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Limerick

An economic renaissance

This is a county to live in...

194,899

People, Ireland's 3rd largest city in 2016

Best secondary school in the country

of income per person

- Young population age profile
- Gateway to the Wild Atlantic Way
- Disposable incomes higher than national average
- Most affordable urban area in Ireland
- Relatively affordable housing more affordable than in other cities

- Affordable residential rents in Limerick
- Lower salary costs
- Short commute times
- Low congestion levels
- Walkable compact city



This is a county to learn in...

24,000

Almost 24,000 third level students

Of UL graduates find employment in the Mid-West Region

- Students of STEM subjects account for 1/3 of graduates from UL and LIT
- Strong pipeline of talent to local businesses for both entry level and posteducation positions



This is a county to do business in...

12,000

Active enterprises operating in Limerick

12,000

New jobs created in Limerick over last 5 years

IDA-backed firms with a Limerick home

Start-ups for every 1,000 of population

- Broad spectrum of industries
- Supportive business environment
- ► Collaborative local engagement
- Three largest economic sectors in Limerick are Wholesale and Retail Trade, Construction and Professional, Scientific and **Technical Activities**
- Development of new industry
- Key Sectors: Human Health and Social work

- Most important sector for FDI investment ICT/Hardware/ Software followed by Engineering/Medical Technology
- Available, affordable office space coming on stream
- Shannon Foynes Port Ireland's largest deepwater port - handles largest quantity of cargo in the country after Dublin



This is a county to visit...

20min

Shannon international airport within 20 minutes drive

One hour drive from Cork and Galway



Two hour drive from Dublin

- Home to significant historical sites including King John's Castle and The Treaty Stone
- Daily transatlantic, London and European flights





"Limerick will become a major economic force in the Irish and European economy, a leading centre for commercial investment, capitalising on the strength of its higher education institutions, the skills of its workforce and its environmental and heritage attributes."

Limerick 2030 Vision: An Economic and Spatial Plan for Limerick

Overview

Over the last two decades there has been an increasing understanding of the importance of cities and city regions as economic, social and cultural focuses, which can drive regional and national economies. In today's environment of mobile, financial and human capital, the focus of economic competition is increasingly on city regions. This trend is particularly significant for an open economy such as Ireland which is competing in a global market for investment and talent.

> In 2014 Limerick City Council and Limerick County Council amalgamated into one body - Limerick City & County Council. As outlined in the Limerick 2030 Vision: An Economic and Spatial Plan for Limerick report, the objective of this merger was to extend the city boundary to include urbanised parts of the county and was seen as a 'once in a generation opportunity' to drive new levels of employment and economic growth.

> In May 2017 Limerick City & County Council (LC&CC) appointed EY-DKM Economic Advisory Services (formerly DKM Economic Consultants) with MCJ Lemagnen Associates Ltd. (MCJ Lemagnen) to undertake an Economic Profile report of Limerick city (including suburbs as defined by the CSO) and county. The context for this study includes the delivery of the Limerick 2030 vision, and of the new National Planning Framework Ireland 2040 - Our Plan, which foresees the population of Limerick growing by 50% between now and 2040.

The study addresses the following elements:

- A. A comprehensive Economic Profiling of the city and county, in terms of performance over the last number of years, and the current outlook.
- B. A forward-looking Predictive Analysis this element of the study was addressed via a SWOT analysis, a review of international "megatrends", and a set of detailed international case studies.
- C. A detailed Benchmarking Analysis against comparable cities internationally.
- D. A detailed Assessment of Investment in Limerick in key sectors over the last number of years, and looking forward.

The outputs of the study are summarised in this Executive Summary.

A. Economic profiling

The Economic Profiling element of the report undertook a comprehensive socio-economic statistical analysis of Limerick city and county, including comparison with the other four major cities in the State - Dublin, Cork, Galway and Waterford - and their counties.

Population

The total population of Limerick city and county in 2016 was 194,899, an increase of 1.6 per cent over the previous five years. Of this, some 97,000 were resident in Limerick city & suburbs (as defined by the CSO, including the settlements of Annacotty and Mungret). Limerick is the third largest city in Ireland after Dublin (1.17 million) and Cork (209,000). The population of Limerick city & suburbs grew by 3 per cent in the five years since Census 2011, making it the slowest growing of the five major cities in the intercensal period.

Under the National Planning Framework, it is planned that half of the overall national growth in terms of population, employment and housing will be targeted at Ireland's five cities - Dublin, Cork, Limerick, Galway and Waterford. Currently, growth has been disproportionately focused on Dublin, and it is the objective of the Framework to redistribute growth in a more balanced manner, which would see each of the other cities grow by at least 50 per cent by 2040, 'to enhance their significant potential to become cities of scale'. The Framework foresees the population of Limerick city reaching approximately 150,000 by 2040.

Commerce

In 2015, there were approximately 12,000 active enterprises operating in Limerick city and county. This represented growth of 21 per cent in the year from 2014, and was in excess of the rate of growth observed in the State (18.8 per cent). In common with the rest of the country, Limerick had experienced reductions in the number of enterprises in the previous two years. In 2015, Limerick County ranked fourth out of the five counties, on a per capita basis, for the number of active enterprises.

The three largest economic sectors in Limerick are Wholesale & Retail Trade, Construction, and Professional, Scientific and Technical Activities, which between them represent close to 41 per cent of total active enterprises. This is broadly in line with what is observed in the four other counties.

In terms of employment, the key sectors are Human Health and Social Work, accounting for 23 per cent of the 64,140 employees employed in active enterprise in 2015 in Limerick County. This is significantly higher than the level of employment observed in the same sector in Dublin, Cork, Galway and Waterford, where it represents approximately 10 to 12 per cent. The Wholesale and Retail Trade sector represents approximately 13.8 per cent of total employment in enterprise, somewhat lower than the levels observed in Dublin, Galway and Cork.

Limerick County is home to 54 IDA-backed firms in total, placing it behind Dublin, Cork and Galway, but ahead of Waterford. The most important sector for FDI investment in Limerick is ICT/Hardware/Software, followed by Engineering and Medical Technology. Biopharmaceuticals, Business Services, Financial Services and Consumer Goods also feature. While Limerick does not enjoy the same degree of sectoral FDI clustering as can be seen in Cork and Galway, it does have the advantage of a wide range of sectors, which should be resilient to sectoral downturns.

In 2016, there were three start-ups for every 1,000 of the Limerick population. Similar levels are reported in in Galway and Waterford, while in Dublin and Cork there were seven and five start-ups per 1,000 population respectively. Of the firms that started in Limerick in 2016, the majority were involved in the Professional Services and Finance sectors. These two sectors also made up the majority of start-ups in Cork, Dublin and Galway.

The city centre spatial plan, as outlined in Limerick 2030, has the ambition to create 'a city centre that can attract new inward business investment and encourage the formation of new local business by providing high quality, flexible space.' Although the level of office stock in Limerick has been increasing over the past number of years, there remains a shortage of large, high quality office space in Limerick city centre (Central Business District and adjoining areas). This will be alleviated as high profile schemes such as Gardens International and Opera sites come

| Economic Data Profiling Report for Limerick | Executive summary



Limerick is the most affordable urban area in Ireland in which to both rent and buy residential property. When coupled with the fact that disposable incomes are higher than the national average, this is a key advantage.

on-stream. Notably, city centre office rents remain lower than the equivalent in Dublin, Cork and Galway.

Labour Market

A number of sources of data for job creation in Limerick over the past five years have been considered in this chapter. Data collected by LC&CC points to almost 12,000 new jobs announced in Limerick city and county over the study period. This number is incomplete however as it only includes publicly announced jobs and it can take approximately two years for job announcements to translate into actual jobs.

In terms of the increase in jobs net of job losses, the data indicates that a net 5,000 private sector jobs have been created in Limerick city & suburbs over the past five years. In the city and county combined, the figure is over 8,000 net private sector jobs. Some additional public sector jobs could also be expected. While these statistics relate to businesses based in Limerick and thus would include commuters into the city/county, census data for residents of the city and county indicate broadly similar growth.

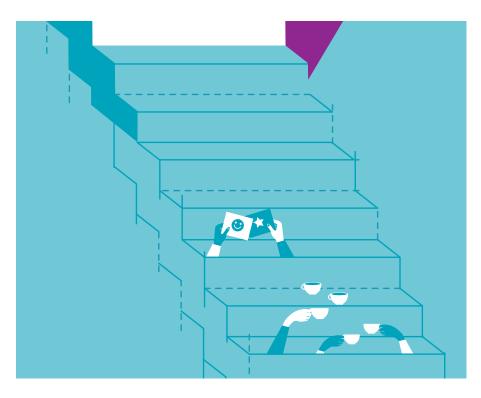
Commuting data from the Census confirms that Limerick city is a major locus of employment, with over 22,700 workers commuting daily into the city - this represents slightly more than the number of city residents working in the city. While job creation has been broadly based, employment growth has been particularly strong in the following sectors: BioPharma/Medical Devices; ICT, Construction, Retail, Fintech and the Creative sector.

A significant reduction in unemployment was observed in Limerick city & suburbs between the 2011 and 2016 Censuses, with the rate falling from 23.3 per cent to 16.8 per cent. This represented the greatest improvement across the five main cities over the period.

There are considerable ongoing unemployment issues within Limerick city, however. Census 2016 identified 79 unemployment blackspots across the State, where unemployment is two to three times the national average. Of these, 17 are located in Limerick city and

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At third level, UL (including MIC) and LIT (including the highly rated Limerick School of Art & Design) have an aggregate student population of approximately 23,800, which provides a strong pipeline of talent to local businesses



suburbs. By comparison, Waterford city contained 13 unemployment blackspots, Dublin city contained seven and Cork city had five. Across the five cities, Limerick has shown the slowest recovery in terms of the reduction in unemployment blackspots between the two censuses. However, as indicated already, the populations of the most deprived areas in Limerick have been falling over that period.

Education

Limerick's third level institutes is a key strength for the city and county. Given the level and sectoral spread of FDI in Limerick, it is paramount that the city is in a position to supply a highly qualified, highly skilled labour force to meet the requirements of the economy.

In the academic year 2015/2016, some 23,800 students were enrolled in third level institutions in Limerick, across University of Limerick (UL), Limerick IT (LIT) and Mary Immaculate College (MIC). Across both UL and LIT, the proportion graduating with degrees in Natural Sciences, Mathematics, ICT and Engineering and Manufacturing totalled 10 per cent, 8 per cent and 17 per cent respectively. This compares favourably to the equivalent for Dublin, Cork, Galway and Waterford.

The QS World University Rankings, which ranks over 950 universities from 84 countries, ranks UL between 501 and 550 in 2018. Only one Irish university (TCD) is included in the top 100 of this ranking. The SCImago Institutions Rankings 2017 ranks UL 502nd out of 5,250 institutions globally, and 8th in Ireland.

Incomes & Social Class

In 2014 Limerick city and county had the second highest level of total income per person in the State, after Dublin. That said, between 2011 and 2014, Limerick city and county was the only one of the five counties to experience a decline in disposable income per person, falling by 5.9 per cent compared to the State average increase of 2.2 per cent. However, Limerick did experience income growth in 2014, reflecting the start of the economic turn-around.

| Economic Data Profiling Report for Limerick | Executive summary

Shannon Airport is a critical asset to the growth of the city and wider region; Marine connectivity is similarly important with Limerick city served by both Limerick Docks and the Shannon-Foynes Port

Limerick has more areas of deprivation than any of the other cities. The data indicates that these areas were particularly badly hit by the economic crisis, and have been slower to recover in the meantime. However, due largely to the activities of Limerick Regeneration, the proportion of the city's population living in these areas has fallen significantly over the last number of years.

In terms of labour force skillset, Limerick city has a lower profile than the other cities. The city's dependency ratio is likewise higher than the other cities, with the exception of Waterford, but is lower than the State average.

Housing

Limerick city has not escaped the fallout from the collapse in the housing market in the late 2000s, and the subsequent slow recovery in output. New housing completions remain low, as is the case in the other main cities.

That said, housing remains significantly more affordable in Limerick than in the larger Irish cities. As of 2016, average sales prices in Cork, Galway and Dublin cities were respectively 59 per cent, 66 per cent and 174 per cent higher than in Limerick city. Likewise, residential rents in Limerick city are significantly lower, and have been growing at a much lower pace, than in the larger Irish cities.

While representing a challenge for the commercial sustainability of new housing development in the city, housing affordability is a key competitive advantage for Limerick in attracting people and investment.

Tourism

A successful tourism industry is important not only for Limerick city and county but for the Mid-West region as a whole. Data from Fáilte Ireland indicates a positive trend in the numbers of visitors, both domestic and overseas, visiting the county in recent years. Growth has also been reflected in overseas tourism spend which reached approximately €210 million in 2016.

Infrastructure

Infrastructure will prove vital for LC&CC's plan to develop Limerick city and county into an attractive and competitive location for enterprise and inward investment. Road infrastructure is of particular importance in linking the county and region to the other major cities. Limerick is well served via the M7 link to Dublin and the M17 link to Galway, while the link to Cork will be addressed with the recent approval of the M20 motorway.

There appears to be scope for further investment in public transport links through the city and county, with very low percentages of commuters choosing public transport. That said, Bus Éireann reports that recent improvements in the bus network have resulted in significant increases in patronage, albeit from a low base.

Shannon Airport is a key connector for both inward investment and tourism. In 2016, 1.7 million passengers travelled through the airport. While this represents year-on-year growth, it accounts for only 5 per cent of the total 32.8 million air passengers in Ireland that year, with Cork Airport accounting for close to 7 per cent and Dublin 85 per cent. Shannon Foynes Port is likewise a significant resource for Limerick and the region, handling the second largest quantity of cargo in the country, after Dublin Port.

Finally, broadband is a key infrastructural issue. The level of broadband connectivity in Limerick city and suburbs has increased steadily since Census 2006, when 25 per cent of households had access to broadband. In Census 2011 this increased to 65 per cent, reaching 71 per cent in Census 2016. In rural Limerick it is planned that over 15,000 properties will be enabled with commercial high-speed broadband between 2017 and 2018.

B. Predictive analysis

This section of the report undertakes a SWOT Analysis for Limerick, which highlights the strengths, weaknesses, opportunities and threats facing the city. This is drawn from consultations with a broad range of Limerick stakeholders, the economic profiling section, and the international benchmarking analysis. The conclusions of the case study analysis also provide context on Limerick's development in relation to a selection of cities with similar characteristics, development paths and vision. Finally, an analysis of international "megatrends" is produced, and linked to the SWOT analysis.

SWOT analysis

Strengths

The Limerick region has many strengths which make it a highly attractive location in which to live and work, for businesses to operate in, for students to study in and for tourists to visit. Our analysis highlighted the existing base of industries and businesses located in Limerick as a strength for the region. One key aspect is the broad spectrum of industries located in the region, meaning that Limerick has reduced dependency on any one individual sector. Many leading firms have either emerged from Limerick or have chosen Limerick as their base, including Johnson & Johnson, General Motors, Northern Trust, Uber and WP Engine. The Troy Studios Film Hub in Castletroy and the National Sports Business Cluster reflect new sectors that have emerged in recent years.

Relatively affordable housing, low congestion levels and relatively short commutes and a compact city were highlighted as significant strengths. The cost of living is a particular strong point, with Limerick identified as the most affordable urban area in Ireland in which to both rent and buy residential property. When coupled with the fact that disposable incomes are higher than the national average, this is a key advantage.

The relative affordability of office space in Limerick compared to other cities in Ireland is another strength, despite an apparent under-supply of high quality office space. However, the Gardens International development and the proposed Opera development will provide new supply to the market in the medium term.

The level of collaboration and joined up thinking in the city, driven by the Council's own strategy and actions, and strong engagement with the wider community around redevelopment, is a key strength. LC&CC was for instance praised for its supportive and flexible approach to exploring office space solutions with businesses in the region, and particularly with FDI firms establishing in the county.

Limerick has grown through positive disruption, having taken some very bold decisions in response to the major loss of jobs during the economic crisis.

The level and depth of engagement between businesses, third level institutions, representative bodies and statutory bodies in Limerick is a unique and formidable strength. Industry collaborations such as 'Limerick for IT' and 'Limerick for Engineering' are examples of industry-led initiatives which are supported by education and training providers, to address future skills needs and ensure an adequate pipeline of talent.

The collaborative approach to enterprise in Limerick has been further enhanced by the development of spaces such as 'Engine', Bank of Ireland's Workbench facility, the Nexus Innovation Centre at UL and the Hartnett Enterprise Acceleration Centre at LIT. Collaboration in the wider region also extends to the county councils where it is recognised that economic progress in one county is advantageous for the others, and hence approaching development from a regional perspective is mutually beneficial.

In common with Ireland in general, Limerick has a lower median age than other western countries, and a slower growth rate of the cohort aged above 65. This represents a significant competitive advantage for the county in economic terms as greater labour force participation over a longer period could be expected.

Education is a key prerequisite for economic development and Limerick has substantial strengths in this regard. Limerick has an expanding network of secondary schools (including Laurel Hill, the best secondary school in the country). At third level, UL (including MIC) and LIT (including the highly rated Limerick School of Art & Design) have an aggregate student population of approximately 23,800, which provides a strong pipeline of talent to local businesses.

With an improving road network - notably the recently completed M17/M18 to Galway, the planned Northern Distributor Road and new M20 motorway to Cork -Limerick's road connectivity is developing as a key strength.

Shannon Airport is a critical asset to the growth of the city and wider region. The airport provides vital international connectivity to commercial

centres, which facilitates greater interaction of firms (particularly FDI firms) in Limerick with businesses internationally. Marine connectivity is similarly important with Limerick city served by both Limerick Docks and the Shannon-Foynes Port, the second largest port in the State by volumes handled.

Sport is a primary passion for Limerick people and the city's sporting heritage provides significant physical and cultural assets. Thomond Park and the Gaelic Grounds both have the potential to be utilised for purposes other than sport, including as business and entertainment event venues.

As with all cities and regions, Limerick has a number of areas of weakness. The key ones identified as part of this study are discussed here.

One of Limerick's primary weaknesses has been the 'hollowing out' of the city's core residential, retail, education and commercial activities in recent decades, resulting in a lack of vibrancy and population in the city centre. The Georgian Quarter of the city was highlighted by multiple stakeholders, as was Nicholas Street, albeit urban renewal investments are underway to tackle these. We note also that a number of new venues have opened in the city centre in recent

Housing and the retail & commercial sectors are also victims of this 'donut effect'. The lack of availability of modern apartments was alluded to in stakeholder consultations. Similarly, suburban shopping centres have come to dominate, drawing people away from city centre retail. The lack of urban density is also reflected in a shortage of significant high quality office space in the city centre.

This may be a hindrance for future growth, since businesses and workers are increasingly attracted to urban areas of critical mass and density. Likewise, achieving the population growth targets set in the National Planning Framework will represent a challenge given the current urban configuration. As indicated above, one notable issue for Limerick

Thomond Park and the Gaelic Grounds both have the potential to be utilised for purposes other than sport, including as business and entertainment event venues

city is the number of areas of social deprivation, and unemployment blackspots, relative to the other main cities in Ireland. However, the proportion of the total population living in these areas is falling steadily, linked to steps taken by Limerick Regeneration.

Rural broadband infrastructure has also been identified as requiring attention, despite strong coverage levels in the city. Several stakeholders outlined how this should be a high priority for the future development of the county, as it is constraining business development outside urban areas.

Stakeholders also raised concerns over the capacity of schools in the region to absorb additional pupils if the population of Limerick is to reach the targets set by the National Planning Framework. In recent years the number of schools in the city centre has reduced, with school amalgamations driven by changing demographics and the movement of families into the suburbs.

Public transport in Limerick is a notable weakness. Despite recent improvements, the city's bus service is used by a low proportion of the workforce, compared to the other main cities. Likewise, the lack of frequent direct train links with Dublin is a weakness. Regional rail links meanwhile are infrequent and poorly patronised.

Finally, Limerick is an underperformer in tourism terms, despite being bordered by counties which draw large volumes of tourists. One possible issue is the lack of a compelling tourist attraction in the city: in the Top 47 attractions in the country, as compiled by Fáilte Ireland, Limerick features only twice, with the Hunt Museum (42nd) and King John's Castle (43rd).

Opportunities

Reflecting both the strengths and weaknesses of Limerick, opportunities exist for the overall improvement of the county as a place to live, work, do business in and visit.

There exists substantial scope for the development of both greenfield and brownfield sites in Limerick which could cater for residential, commercial, educational and recreational development. Under the Limerick 2030 strategy, six key development sites have been identified, with the Cleeves Riverside Campus and the Opera site considered to have the most 'transformational' potential for the future development of the city. In combination with Gardens International, Troy Studios and the Mungret College site, the sites represent a significant opportunity for the regeneration and development of Limerick City and its environs.

Public investment will also need to be supplemented with private development. According to LC&CC there is currently 440ha of land zoned for residential development in the city and its environs, and a number of stakeholders raised the possibility that private developers could be engaged in order to speed up the development process and alleviate pressure on public funds.

While the 'donut effect' represents a weakness, it also presents considerable opportunities for the rejuvenation of the city centre. The Georgian Quarter, in particular, is seen as an area of opportunity while the major rejuvenation of O' Connell Street, involving an investment of €9 million by the Council, should see increased activity and footfall return to the city centre. The recently announced plans for redevelopment of the Limerick Docklands meanwhile represents a major opportunity for a new economic district in the city.

There is likewise considerable potential with regard to the development of Limerick as a 'smart city', providing opportunities to install modern technology systems which could, for instance, improve transport or energy efficiency in the city.

With the UK's exit from the EU there is scope for Limerick to build its economic base by capturing some of the businesses relocating from the UK. While Limerick is unlikely to be the first preference for relocating head offices, back-office and support functions for multi-national companies could be attracted to Limerick. Limerick's relatively low costs of living and of doing business, along with the strong pipeline of new commercial space in the city,

Collaboration in the wider region also extends to the county councils where it is recognised that economic progress in one county is advantageous for the others, and hence approaching development from a regional perspective is mutually beneficial

represent a strong opportunity not only to attract 'Brexit business', but also to attract businesses that are being priced out of an increasingly expensive Dublin. In this context it will be important to maintain strong communications with IDA Ireland and Enterprise Ireland to stay informed regarding what their client firms are looking for, and to keep them updated on what Limerick has to offer.

Clustering in the cultural and sports sectors is another important area of potential, and the recently established Troy Studios has the potential to emulate the likes of the National Sports Business Cluster in spurring clusters in the film/television and related sectors.

With regard to the opportunities in the tourism sector, Limerick boasts a broad spectrum of historic and tourist amenities which should form important components in the region's tourism strategies over the coming years. There is scope for Limerick to increase tourism spend through the targeting of overnight stays in the city and county, as both average occupancy and average room rates are considerably lower than in Dublin, Cork or Galway.

Delivery of the Limerick Tourism Development and Marketing Strategy 2017-2023 (draft) should contribute to boosting the tourism sector in Limerick. Limerick would benefit from being more fully included in the Wild Atlantic Way, enabling the county to tap into a rich tourism market. The River Shannon was also identified as an important asset which could be harnessed for both tourist and leisure activities. Likewise, the hosting and promotion of more high profile events in the city has been highlighted as a way to improve the vibrancy of the city and attract more tourism.

Threats

A number of factors, mainly outside the control of local stakeholders, have been identified as threats to the future economic success of the city and county.

Shannon Airport is of vital importance to Limerick and the west of Ireland, and any uncertainty over the continued operation of air routes could have serious consequences. The closure of routes to either US or European destinations would be a significant threat to businesses in Limerick, and to the tourism market in the region.

While also representing an opportunity, Brexit could potentially have a damaging effect on Ireland and Limerick, in terms of both trade and tourism.

The viability and continued operation of train routes is also considered to be a threat. Irish Rail identified that two of its four worst performing routes had a terminus in Limerick: the Limerick-Galway and Limerick-Ballybrophy routes. Concerns exist around the long-term viability of these lines, particularly as road connectivity continues to improve.

"The City Centre will be at the heart of this economic force - an attractive magnet for retail, leisure, residential, commercial, educational and cultural growth. Growth will benefit all citizens across the City, County and MidWest Region."

Limerick 2030 Vision: An Economic and Spatial Plan for Limerick

Case studies

As part of the predictive analysis we also compiled case studies for three cities in order to place Limerick in an international context. Following consultations with LC&CC it was decided that Dundee (UK), Portland (Oregon, USA) and Tampere (Finland) were the most appropriate cities against which to compare Limerick's performance. These cities' recent experiences parallel Limerick's in many important aspects, and therefore how they have faced their various challenges were felt to hold important lessons for Limerick.

Detailed analysis of socio-economic developments in the three cities was undertaken, and the following key lessons were identified from an analysis of their experience:

► 1. Sustained Investment:

Substantial investment and determination over decades is required to achieve change.

► 2. Planning and Monitoring:

Time spent planning the city's strategy, tactics and key performance indicators is time well spent.

► 3. Communication:

Regularly keep residents up to date with progress on initiatives and plans through PR and social media.

► 4. Entrepreneurialism and Innovation:

Set up incubators, accelerators and development programmes and create strong links between academia and the public/private sector.

▶ 5. International Focus:

Be outward facing to the local community, to local and country markets and to international investors.

► 6. Equal Opportunities:

Equality matters and being open to issues, such as pay, housing or skills, is important.

▶ 7. Smart City and Sustainability:

Be bold in smart city strategies, sustainable policies and programmes to underpin urban renewal and future growth.

▶ 8. City Personality:

Use the natural environment to the city's advantage for both residents and incomers and allow the city's personality to shine through and develop

Megatrends

A number of international megatrends were identified as part of the predictive analysis. The following table summarises them along with their implications, and how they link with Limericks strengths, weaknesses, opportunities and threats, as identified in the SWOT analysis.



Megatrend

BREXIT

EU & US Tax Alignment Pressures

Rise of Asian Economies

Automation, Robotisation, Artificial Intelligence (AI), Internet of Things (IoT)

Online Retailing

Megacities (> 10 million people)

Smarter, Sustainable and Cleaner Cities, Energy & Climate Change

Ageing Demography in Developed World

Technology Start-Ups Boom - "Rise of the Unicorns"

Implications	Linkage with Limerick's Strengths, Weaknesses, Opportunities & Threats
Short-term uncertainty; potential trade barriers and increased trade costs (agrifoods and tourism particularly exposed). Ireland may become more attractive FDI location/target for UK relocations.	While Limerick will not be immune from the threats from BREXIT, the city's competitive cost of living and doing business relative to other locations in Ireland leave it well-placed to capture certain types of "back-office" type activities, both from the UK and further afield, and relocating from Dublin. Potential activities could include accounting, business support services (e.g. payroll, HR) technical support desks, including IT technical support. Software development and other R&D/Innovation are also possibilities
Reduce international attractiveness of Irish tax system for attracting investment.	Limerick's relatively wide FDI sectoral spread should reduce the potential impact on the city.
China and other Asian countries will become more important parts of the global economy, and will become increasingly active investors in the West.	Low costs relative to other Irish cities, strong air and sea connectivity and third-level education sector should leave Limerick well-placed to attract inward investment.
Negative impact from jobs losses. Up-skilling, retraining and education will be critical challenges. Opportunities from disruptive technology given Ireland's reputation as a location for tech companies and attracting FDI.	May be a concern given Limerick's relatively prominent manufacturing sector. Third-level education sector with strong focus on STEM subjects will be an asset in building and maintaining relevant skillsets. Promoting hi-tech sectors (particularly start-ups) will be key.
Online retailing an increasing challenge to "bricks and mortar" retail, particularly in city centres.	A challenge for Limerick, as it seeks to revitalise city centre retail. Also an opportunity for new e-commerce logistics units as Limerick has strong and improving road connectivity, and Shannon Airport is a strong logistics asset.
Increasing proportion of global economy and population locating to megacities.	Ireland too small to support a megacity, risks of economic peripherality.
General trend towards urbanisation, with demographics, is source of challenges and opportunities regarding healthcare, mobility, waste, air quality and affordable housing. Push towards carbon neutrality will have implications for energy generation and usage, and transport.	City authorities can play a leading role in terms of policy and use of city assets and services for piloting and development of smart and clean innovation. Limerick needs to ensure that it is a frontrunner in smart cities in Ireland and Europe. Promote the city as a testbed for new technologies/infrastructure. City centre living and public transport are key challenges for Limerick in this regard.
Economic participation rates will decline with ever-increasing percentages of retired persons and growing healthcare and tax challenges, notwithstanding that retirement ages will increase.	Ireland (and Limerick) has one of the youngest populations in Western Europe, which will give a strong advantage in terms of available labour force. Medical and healthcare product and service innovation, especially solutions for independent living represent a major global opportunity. Linkages with smart city initiatives. The centralised nature of Government and taxation in Ireland limits the degree to which Limerick can influence policy.
Emergence of next generation IT technologies, and 5G infrastructure that is the biggest driver of new generation of massively backed start-ups, which are dramatically changing all industries, from automotive to fintech to health to manufacturing and logistics.	Ireland is in a strong position to attract these companies and has also established its own significant start-up ecosystem. The challenge for Limerick is to ensure that it fully participates, in particular establishing its own sustainable, start-up ecosystem. Economic profiling analysis indicates Limerick somewhat behind in terms of start-up scene.

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C. International benchmarking analysis

Section A of the report undertook a detailed statistical profile of Limerick, including benchmarking it against the other main cities in Ireland. The key objective of the international benchmarking section was to compare Limerick with a group of progressive and visionary cities with similar characteristics, to create a better understanding of their transformative journeys in more detail.

Where relevant, country as opposed to city benchmarks are presented. The benchmark cities chosen were: Dundee, Tampere and Portland, whose more detailed case studies are contained in Section B, along with Norwich (UK), Aalborg (Denmark), Montpellier (France), Groningen (Netherlands) and Vancouver (Canada).

Population

Limerick is identified as having a younger population age profile than the international benchmarks, which is viewed as a positive in that the city can have greater economic participation for longer into the future. This competitive advantage can only be maintained however if Limerick is able to deliver employment opportunities into the future.

GDP and Tax

Ireland has the best corporation tax rate in Europe, which continues to be a compelling selling point for FDI attraction, expansion and retention. It is also a favourable rate for Irish SMEs.

Labour force: Unemployment

Limerick has a high unemployment rate compared to the benchmark locations. This is clearly a challenge. Limerick will need to reinvest in upskilling and 'lifelong learning' of the labour force as a whole as, for example, Tampere is doing.

Sectoral Employment

The relative diversity of its sector employment is a strength for Limerick, mitigating risks of overdependence on a single sector/company. Both Limerick and Tampere were victims of major retrenchment by global ICT firms.

Utilities and Infrastructure

Digital infrastructure investment is imperative for deployment of smart city technologies and the Internet of Things (IoT). Relatively high electricity prices are a hindrance for business investors and also for development of electric and increasingly autonomous vehicles. On the other hand, industrial gas prices, air connections and air freight and road congestion compare favourably with benchmark cities. Limerick has the best air links of the benchmarked cities (albeit they could still be improved), a key asset for both FDI attraction and for exporting firms. Further European route expansion, embedding into export manufacturing supply chains for air freight, and improved national road developments are both strengths and opportunities.

Property

Compared to the benchmarks, Limerick has high property taxes and charges. While its office rents are relatively expensive, retail and industrial rents are competitive. A key issue is a lack of affordable office space, which is a constraint for SMEs and startups. Limerick needs to address this issue, ensuring adequate supply catering for different phases of startup growth, particularly in the city centre locations. Both Dundee and Tampere have invested in high quality but affordable and flexible start-up space.

Education

Limerick has a critical mass of Higher Education (HE) students, and is comparable to the benchmarks in this regard. The share of students in STEM-related subjects is high, although the numbers in health/welfare subjects is relatively low. Increasing STEM and health graduate numbers would increase the city's attractiveness to international companies and also for R&D contract work.

One of the biggest issues for Limerick is its ability to retain graduate talent. Some 33% of the working age population has a tertiary education, the third lowest of the benchmarked cities, despite being a university city. This is evidence of 'brain-drain' and a potential risk for attracting higher skilled corporate investment projects

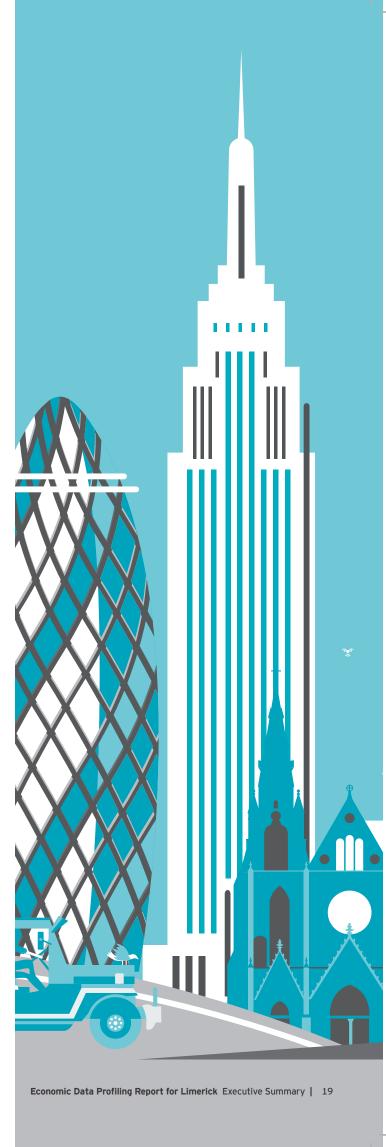
Of the cities under considerations, four have higher ranking universities than Limerick and two benchmark locations have two institutions in the QS top 1,000. Limerick's third level institutions are very good in a national context but more needs to be done to increase their international standing. Subject-specific rankings should be used to illustrate sector expertise.

Research and Development

Ireland has lower R&D spend than all other benchmark countries, and fewer researchers, and also ranks low for talent and innovation in global indices. Relatively speaking, Ireland does not have quite the international pure R&D intensiveness of the others, but IDA Ireland has been highly successful in attracting applied R&D and software innovation FDI projects.

International Competitiveness

Finally, Ireland has a mixed position on global competitiveness rankings – consistently high in the IMD World Competitiveness ranking but the lowest on the WEF Global Competitive Index. This all depends on one's definition of 'competitive'. Ireland is a global frontrunner in FDI attraction so is clearly competitive for business, but other indices indicate Ireland is less competitive for innovation/R&D. Ireland also has room for improvement on ease of doing business compared to the UK and Denmark.



D. Assessment of investment

The quantity and quality of a region's infrastructure has an important role to play in sustaining competitiveness. Investment decisions, in particular FDI, are based inter alia on the quality and reliability of physical infrastructure. In this section of the report a detailed review of the public and private infrastructure put in place across Limerick in recent years is presented.

Over the period 2014 to 2017 a total of 1,324 planning applications (excluding one-off self-build applications) were identified, across a range of sectors including industrial, commercial, retail, residential and education, and were reviewed in detail.

Industrial Investment

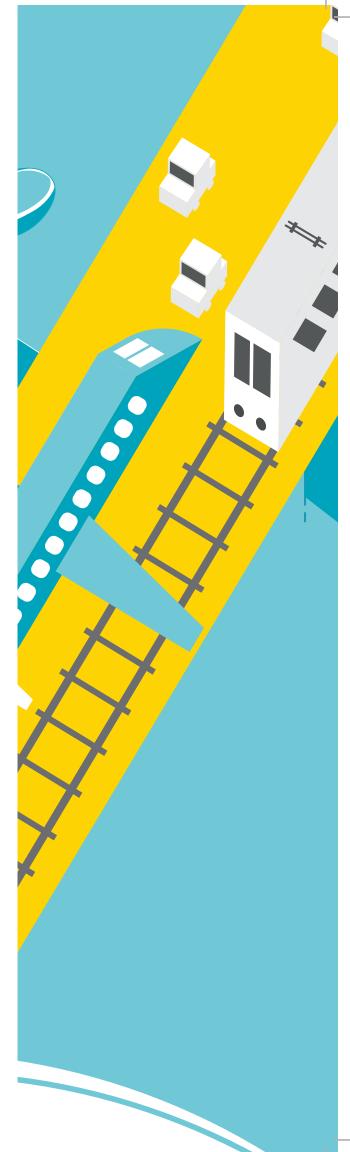
One of the most notable industrial investments during the study period is Troy studios, which saw the redevelopment of the former Dell building in Castletroy and involved an investment of €1 million (shell and core).

There is also considerable potential industrial investment for Limerick, with €41.2 million worth of projects awarded planning permission during the study period but have yet to progress to on-site construction. If these investments were to come to fruition it would add an additional 33,000 sq. m. of industrial space to the county.

Commercial and Retail Investment

During the study period the greatest investment occurred in the commercial and retail sector, with just under €90 million invested in on-site construction. Commercial projects, i.e. office space, made up €65.5 million of this, while retail projects constituted €24.3 million.

The majority of this investment has been in the form of commercial projects in Limerick's city and suburbs. Over the four year period some 48,000 sq. m. of commercial space was added, 43,000 of which was located in the city and suburbs. The largest commercial investment over the period has been the office space in the Gardens International site, which accounted for 65.7 per cent of the total investment made in commercial projects in 2017.



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The relative affordability of office space in Limerick compared to other cities in Ireland is another strength ... the Gardens International development and the proposed Opera development will provide new supply to the market in the medium term.

Residential Investment

Investment in the residential sector was particularly badly hit during the economic downturn, with a dramatic slow-down in home building resulting in the currently lack of housing supply across all regions. Similar is evident from the investment data for Limerick, which shows that in the period between 2014 and 2017 some 2,400 residential projects were granted planning permission across the county but only 960 projects actually began construction. Having said that, the value of residential projects on-site has recovered considerably since the crisis. In 2014 approximately €2 million worth of investment occurred in the sector, compared to €41 million in 2016. In the first three guarters of 2017 a total of €21 million has been invested.

In the past two years a number of significant housing developments have begun construction in Limerick. In 2017 construction on 53 housing units began in Castletroy, valued at €6.2 million. A further 170 units are being constructed in Annacotty, with an estimated value of €21 million.

The level of public investment in the residential sector has been exceptionally low in the past number of years and Limerick is no exception. According to the data, no publically funding housing developments were funded in the Limerick in either 2014 or 2015. There has been slightly more activity in the past two years, however the level of investment is considerably subdued compared to that of the private sector.

Education Investment

There has been considerable investment in education in the past four years, with close to €50 million invested across crèche/ nurseries, schools, colleges, universities and training centres. The vast majority of this investment has involved the extension or refurbishment of existing buildings.

In both 2014 and 2015 the city and suburbs received most of the investment in this sector, before switching in 2016 and 2017 to a focus on investment in the rest of the county. The largest investment (c. €12 million) was recorded in 2016, with the development of the Mungret Educate Together National School and Gaelscoil an Raithín. As might be expected, the vast majority of investment made in education is public sector, representing c. €46 million of the total €49 million of on-site investments.

Some 3.3 per cent of the overall national investment in education in 2017 occurred in Limerick compared to 4.5 per cent in 2016. This compares to less than 1 per cent of the onsite investment in education in Ireland in 2014.

Other Investments

Significant investment has also occurred over the past four years in sectors such as healthcare, transport, civil, utilities, hotel and catering and sports and leisure.

Healthcare investment, which includes dental surgeries, health centres, nursing homes and hospitals, has totalled €64 million over the past four years. Considerable investment has been made in University Hospital Limerick (€17 million) and a privately funded palliative care unit (€11 million) in the city and

According to the data, few transport projects have been approved during the study period, with even fewer progressing to construction stage. The most notable transport investment is the redevelopment of Colbert Train Station, with an estimated construction value of close to €17 million.

Investments in road and maintenance has been relatively subdued with the data showing that approximately €1 million of civil engineering investment occurred in the past four years. Similarly, investment in utilities, such as wind/solar energy farms and water treatment facilities, totalled just under €6 million.

The redevelopment of Adare Manor hotel is the key component behind Limerick's investment in the hotel and catering sector. Between 2014 and 2017 a total of €58 million was invested in the sector, of which Adare Manor Hotel constituted €50 million. There is also considerable investment in the pipeline, with a further €15 million worth of projects granted planning permission during the period.

In the past four years some €43 million has been invested in the likes of sports facilities and community, religious and leisure centres. Close to €26 million of this is associated with the Glucksman Library at University of Limerick. A further project, awarded planning permission is set on the Mary Immaculate College campus, with an estimated investment value of €21 million.

Conclusion

While Limerick still faces many challenges, overall, the city has a very positive and exciting story to tell the world. From the amalgamation of the city and county councils, Limerick has grown through positive disruption, having taken some very bold decisions in response to the major loss of jobs during the economic crisis. The amalgamated Council has a well-articulated vision for the future, and a plan and commitment to make it happen. It has been notably pro-active in acting as developer when the private sector was unable to, and there is a remarkable degree of community and business 'buy-in' to the future vision for the city.

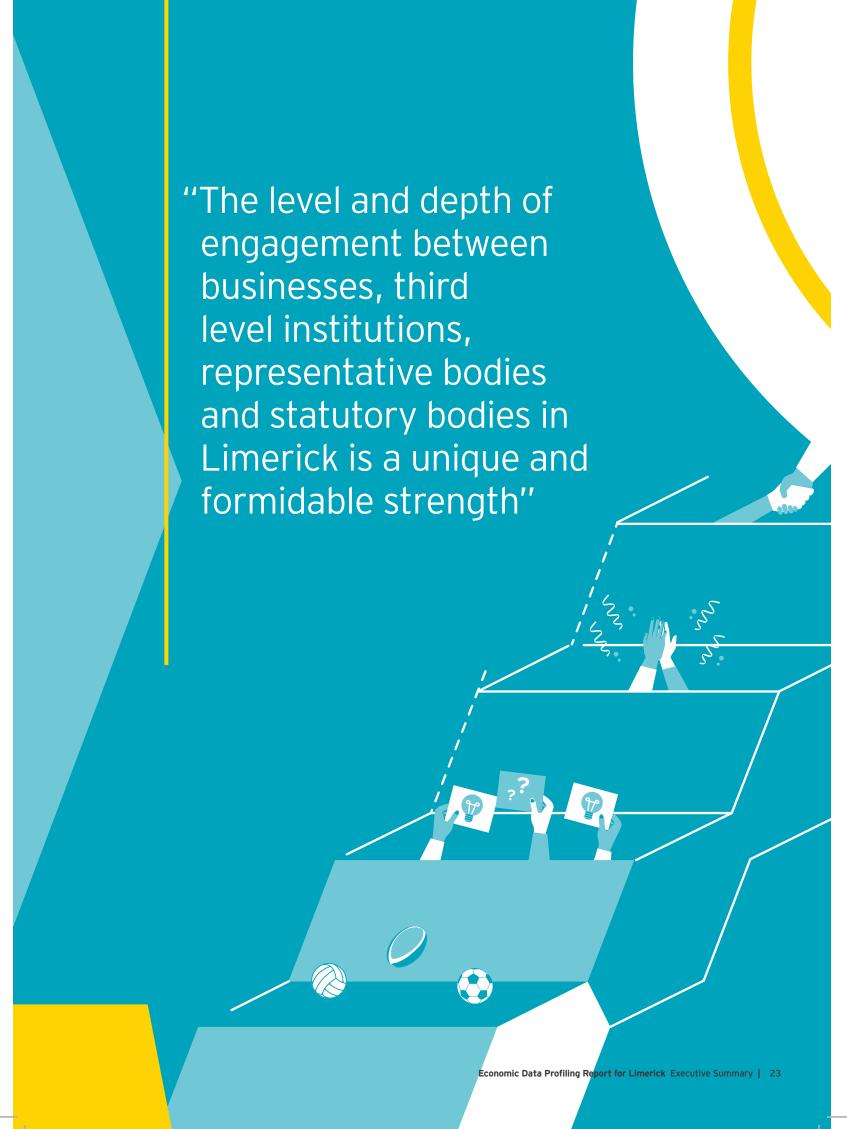
From an FDI perspective, Limerick is a good 'allrounder' with a mix of traditional and modern industries, manufacturing, new technology firms, a strong third sector and good international connectivity, notably to the US.

Limerick's infrastructure is strong and improving, with a range of important assets, proximity to major centres and good international connectivity. Costs of living and doing business are attractive compared to other major Irish centres, and there is considerable potential for ongoing strong growth into the future across a range of sectors.

While it was not part of this study to make recommendations on the way forward for Limerick, we would make the following observations arising from our analysis:

- Limerick is on largely the right path, and should 'keep doing what it's doing'. Notably, the policies adopted and put into practice by the Council, along with broad community and business 'buy-in', have been key in setting the groundwork for the city's future growth. This should become easier going forward, as the private sector and wider business community steps in and becomes more active in investing in the city.
- The cost of living and doing business in Limerick is an important strength, and should make the city attractive for firms relocating from the UK on account of Brexit, as well as from an increasingly expensive Dublin. Close coordination with the State promotion agencies to keep them informed of developments in the city, and matching it to what their clients are seeking, is key.

- ► In terms of sectors to target, support services represent significant potential, including accounting, business support services (e.g. payroll, HR) and IT/technical support. Software development and other R&D/Innovation are also possibilities. E-Commerce logistics may represent another potential opportunity, given the ongoing evolution of the retail sector, and Limerick's strong connectivity.
- Reversing the hollowing out of the city core is a priority, as vibrant cities with critical mass are increasingly attractive to international business and workers. The Council is taking a number of steps that are contributing to this, and the wider business community is also becoming more active. The targeted population growth under the National Planning Framework represents both a challenge and an opportunity in this regard. Improved public transport will be a key step, as will the continued support and promotion of 'smart city' initiatives, and of the start-up scene.
- Limerick needs to develop its brand, or 'personality', to stand alongside Dublin, Cork and Galway as strong locations in which to live, work, study in and visit, from an Irish and international perspective. A residual image problem exists but it is fading, and is not an issue outside Ireland. The Council is being pro-active in progressing this.
- Limerick has significant underdeveloped potential in the tourism sector, notably as a city destination, which may be somewhat related to the previous point. The city is physically attractive, and hotel rates are competitive, but it appears to lack a compelling attraction, such as a high profile tourist amenity or event/festival. Gaining a higher profile as part of the Wild Atlantic Way would be helpful.





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