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**Following the economic footprint of a Cruise Ship
around Ireland: Berthing versus Non-Berthing**

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Ireland: Berthing versus Non-Berthing

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Abstract

The cruise industry has the potential to generate enormous revenue for port cities however there are some challenges to this revenue stream. These challenges are very apparent here in Ireland in recent years. As ships increase in size tendering becomes less feasible. This paper investigates how passenger tendering rather than berthing in Irish ports affects possible economic benefit from the cruise industry. The paper also examines how port facilities affect the overall passenger experience. Is passenger spending restricted? Using four Irish ports as case studies and a survey of passengers of 1 cruise ship visiting all four ports this paper seeks to identify the difference between passenger spending at tender and non-tender ports.

Keywords: Cruise industry, ports, berthing, economic benefits, Ireland

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1. Introduction

The global cruise industry has been growing steadily for decades now. Despite the recent economic downturn the cruise industry has continued to do well. While the tourism industry as a whole took a serious hit during this period the cruise industry did not follow this trend, with passenger numbers continued to grow, albeit with a growth rate that was not as impressive as before the downturn. Cruise passengers have always originated predominantly from North America. In recent years however, the European market has gone from strength to strength. European passenger numbers have increased rapidly and the industry now contributes significantly towards the tourism industry in many European coastal economies.

Ireland is ideally located to capitalise on the cruise industry. The island is located on the edge of the developing European market. Ireland is also seen as the gateway to Europe for American cruises. Ireland relies heavily on the tourism industry; however it has never made cruise tourism a priority. A substantial number of cruise passengers originate in the UK and mostly embark on short journeys. Ireland would be ideal for these visitors due to its close proximity. Despite Ireland's geographical advantage the cruise industry here is still relatively small. One of the main problems facing the growth of the industry in Ireland (according to previous passenger surveys) is the appearance and lack of facilities of Irish ports.

Dublin, Belfast and Cork are the main ports for cruise tourism in Ireland. Galway has been steadily increasing the number of cruise ships coming to the city; however one of the main disadvantages for the area is the lack of a cruise ship berthing facility. Due to this lack of berthing facility, passengers have to be tendered ashore on smaller boats. This process can be unpopular with crew and passengers especially in bad weather. The percentage of passengers that choose to stay on board may be higher in Galway due to the added complications of disembarking. The revenue generated from those that disembark is also affected due to the reduced amount of time spent onshore. The combination of these factors significantly impact the local revenue generated from the cruise industry in Ireland.

The new marina plans for Galway should significantly improve the facilities for the cruise ship industry in the city. There will be facilities that will allow cruise ships to dock; passengers will be able to come ashore directly to a marina, which will be close to the heart of the city. The appearance of the marina will be welcoming to visitors and they will be able to receive information about the different areas of interest in the city. The marina is predicted to generate further economic benefits for Galway city and the surrounding areas. The purpose of this paper is to estimate the potential economic benefit to the area through extra direct cruise passenger spending. It will also examine whether the requirement to tender affects the economic benefit from cruise tourism.

2. The Cruise Tourism Industry

Tourism is the largest industry in the world, contributing between 10-12% to the world's GDP (Chase & Alon, 2002). The cruise industry is one of the fastest growing segments of the tourism industry globally. The sector achieved almost twice the growth rate compared with land-based tourism in 2007 (Brida & Zapata, 2010a). The average annual growth in passenger numbers worldwide, according to Brida & Zapata (2010b), was 7.4% between 1990 and 2007. Since 1990, over 185 million passengers have taken a 2+ day cruise. Of this number, over 70% of the total passengers have been generated in the past ten years, and nearly 38% in the past 5 years (Florida Caribbean Cruise Association, 2012). Cruise passenger numbers have also grown from 7.2 million in 2000 to 12.6 million in 2007 (Mescon & Vozikis, 1985). North American passengers have always had a strong share of the market (90% in 2000). However this has been declining and their market share was 81% in 2007. This decline in market share is due to the increase in passengers from around the world especially Asia and Europe. In 2009, Europe commanded 30% of the global market in cruise tourism. The Caribbean has remained the most popular destination but the Mediterranean and Northern Europe have been steadily increasing in popularity.

The Florida Caribbean Cruise Association (2012) carried out a survey to determine interest in the cruise industry. The survey was carried out in the US and examined a cross section of the population that was identified as prime cruise candidates. According to the survey there is a high level of interest in cruising with 71% of general public respondents expressed an interest in cruising in the next three years. Results from both cruisers and non-cruisers showed that large and medium ships were preferred to small ships, with 62% preferring larger ships. The average age of cruise passengers in 2004 was 55. In 2009 that had reduced to 49 (BREA, 2009).

The main measure of output from the cruise industry is passenger expenditure. It has been found (Brida & Zapata, 2010b) that cruise passengers tend to spend less than 30% of the expenditure of a land based tourist. The amount of spending depends on the destination and the category of the port, home port, port of call or turnaround port. In 2006 the expenditures of the cruise lines across the USA from passengers and crew were responsible for the generation of \$35.7 billion in gross output, a 10.2 % increase over 2005. This generated 348,000 jobs throughout the USA, paying a total of US\$1.7 billion in wages and salaries.

There have been many varying attempts to establish economic benefit of cruise tourism to an area. Most of the approaches are variations of a multiplier model. The most common of these are input output analysis, computable general equilibrium modelling or a Keynesian model. Dwyer and Forsyth (1998) used a computable general equilibrium model in their paper to evaluate the costs and benefits from cruise tourism in Australia. This study found that it was possible for increased expenditures to generate increased economic activity from cruise tourism, but there was a net cost

to society. They found there was an increase in the price of waterfront land and there was damage to the local fishing industry. There was also a depreciation of the local currency that hurt some local export industries (Dwyer & Forsyth, 1998).

Chase & Alon (2002) used a Keynesian model, as it was their aim to develop a model that could be used in many economies even those with restricted data. Using the basic Keynesian multiplier model different multipliers are established. The model considers leakages from imports, taxes and savings, while at the same time considering direct indirect and induced spending from an additional unit of cruise ship spending (Chase & Alon, 2002). The model considers the revenue generated for the government by cruise tourism, which can lessen the tax burden of citizens of the country, while giving the government more income to invest in other areas of the economy. The model also examines improvements in balance of payments taking account for import leakages. The model also shows the effect of increase expenditure on investment. Investment for cruise tourism can indirectly benefit the local population; however it can also take investment away from other areas in the community that may need it more.

Employment is a major determinant of economic benefit for an area. When it comes to the cruise industry there are two areas of employment; employment on the cruise ship or employment generated from the spending of passengers, crew and the cruise liner. In terms of employment, there are some positions available for people from the start off port. The wages generated from these employees will benefit stop over ports to a limited degree but will be the majority of the benefit will accrue to the start off port. The other area of employment is employment generated from spending. There is added direct employment in restaurants and shops due to the extra spending, and also added employment in the companies that supply the shops and restaurants. These are direct and indirect benefits (Dwyer & Forsyth, 1998). The direct effects are concentrated mostly in the local region whereas the indirect impact can be widely spread throughout the economy. Referring to the latter type of employment generated, it is important to realise increasing employment in one sector is not always of benefit to an area as a whole. The condition of the economy determines whether increasing employment in the cruise tourism sector will have a positive or negative impact. If the economy in question has full deployment of resources, an increase in demand for labour in the cruise market will take resources from other sectors of the economy, which may harm their development. If on the other hand the economy has high unemployment and has underemployed labour resources an increase in the demand for labour would benefit the area as a whole (Dwyer & Forsyth, 1998). With the recent downturn in the economy, most countries are experiencing high unemployment therefore increasing demand for labour would benefit most economies. Employment also generates induced benefit. This is the benefit from those who are employed spending themselves in the local economy.

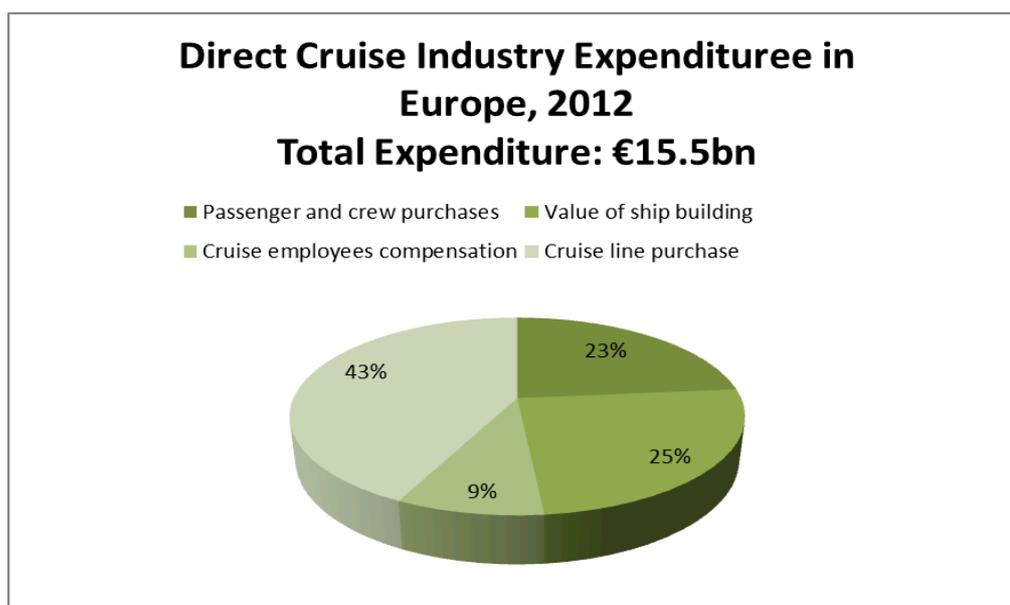
Cruise tourism does not always have a positive impact in the local area. A major problem with cruise tourism is that it creates a sudden jump in tourists visiting an area. Travel tourists tend to be more spread out and there is a gradual increase in numbers as summer approaches. A study by Brida & Zapata (2010a), which was conducted in Costa Rica, shows that the sudden influx of cruise tourists can put major pressure on the lucrative travel tourist market.

There have been no direct studies regarding the added economic benefit of cruise ships being able to berth as opposed to passengers having to be tendered ashore. However it is possible to study dis-embarkation rates and reasons for not disembarking at ports as a method of determining the impact of not having cruise berthing facilities. On average 80% of passengers disembark at stop over ports, however this number varies greatly between ports. According to Caymannetnews.com there are many reasons for passengers deciding to stay on board the ship while it is inshore. These reasons vary from 'not interested in coming ashore' to 'inconvenient to come ashore'. Research indicates that passengers and especially crew are less likely to come ashore if they have to use a tender. According to a Caymannetnews.com, the passengers described having to use a tender as a less than pleasurable experience. Having to queue in all types of weather to return to the ship was a major complaint. The Cayman Islands are in an ideal location to avail of passing cruise tourism; however passenger numbers have been in decline there for many years. The main reason given by cruise liners for not choosing Cayman Islands as a stopover port was the lack of facilities. This is an issue, which is becoming more important recently due to the increasing size of cruise vessels. Even if larger ships do decide to travel to destinations without berthing facilities, disembarking will be a long and troublesome task, meaning a higher percentage will choose to remain on board. In recent years safe, welcoming cruise terminals are becoming increasingly important for cruise liners.

Europe

Europe's cruise market has strengthened significantly in recent years, with an increased interest by European passengers in embarking on a cruise. There has also been a significant rise in interest from those outside Europe to embark on cruises within Europe. Over 6.26 million European residents booked cruises in 2012. This represents an increase of 1.3% over 2011. European passengers now represent 30% of the global market for cruise passengers (CLIA Europe 2013). Europe has also increased in popularity as a start off port. More than 5.7 million passengers began their cruise journey at a European port. This was an increase of 2.5% on 2011 figures. Of the 2012 figures 4.8 million originated from within Europe and 0.9 million came from outside Europe. In 2012, the cruise industry generated direct expenditure of €15.5 billion.

Figure 1. Direct cruise industry expenditure in Europe in 2012



Source: Fáilte Ireland, 2012

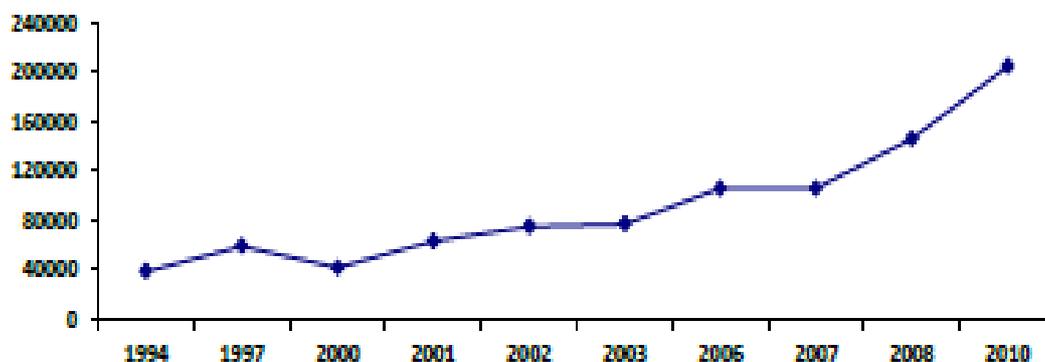
Direct economic impacts include the production, employment and employee compensation that were generated in those European businesses that supplied goods and services to the cruise lines, its passengers and crew. This expenditure can be divided into four categories. Cruise ship construction and maintenance accounted for €3.9 billion, cruise line spending generated €6.6 billion, crew and passenger spending at ports totalled €43.6 billion and €1.4 billion was paid out in wages and salaries to administrative staff and crew of the ships. Passengers on average spend €62 per port of call and crew spend €21 (CLIA Europe, 2013).

In the last five years there has been significant growth in all areas of the cruise industry. Since 2007 European-sourced passengers have grown by 55% from 4.05 million in 2007 to 6.26 million in 2012. Cruises originating in Europe have grown by 33% over the five year period; this growth was mainly due to the growth in American sourced passengers. Port of call visits increased by 53% from 18.8 million in 2007 to 28.7 million in 2012. Direct expenditures have increased by 20% from €12.9 billion in 2007 to €15.5 billion in 2012 with an average annual growth rate of 3.75% (CLIA Europe, 2013). Since 2007, the combined expenditure of cruise liners and their passengers and crew increased by 45% from €8.1 billion in 2007 to €11.6 billion in 2012. Cruise passengers spent an estimated €3.63 billion in purchases during port visits, as seen in Figure I. Europe is one of the largest sources of ships for the cruise industry. The UK is the largest source market for cruise passengers in Europe with 1.7 million residents taking cruises in 2012. The UK also ranks third in terms of direct spending, which totalled €2.93 billion in the same year. The European market has grown by 24% over the past three years and by 162% in the last 10 years. Northern European cruises are becoming increasingly popular; the market for these cruises grew by around 16% in 2012.

Ireland

Ireland, as an island nation located near one of the main players in the cruise industry (Britain), could benefit greatly from the cruise industry. Unfortunately as of yet Ireland has not fully capitalised on this potentially lucrative industry. Cruise operators indicate that Ireland is a well-defined cruise destination. However, the appearance of the ports can be a drawback for them (Fáilte Ireland, 2012). The number of cruise ship passenger and crew travelling to Ireland has increased by over 200% in the last decade (Fáilte Ireland, 2012). In 2010 a total of 202 cruise ships called to Irish ports carrying 204,489 passengers. Fáilte Ireland estimated that the direct spend from passengers and crew who disembarked (including port charges) was €20.3 million (Figure 2).

Figure 2. Cruise passenger numbers to Ireland between 1994 and 2010



Source: Fáilte Ireland, 2012

Cruise liners are keen to highlight that revenue, cost, guest satisfaction, excursions and port facilities are key considerations for them when they are considering their itineraries. Ireland has strong cruise tourist potential due to the proximity of ports to towns or cities. Originally, Ireland's principal cruise traffic was from North American passengers on US based vessels. This trend has changed due to the increase in the prominence of North European cruises. There has been a significant increase in British operators that are including Ireland in their itineraries.

Ireland has been steadily increasing cruise traffic; in 1994 a total of just 65 ships called to Ireland. By 2010 the number had increased to 202 (Fáilte Ireland, 2012). The majority of cruise liners that visit Ireland spend one day in each port they visit. The numbers of passengers visiting Irish shores have also increased by over 200% over the last decade to 204,489 in 2010. This massive growth has come about due to the increase in the number of vessels visiting Irish waters and also the increasing passenger capacity of vessels that are visiting our shores. Ships continue to increase in size and demand still outweighs capacity, indicating that the cruise market all over the world, including Ireland, will continue to strengthen. One of the main problems identified by Fáilte Ireland, (2012) was that Irish ports are not suited to the larger

capacity of new ships and also that passengers are not satisfied with the port facilities at Irish ports.

The Fáilte Ireland report also undertook a SWOT analysis of the cruise sector in Ireland. The strengths identified were: positive well established image, depth of on-shore activities and friendly people. Unfortunately the survey also identified major weaknesses: inconsistency between ports and ports lack of proactive approach towards attracting cruise liners and poor landing facilities. Tendering in a port is unpopular all round with operators, guests and staff. Operators are only inclined to tender if there is a compelling reason to stop or if guests are of a younger profile (Fáilte Ireland, 2010). The main findings of the report were that Ireland was a popular destination with cruise liners and passengers but that the port experiences were below adequate standards. Some Irish ports also lack berthing facilities; this means that passengers must come ashore on small tender boats. This process can be very off putting for passengers with many choosing not to disembark. For those who do disembark their time is cut short due to the extra time needed to go back on-board. This process is frustrating for passengers but also affects the economic benefit for the area surrounding the port.

In most Irish ports passengers must come ashore in the same area as large commercial ships. The feedback from passengers previously has shown that they dislike this experience and would much prefer a dedicated cruise terminal, where passengers can relax before exploring the area. Cruise terminals do not need to be high tech, simply an area dedicated to cruise traffic where passengers can avail of light refreshments and get information on the local areas.

Galway

Galway City has a long tradition with the sea and especially maritime transport. Cruise liners have been docking in Galway Bay for decades. Galway has proven popular with cruise liners and their passengers. In 2009 the European Commission identified a method of determining the potential of a port as a cruise liner destination. The European Commission (2009) identifies three key success factors for port areas.

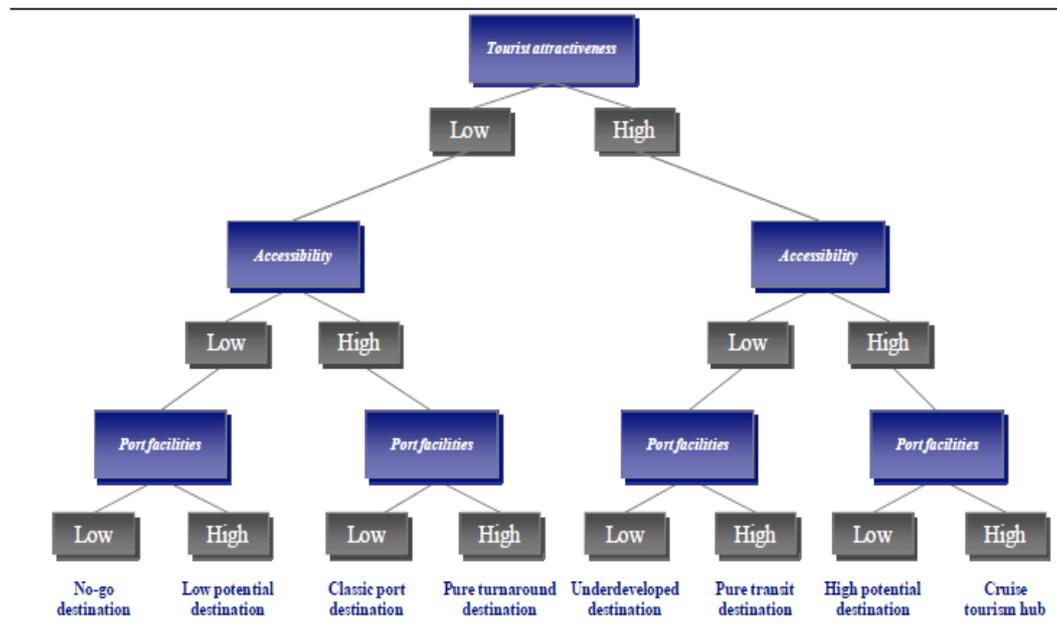
- Tourist appeal
- Accessibility of destination
- Level of port facilities

Galway clearly has an advantage; it is already very popular with tourists. The port is also very accessible to ships due to its location at the edge of the Atlantic Ocean. The port is also located within walking distance of the city. The only factor that is lacking is the port facilities, which are the easiest and cheapest characteristic to change. The

facilities for cruise ships at Galway port are seriously lacking. There is no designated area for arrivals, meaning passengers have to pass commercial ships docked to enter the city. Passengers also have to be tendered ashore because adequate docking facilities are not in place. Tendering has proven an unpopular experience with cruise liners and passengers, especially in bad weather.

The European Commission (2009) developed a chart to allow ports identify the level of cruise industry potential for that port with regard to cruise tourism (Figure 3).

Figure 3. Model for assessing port strengths and port Categories



Source: European Commission (2009) pp.37

Using the chart we discover that Galway is classified as a high potential destination. If we follow the diagram for Galway, the graph will identify the potential of the port. High potential destinations have the ability to become a cruise tourism hub. The report states that to facilitate further growth a high potential port must invest in tourist facilities in the port and its hinterland (European Commission, 2009). The aim for Galway would be to become a tourism hub, which is attractive to tourists, easily accessible with high class port facilities.

Galway harbour is being proactive towards attracting increased cruise tourism. They have unveiled plans to develop a new port. The development will vastly improve the experience of cruise liners and their passengers. The proposed new quay development will extend 935 metres into the sea providing 660 metres of quay berth to -12m Chart Datum depth serviced by a -8m C.D channel Depth (Galway Harbour Company, www.galwayharbour.com). This would allow cruise liners to dock and passengers to walk onshore, without the extra hassle of tendering. The development includes a

dedicated cruise terminal and a bus link that brings the passengers directly to the city centre.

With these enormous improvements in facilities Galway could become a cruise tourism hub within Europe. Establishing a cruise tourism hub would be extremely beneficial for the city of Galway. The scale of the development could even allow the port to become a turnaround port. The economic return from turnaround ports is much higher. There would be the potential for overnight stays before and after the cruise. Galway could become the starting point for all Ireland cruises. Even if Galway does not develop as a turnaround port there is still huge potential for increased revenue due to three factors:

1. Passengers who disembark will have more time onshore, allowing them to spend more than if they had to queue for a tender.
2. It is believed that more passengers and especially crew would disembark if there were docking facilities.
3. The greatest revenue will be generated from the increase in the number of ships that will come to Galway due to the improved facilities. The increase in the number of ships the capacity of these ships will generate huge revenue for Galway city and surrounding area.

It is hoped that the combination of these three areas of added benefit would contribute greatly to the economy of Galway City and the surrounding areas.

3. Methodology

The main aim of this paper is to identify the level of economic benefit from cruise tourism to ports with berthing facilities as opposed to those without. Passenger and crew spending have been recognized as the most accurate method of establishing economic benefit. With this in mind, it was decided to evaluate passenger and crew spending at Irish tender and non-tender ports to establish whether there is a significant difference. We felt it was important that the passengers at each port would be the same, to rule out any natural variations in spending. We chose to administer the surveys on-board the 'Prinsendam' Cruise ship, which belong to the Holland America Cruise Company. The ship had 740 passengers on-board, which means it is one of the smaller ships allowing it to explore more remote locations.

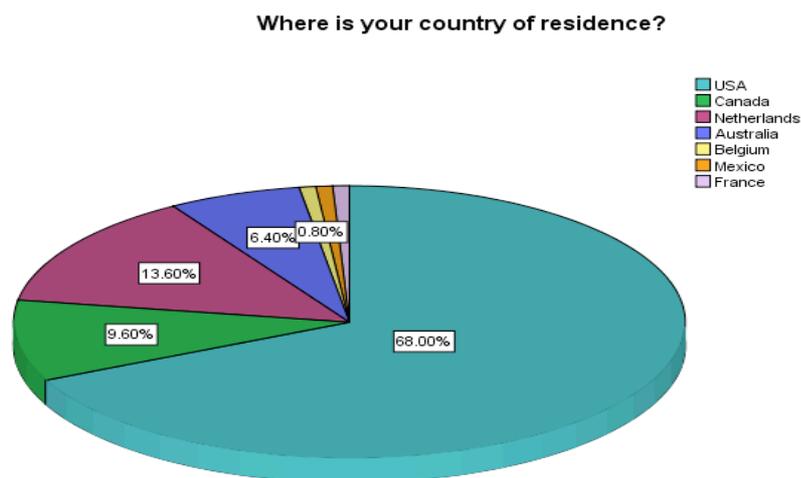
Our first step was to make contact with the cruise company to seek advice and approval to carry out our surveys. A single survey was administered on board which would incorporate each port; we could then bring them on-board at one of the ports. The surveys incorporated the ports of Dublin, Belfast, Galway and Dunmore East

(Waterford). We choose these ports as Dublin and Belfast have docking facilities whereas in Galway and Waterford passengers are required to tender. The questions asked remained the same for each port, this way we could determine the differences between ports regarding spending and visitor experience. By using these surveys we could then determine whether tendering impacted on overall experience and whether it affected passengers' likelihood of disembarking and even on their likelihood of returning to the area. Surveys were left in the cabins of every passenger and crew members requested that the passengers fill out the surveys following the instructions therein. Crew then collected and returned the completed surveys following the final stop over in Cork

4. Results

The passenger capacity of the Prinsendam was 740; there were approximately 450 cabins. 450 surveys were submitted as these surveys were placed in each cabin. 125 of the 450 surveys were completed. It was found that 68% of passengers originated from the United States of America, followed by 13.90% originating from the Netherlands and 9.60% being resident in Canada. 99% of passengers were repeat cruisers. The average number of previous cruises taken was 13 (Figure 4). Eighty five per cent of passengers declared that the requirement to tender had no effect on their decision to disembark. 13% declared that they were less likely to go ashore if they were required to tender at a port. The average number of people in a group was 2.

Figure 4. Country of Residence



Results from Dublin Port

Dublin port does not require passengers to tender; the average length that passengers were ashore was 5.26 hours. The mean spend per group was €153.64, leaving per person spend of €76.82.

Figure 5. Likelihood of returning to Dublin

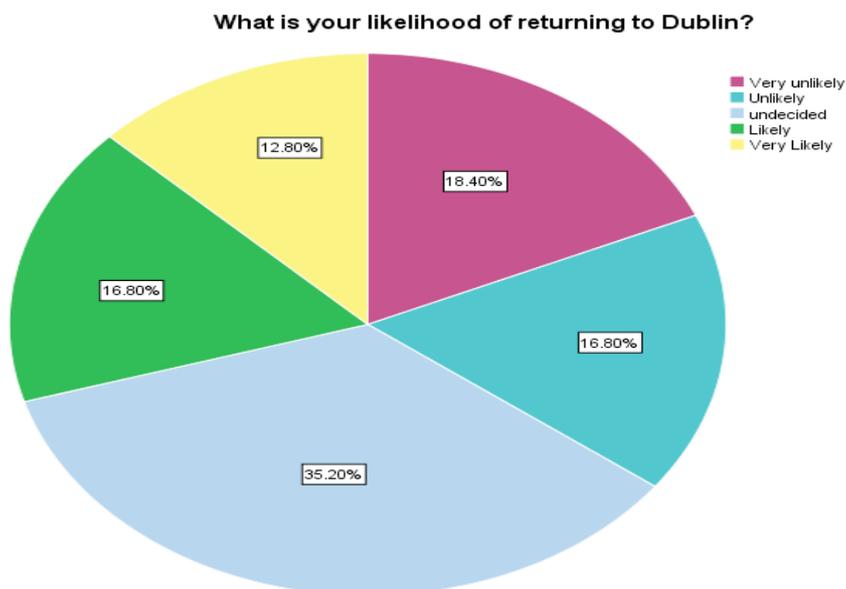


Table 1. Average group spend in Dublin

Category of Spend	Average group spending per category
Food and beverages at Restaurants & Bars	€26.14
Shore Excursions	€174.67
Clothing	€109.20
Local Crafts & Souvenirs	€43.78
Other Shopping	€39.99
Taxis/Ground Transportation	€46.94
Entertainment	€25
Average Total Spend	€153.64

Twenty nine per cent of respondents stated they were likely or very likely to return to Dublin (Figure 5). Thirty five per cent of respondents declared they were unlikely or

very unlikely to return to Dublin. The highest average spend was in the ‘Excursions’ category, with the average spend on excursions of €174.67. Sixty two per cent of spending in Dublin was attributed to excursions. This high spend is reflected in the high grading of ‘Prior information on tours’ (Table 2). Just over 66% of passengers were satisfied or very satisfied with prior information for Dublin City. Passengers were very satisfied with the tours they purchased. Shopping experience was also graded high, reflected in the high spend in this category. A total of €18,283 was spent in Dublin by the sample of respondents who disembarked.

Dublin port fared very well in the second part of the survey, which was the grading of certain aspects of the city and port. Table II shows the percentage each category received. As we can see from the table the majority of passengers were very satisfied with each of the categories. The highest category by far was the friendliness of locals. The port was also graded quite highly. Nearly 60% of passengers were satisfied or very satisfied with the port facilities in Dublin; only 2.8% were very unsatisfied with the port facilities.

Table 2. Grading of Dublin Port (%)

Category	Very Satisfied	Satisfied	Adequate	Unsatisfied	Very unsatisfied
Prior information on tours and activities	25	41.4	27.6	4.3	1.7
Guided Tours	41.4	32.3	19.2	5.1	2
Historic Sites/Museums	38.5	38.5	19.2	3.8	0
Things to See and do	39.4	39.4	14.7	6.4	0
Friendliness of Locals	52.6	37.7	7.9	1.8	0
Shopping experience	26.4	32.2	34.5	4.6	2.3
Overall prices	13.5	24.7	48.3	11.2	2.2
Taxis/Transportation	28.1	35.9	31.3	3.1	1.6
Port Facilities	23.4	35.5	32.7	5.6	2.8

Results from Belfast Port

Passengers were not required to tender in Belfast either, being able to dock beside a quay. On average passengers spent 5.66 hours ashore at the port of Belfast. The

average spend per group in Belfast was €155.78 and the average per person spend was €77.89.

Figure 6. Likelihood of returning to Belfast

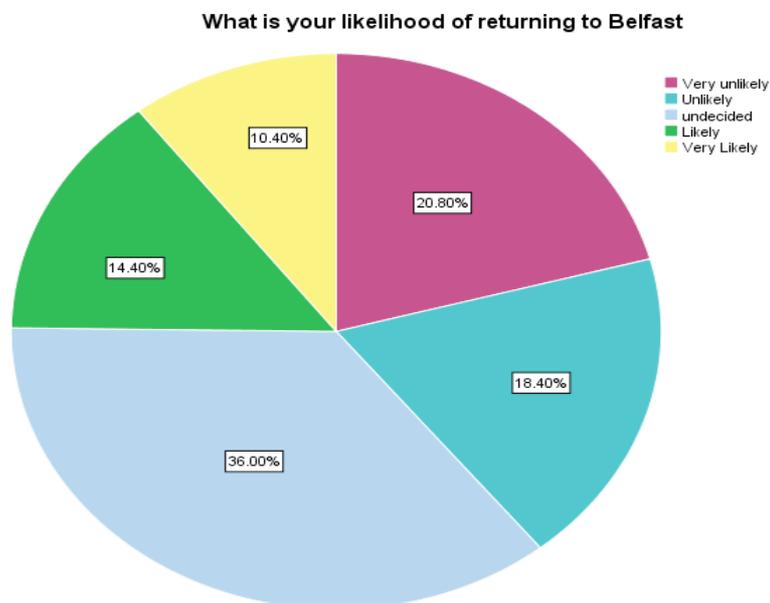


Table 3. Average group spend at Belfast Port

Category of Spend	Average group spend per category
Food and beverages at Restaurants & Bars	€27.68
Shore Excursions	€164.01
Clothing	€61.50
Local Crafts & Souvenirs	€28.61
Other Shopping	€38.85
Taxis/Ground Transportation	€31.00
Entertainment	€117
Average total group spend	€155.78

Twenty five per cent of respondents declared they were likely or very likely to return to Belfast (Figure 6). Unfortunately, 31% stated they were either unlikely or very unlikely to return to Belfast. Once again the largest segment of average spending is in the 'shore excursions' category (Table 3). Passengers were clearly very satisfied with

the prior information regarding these tours and they were happy with the tours themselves. The average spend in the clothing category is also very high. Spending in Belfast surpassed that of Dublin port, but only by a small amount. Total spending in Belfast by the sample of survey respondents who disembarked came in at €18,538. This is a very similar figure to Dublin.

Belfast port graded very high in this survey under all categories considered (Table 4). Friendliness of locals was the highest graded category again. As we have discussed prior information and guided tours were also graded very high. Some 60% of passengers also graded the facilities at the port of Belfast as satisfactory or very satisfactory. Only 9% graded the port as unsatisfactory or very unsatisfactory. Historic Sites and Things to see and do also received high scores. The combination of good prior information and high quality tours but also a wide range of interesting things to do contributed to make spending at Belfast port the highest of all ports.

Table 4. Grading of Belfast Port (%)

Category	Very Satisfied	Satisfied	Adequate	Unsatisfied	Very unsatisfied
Prior information on tours and activities	28.8	36.4	30.5	1.7	2.5
Guided Tours	51.8	32.1	13.4	2.7	0
Historic Sites/Museums	44.3	35.8	16	2.8	.9
Things to See and do	31.8	41.8	19.1	6.4	.9
Friendliness of Locals	53.1	31.9	13.3	1.8	0
Shopping experience	22.5	32.5	38.8	3.8	2.5
Overall prices	14.6	33.7	42.7	7.9	1.1
Taxis/Transportation	34.9	34.9	25.4	4.8	0
Port Facilities	28.8	31.5	29.7	6.3	3.6

Results from Galway Port

Passengers disembarking at Galway were required to take a tender as no docking facilities are available at present at the port. Some 58% of respondents declared the requirement to tender affected their activities onshore. Of those that tendering did affect the effects are shown in Figure 7. Twenty two percent of those passengers indicated that they spent less time onshore as a result of the tender. A further 12% declared that this requirement left them with a negative impression of Galway City. Only 6% of passengers decided not to disembark due to the requirement to tender.

Figure 7. The effects of tendering in Galway port.

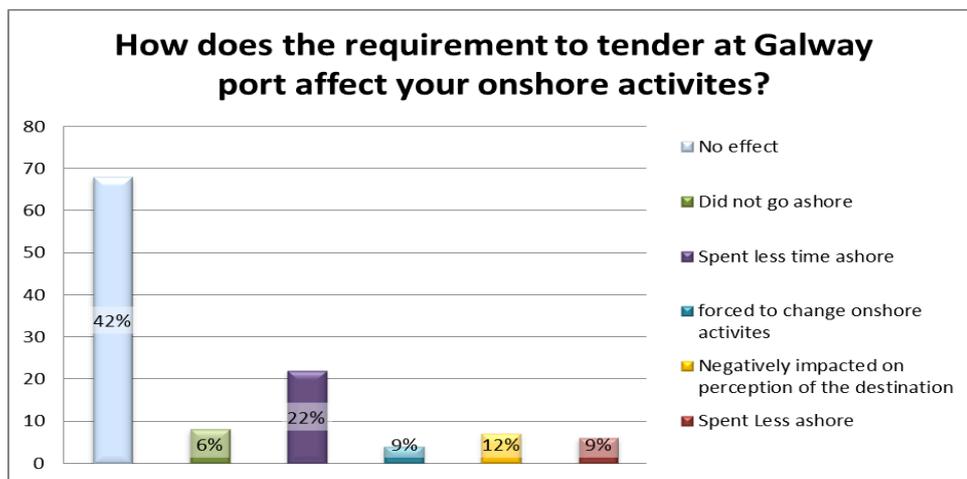
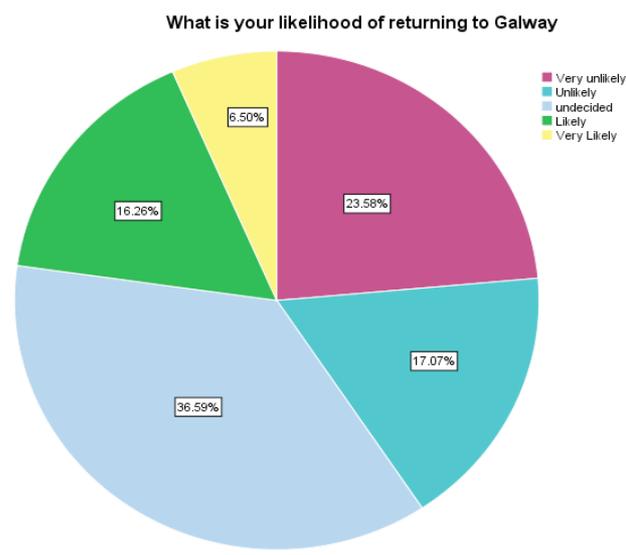


Figure 8. Likelihood of returning to Galway



On average passengers spent 4.16 hours ashore in Galway, which is the lowest land time of all of the ports. The monetary spending of passengers in Galway was also the lowest of all the ports. Only 6.5% of passengers stated they were very likely to return to Galway (Figure 8). 23.5% stated that they were ‘very unlikely’ to return to Galway. This could be partly due to the negative impression given off due to the requirement to tender. It may also be due to the length of the stay in Galway. Passengers commented that they often didn’t have time to explore the local area after they had completed their tours. It is vital that tourists have a long stay to allow them to see enough of an area to encourage them to return. Spending at Galway port was also less than the other ports.

Table 5. Average group spend in Galway

Category of Spend	Average group spend per category
Food and beverages at Restaurants & Bars	€17.61
Shore Excursions	€173.61
Clothing	€86.25
Local Crafts & Souvenirs	€31.76
Other Shopping	€21.47
Taxis/Ground Transportation	€32.36
Entertainment	€12.25
Average total group spend	€116.76

The average group expenditure was €116.76 giving per person spend of €58.38 (Table 5). These figures are much lower than the previous two ports. The average group spend on tours is in line with the other ports. A number of customers complained that tours were overcrowded and unorganised. The total spending in Galway by the sample of respondents who disembarked came to €13,545. The satisfaction in Galway in general was slightly lower than the other ports (Table 6).

Table 6. Grading of Galway port (%)

Category	Very Satisfied	Satisfied	Adequate	Unsatisfied	Very Unsatisfied
Prior information on tours and activities	24.3	24.3	33	11.3	7
Guided Tours	42.9	18.7	29.7	6.6	2.2
Historic Sites/Museums	26.1	27.2	33.7	12	1.1
Things to See and do	30.1	31.1	25.2	9.7	3.9
Friendliness of Locals	47.5	35.6	15.8	0	1
Shopping experience	24.1	32.0	35.4	2.5	5.1
Overall prices	13.9	34.2	45.6	5.1	1.3
Taxis/Transportation	28.6	25.4	36.5	4.8	4.8
Port Facilities	14	16.8	33.6	19.6	15.9

Only 24.3% of passengers graded the prior information on tours as very satisfactory, with 7% stated this category was very unsatisfactory. Guided tours themselves were graded by 42.9% of passengers as very satisfactory, despite comments that they were overcrowded and unorganised. Port facilities were only graded by 14% as very satisfactory, with 30% reported that the facilities at Galway port were either unsatisfactory or very unsatisfactory.

Results from Dunmore East Port

Dunmore East also requires passengers to tender. 41% of passengers declared that the requirement to tender affected their onshore activities at this port. The other 59% declared that this requirement did not affect their onshore activities. Some 19% declared that they spent less time ashore due to the lack of docking facilities. A further 6% of passengers stated that it negatively impacted on their perception of the destination.

On average, passengers spent 4.57 hours onshore at Dunmore East, like Galway this figure is lower than that of Dublin and Belfast where passengers could disembark directly. It is clear that tendering is affecting the length of visit at these ports. Seven percent of respondents declared they did not come ashore due to the tender requirement (Figure 9).

Figure 9. The effects of tendering in Dunmore East

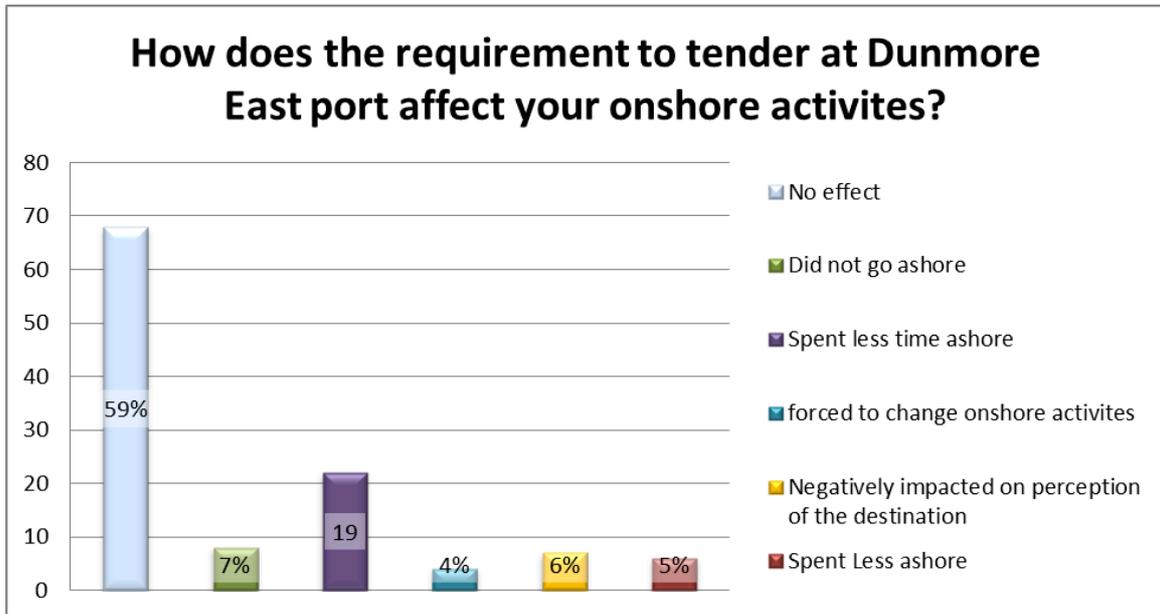
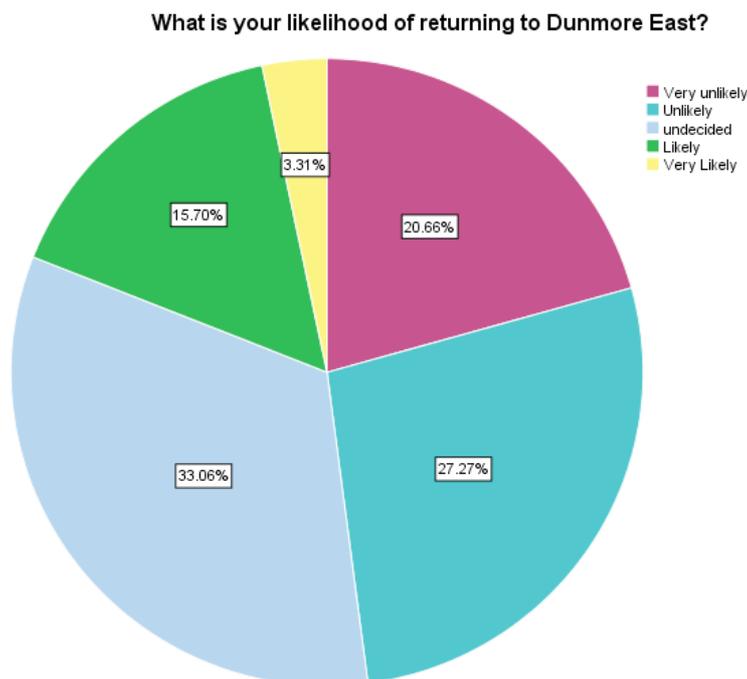


Figure 10. Likelihood of returning to Dunmore East



The likelihood of passengers from this cruise returning to Dunmore East is very low (Figure IX). Forty eight percent stated they were unlikely or very unlikely to return to the area. Only 3.31% stated that they were very likely to return to Dunmore East. It is important to remember that Dunmore East is a local port and may not have the same level of activities or interesting sites. Passengers did comment however that the local scenery was beautiful and they enjoyed being able to wander around such a pretty area.

Table 7. Average group spend per category

Category of Spend	Average group spend per Category
Food and beverages at Restaurants & Bars	€15.19
Shore Excursions	€171.05
Clothing	€16.00
Local Crafts & Souvenirs	€65.27
Other Shopping	€68.79
Taxis/Ground Transportation	€17.90
Entertainment	€19.00
Average total group spend	€132.83

The average group spend was €132.83 and per person spend was €66.42. Again shore excursions are the highest average spend by far for any category of expenditure. Crafts and souvenirs also contributed greatly to the local economy (Table 7).

The port of Dunmore East performance is impressive considering it is such a small port (Table 8). The high grade in guided tours reflects the effort by local groups and organisations; the expenditure for this category is also very impressive.

Table 8. Grading of Dunmore East Port

Category	Very Satisfied	Satisfied	Adequate	Unsatisfied	Very Unsatisfied
Prior information on tours and activities	25.7	23.9	38.5	9.2	2.8
Guided Tours	35.1	28.9	27.8	7.2	1
Historic Sites/Museums	29.2	34.8	25.8	9	1.1
Things to See and do	27.3	29.3	34.3	8.1	1
Friendliness of Locals	50.9	35.8	11.3	.9	.9
Shopping experience	23.3	26	38.4	9.6	2.7
Overall prices	19.2	21.8	46.2	11.5	1.3
Taxis or Transportation	21.7	33.3	31.7	10	3.3
Port Facilities	14.4	28.8	39.4	10.6	6.7

Like the other ports the friendliness of locals ranks highly with an impressive 50% giving it the highest possible grade. Prior information regarding tours received average marks. Just over 14% of respondents declared that port facilities were very satisfactory.

General port findings

The average per person spend was €62.40 at tender ports, compared to the dock port where per person spending is €77.36 on average. This may be due to the reduced length of time passengers spend onshore at these destinations. Those disembarking at tender ports spend on average 4.37 hours ashore, whereas the ports where docking is possible passengers spend 5.46 hours ashore. There is almost €15 difference in per passenger spend at the different types of ports. Both the tender ports had lower spending than the ports which facilitate docking. The total passenger spend by those surveyed was €64,950 (Table 9).

Table 9. Total spend per port

Port	Total Spend
Dublin	€18,283
Belfast	€18,538
Galway	€13,545
Dunmore East	€14,884
Total	€64,950

We received 125 surveys covering the expenditure of approximately 250 passengers; there were approximately 740 passengers on-board. The economic benefit established by this survey only covers a fraction of the total economic benefit from this single cruise. The cruise ship also visited Killybegs, the feedback from this port was very positive and passengers commented on the beauty of the area and the friendliness of locals. To attempt to establish the complete economic benefit from this cruise a conservative estimate for spending at this port is established. The lowest spending is in Galway, if we assume this to be the equivalent of spending in Killybegs then the total economic benefit would be €78,495. This is only an estimate however we can only speculate about the spending at this port. From the surveys the total economic benefit from the visit of the Prinsendam cruise to the four ports discussed above is €64,950.

5. Discussion and Conclusions

Ireland is still a hugely popular destination for American tourists. This is also still reflected in the high proportion of cruise passengers originating in America. North American passengers have always dominated the cruise market. It is important to remember that although cruise passengers do not stay overnight in any Irish port (at present), these passengers still contribute to local communities.

The total revenue from this short cruise shows how this industry can contribute to the Irish economy. The average per person spend for all four ports was €69.88, this spending is for an average of 5 hours onshore. This is a significant spend for such a short period of time. Although this may pale in comparison with the spending of overnight visitors this spending is more concentrated when compared with the dispersed spending of the overnight passengers. Excluding the Belfast visit, the average spend per individual, for the three ports visited in the Irish Republic, came to €203.62. Assuming a similar average spend per person in Killybegs (the other stopover made by the cruise ship, but not surveyed here) as at the Galway port (€58.38), then the total spend per passenger was probably in the region of €260 for this cruise ship's visit to the Irish Republic.

An important aspect of cruisers is that the majority of cruise passengers are repeat cruisers. Less than 1% of respondents were on their first cruise, with 99% of respondents having taken a cruise before. The average number of previous cruises taken by the passengers was 13. This clearly shows that cruise passengers are dedicated to this type of holiday. It is important that each port, and Ireland as a whole, makes a good impression to encourage passengers to return to Ireland either by another cruise or as a stay over tourist. Cruise liners also rely on feedback from their passengers to decide on ports or countries to visit which is another reason to insure passengers have as positive an experience as possible at our ports.

A very important question was asked at the beginning of the survey. The question was 'Does the requirement to tender to at a port affect your decision to disembark?' The overwhelming majority (85.6%) stated that the requirement to tender had no effect on their decision to disembark. This response could be misleading, as it would appear that the requirement to tender at a port has no affect on passengers; however this is not the case. It is important to remember that passengers have travelled a long way and spent a huge amount of money on these cruises; it is unlikely that the requirement to tender would affect their decision to disembark. There were a small percentage of people who reported that they were less likely to disembark at a tender port; these may have been the more senior passengers whose mobility may be compromised. A popular comment received on the survey was that although the requirement to tender does not affect them now it would become more important as they got older. As discussed previously cruise liners are usually comprised of elderly passengers. This may not be a major issue in this survey but for a different cruise with more elderly passengers this question may yield very different results.

The biggest factor that affects ports, which require a tender, is that cruise liners are less likely to add the port to their route plans. As previously discussed one of the major factors taken into account by cruise companies are port facilities and accessibility. The size of the ships that will visit will also be restricted as it is simply not feasible to tender a massive number of passengers. The tendering process is also labour intensive for the ship, as it requires employees on the shore, on the tender and at the entrance from the tender to the ship. The requirement to tender also affects the crew's decision to disembark.

There were three major problems identified in the surveys: not enough time onshore, not enough information about the area and inadequate facilities at ports, especially the ports that require a tender. There is also evidence of a strong link between hours onshore and money spent onshore. The two ports with the highest spend were also the ports with the highest onshore time. These ports were Dublin and Belfast, which are also the two non-tender ports. It is clear that if a port area wants to maximise the money spent in their area they need to maximise the time the passengers have onshore. The difference between the average per person spend of the non-tender ports and the tender ports is €16.03. This extra spending is for an extra hour onshore. The major problem, especially in Galway and Dunmore East, was that passengers had no time

after tours to explore the area on their own. This would be important because passengers would most likely want to buy souvenirs from the local area; however they were unable to do so due to the length of their tour and their restricted time onshore. As discussed, it is important to ensure all aspects of spending are maximised. While €16 may seem like a small amount the added aggregate revenue for a local economy from a high number of passengers could be significant.

The second issue that arose from the surveys was that passengers felt there was a lack of information about the areas and their attractions. This can be divided into prior information about the areas and information on-boardside. Prior information is very important as passengers may decide whether to disembark or not based on this prior information. In the survey one question graded this from a '1 - Very unsatisfactory' to '5 - Very satisfactory'. Only 24% of passengers at Galway port were very satisfied with the prior information regarding the area. This issue needs to be addressed. It is important that local businesses get more organised and ensure their brochures or tourist information is on-board every cruise ship arriving in port. There is also a need for an integrated approach by all businesses and the local councils to ensure adequate information about the area is being distributed on-board. Another interesting idea would be the teaming up of the different ports around Ireland where information about the next port was on offer when re-boarding the ship at the previous port.

Another major issue that arose in the survey was the lack of on-boardside facilities in all four ports, with the tender ports receiving the most negative ranking on this front. The lack of even the most basic facilities seemed to shock passengers. At present most ports in Ireland are more suited to cargo shipping and unfortunately most cruise ships even if they can dock, come ashore near areas where large cargo style vessels are loading and unloading. Passengers described inadequate facilities, even down to the simple chairs and benches needed for elderly when waiting for the tender to bring them ashore. One passenger described the almost dangerous conditions in Dunmore East where there were no railings. Galway was described as 'unfriendly for cruise traffic.' Passengers were also disappointed with the lack of cover for those waiting to re-board, especially in Galway where passengers had to stand waiting in the rain to get a tender to the ship.

It is important for Ireland as a whole to improve their facilities for cruise traffic. A dedicated cruise terminal at the very least is needed in all ports receiving this type of traffic. This can be a simple building where passengers could wait for transport into towns or where they could obtain information on the destination. This would be especially important when passengers are waiting to re-board in bad weather. It is important also because it would provide a place for the elderly to sit and rest before exploring the city. The most important benefit of the cruise terminal would be to improve the impression of the destination. The lack of a cruise terminal gives the impression that cruise passengers are not important, a terminal would show that we encourage and value cruise traffic. The cruise terminal would also speed up disembarking and returning to the ship. Facilities for cruise ships to dock would form

the most basic of all strategies to encourage extra cruise traffic. High quality docking facilities are very important, especially if we want to attract larger ships, which can generate much larger revenue. As previously discussed it is not feasible to tender large numbers of passengers. Feedback from the survey supports the idea that tendering is unpleasant and inconvenient. Many passengers complained about the excessive length of the wait to get a tender in Galway. Unfortunately the tender process was disturbed by commercial shipping, which is an unfortunate offshoot of sharing the port space with these commercial ships. Passengers had to queue in the rain for up to an hour to board the tender for the ship. There were also complaints that the tender in Galway took too long. Elderly passengers also raised concern that if sea conditions were rough many people would choose to remain on board. It is clear that this issue is a pressing one, especially if Ireland is serious about maximising the number of cruise passengers to our shores. Our ports are not suited to this type of traffic and passengers feel unwelcome at the ports. This is in contrast to the perceived friendliness of locals in the port towns, which is graded very highly. It is important that we capitalise on the interest in travelling to this country, but this will require a larger, more coordinated effort if we are to fully compete in this area. Another indirect benefit to the area surrounding the ports would be the increase in employment. This would especially be important if Ireland were to increase cruise traffic significantly.

There are some ports that are reacting to the evidence that Ireland needs to capitalise on the cruise market. Dublin, Cork and Galway have plans in the works to improve their port facilities. Dublin plans to develop an area where two cruise ships could dock at the same time. This area will be dedicated to cruise traffic and contains a cruise terminal. The port aims to increase its passenger numbers from 110,000 to more than 320,000. Dublin also hopes to become a turnaround port which means ships could start and end their journeys there. This would vastly increase revenue generated. Cork plans to develop the current deep water quay at Cobh. Cobh can dock very large ships and it is a very popular stop over, however there is often need for space for two ships to dock at the same time. Cobh does not have the capacity to cater for two cruise ships at a time. If two ships want to dock one has to dock at Ringaskiddy, which is more suited to container traffic. Cobh is very popular with cruise tourists and more suited to their needs, ships dock right alongside the village. This port is very popular with passengers due to its historic connections to the Titanic. There is also a rail link to bring passengers directly into the town Cork city or to various excursions.

Galway also has substantial plans to develop their dock facility. The plans will allow the larger cruise ships to dock and passengers to walk ashore to a new dedicated cruise terminal. A newly planned marina for the port will also have a dedicated bus route into the city centre. This will vastly improve the docking facilities but also the passenger experience onshore increasing the number of passengers who want to return. This development will also increase the number of hours passengers spend onshore as

they will not need to queue to get a tender and the ships movements will not be dictated by the tides. These projects are being pushed ahead by the various parties involved in each, however there should be a coordinated all Ireland effort to assist these projects to ensure they go ahead. Ports should be working together to encourage cruise ships to come to our shores, providing each port meets certain standards, at present each port is battling for business 'against' each other however this is not the correct approach.

The cruise industry across Europe is currently booming and it is expected to continue to grow in the coming years. It is essential in the coming years that Ireland invests heavily in port infrastructure. Investment in simple cruise terminals or tourist information stands will vastly improve the passenger experience at our ports. There is a massive interest in visiting Ireland by cruise ships and it is vital we capitalise on this huge market. Chase & Alon (2002) concluded that cruise tourism requires less investment in infrastructure than other forms of tourism. Once cruise tourism has the basic level of investment i.e. a well-kept cruise terminal there is very little need for extra investment, which allows the extra revenue be diverted to other areas of the economy. There has recently been a realisation that we have been missing out on a potentially huge revenue source. The ports of Galway, Dublin and Cobh are planning huge improvements in their infrastructure; these facilities will serve as sources of revenue for years to come. Until these facilities are ready we should not forget the importance of a simple map of each city or the basic tourist information on the area which should be made available on-board if possible but at the very least on disembarkment at the port. It is important that the efforts of these ports do not go unnoticed. There must be a coordinated focused plan for all ports to improve visitor facilities and tourist information to ensure passengers have the best possible experience onshore and that they are encouraged to return to Ireland again.

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Appendices

Appendix A. Questionnaire (only shown for Dublin Port – questions repeated for other ports)

CRUISE SURVEY QUESTIONNAIRE

Dear Cruiser,

The Socio-Economic Marine Research Unit (SEMURU) in the National University of Ireland, Galway, in association with Galway Harbour Company is conducting research on cruise liner visitor experiences in Irish ports.

The information you provide will be used to gain an understanding of the contribution cruise liner visits make to the Irish economy, and what facilities cruise liner tourists would like to see provided/improved. All information gathered from this survey will be kept confidential. To ensure this confidentiality, any published figures will be aggregated totals or summary statistics, so as to prevent the identification of any single individual.

The information from the survey will be useful for future policymakers' decisions with regard to coastal resources to enhance cruise liner tourists' experience. If you could spare a few minutes, I would be grateful if you could answer the few questions overleaf that relate to your experiences in the ports of Belfast, Dublin, Galway and Dunmore East.

Thank you for taking time to read this letter and for answering the survey.

Background Information

- Q.1** What is your country of residence? _____
- Q.2** a) Is this your first cruise? **Yes** ____ **No** ____
- b) If no, how many cruises have you been on? _____
- Q.3** How does the requirement to use a tender at a port impact on your decision to go ashore at a stopover?
- Less likely to go ashore Has no effect More likely to go ashore
- Q.4** How many adults aged 16 years and older, including yourself, were covered by your expenditure on this stopover and how many children aged less than 16 years were covered by your expenditure on this stopover?
- No. adults** _____ **No. children** _____

Dublin Port

- If you were required to use a tender to go ashore at this port, how did this lack of berthing facilities affect your visit here? **Check all that apply**

Did not tender Had no effect I/we did not go ashore
 I/we spent less time ashore Forced me/us to change our onshore activities
 Negatively impacted my/our perception of this destination Spent less ashore

- How long have you spent ashore on this stopover? ____ hours ____ mins
- What was the expenditure of **your group** on this stopover divided amongst the following categories (to the nearest euro)?

Food and beverages at Restaurants & Bars	€ _____
Shore Excursions	€ _____
Clothing	€ _____
Local Crafts & Souvenirs	€ _____
Other Shopping	€ _____
Taxis/Ground Transportation	€ _____
Entertainment	€ _____

- What is your likelihood of you returning to this city? (1= very unlikely and 5= very likely)?

	Very Unlikely		↔	Very Likely	
	1	2	3	4	5
Likelihood of returning to this city	<input type="checkbox"/>				

- On a scale of 1 to 5, how satisfied were you with each of the following at this stopover? : Please tick (✓) one box for each item below ↓

	Very Dissatisfied		↔	Very Satisfied	
	1	2	3	4	5
Prior Information on Tours and Activities	<input type="checkbox"/>				
Guided Tours	<input type="checkbox"/>				
Historic Sites/Museums	<input type="checkbox"/>				
Variety of Things to See and Do	<input type="checkbox"/>				
Friendliness of Locals	<input type="checkbox"/>				
Overall Shopping Experience	<input type="checkbox"/>				
Overall Prices	<input type="checkbox"/>				
Taxis/Local Transportation	<input type="checkbox"/>				
Port Facilities	<input type="checkbox"/>				

