

THE ECONOMIC IMPACT OF ALLERGAN'S OPERATIONS IN IRELAND

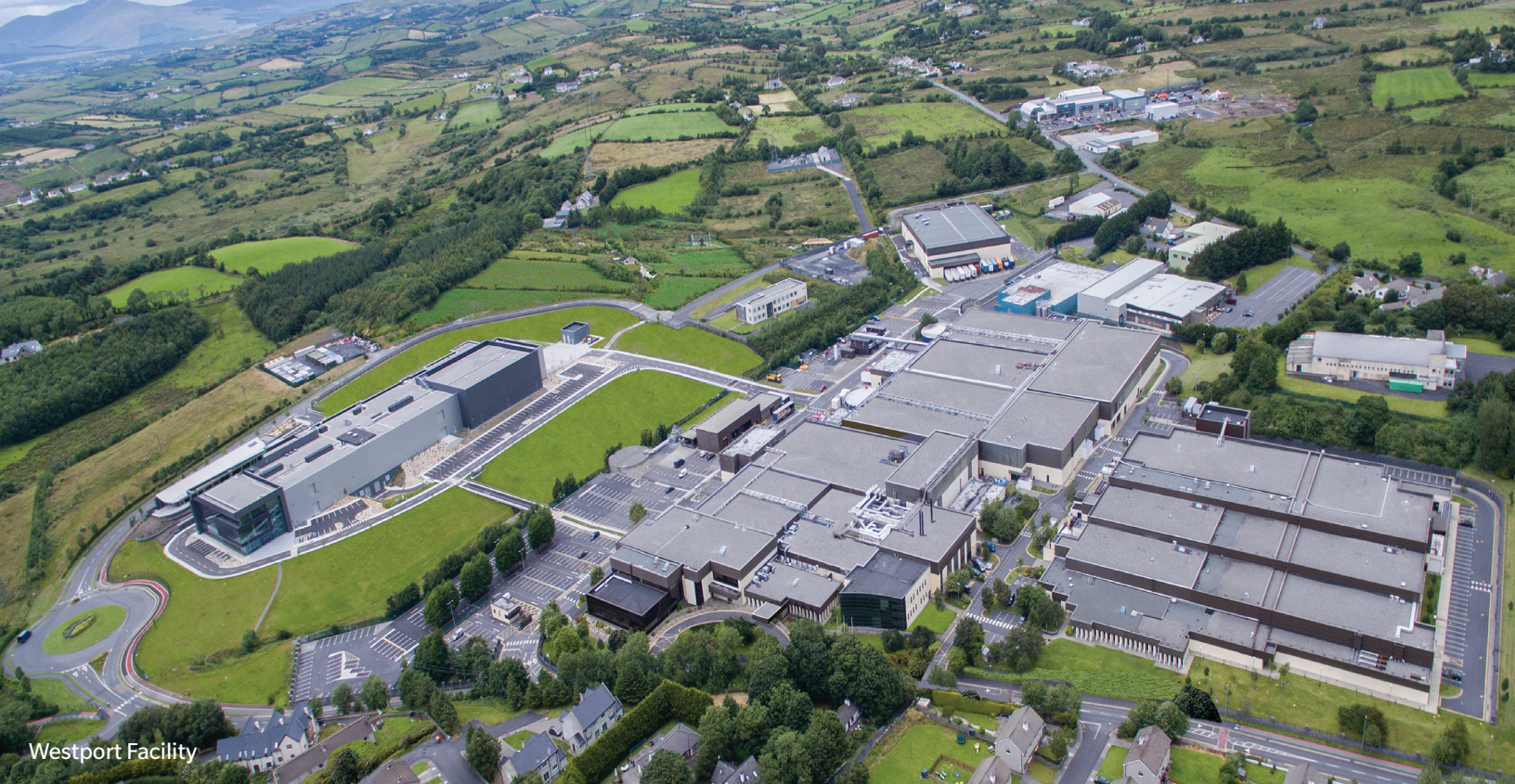
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EXECUTIVE SUMMARY

Allergan is an Irish global life-science innovation leader providing high-skill employment and high-tech R&D investments now entering its 40th year of operations.

Allergan markets leading brands and best-in-class products for the central nervous system, eye care, medical aesthetics, regenerative medicine and dermatology, gastroenterology, women's health, urology, and anti-infective therapeutic categories.

- Allergan directly employs **1,700** people in Ireland and makes significant purchases in the Irish economy, that support over **600** further jobs in the supply chain and **500** jobs in the wider economy.
- Capital investment to date by Allergan in Ireland sums to almost **€610 million** (over \$670 million).
- Allergan's Irish operations continue at a high level with an estimated investment of **€42 million** (\$50 million) in 2017.
- Since 2010, the Allergan International Foundation has awarded **€370,000** (\$414,000) to Irish-based organisations.
- Total sales by Allergan's Irish operations amounted to **€2.96 billion** (\$3.28 billion) in 2015.
- Allergan's operations in Ireland added approximately **€414 Million** (\$462 million) to Ireland's GDP in 2015.
- Allergan employs a high proportion of **3rd level graduates**.
- Allergan's operations in Ireland embody the industrial strategy of IDA Ireland, and align with the key target sectors and activities identified in the IDA 2015-2019 development strategy.

1.0 INTRODUCTION

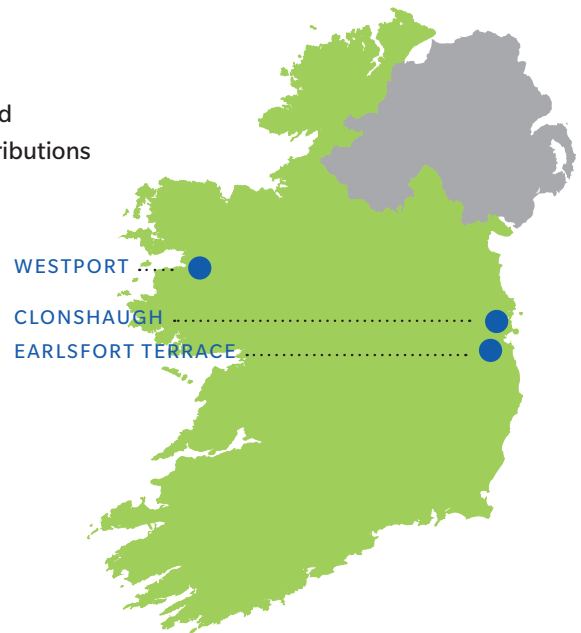
1.1 PURPOSE OF REPORT

To mark the 40th anniversary of its operations, Allergan has requested DKM Economic Consultants (DKM) to undertake a study of the contributions that Allergan has made to Ireland's economy over that period.

1.2 OVERVIEW OF ALLERGAN IN IRELAND

Allergan currently operates three facilities in Ireland:

- The Allergan campus in Westport, Co. Mayo;
- The Allergan campus in Clonshaugh (including the offices of the plc), Dublin 17; and
- Allergan International Supply Chain, based in Earlsfort Terrace, Dublin 2.



The Westport and Clonsaugh campuses are engaged in the manufacturing of a range of branded medicines for export. The Westport campus also accommodates a finance shared services centre that serves Allergan's Europe, Africa and Middle East operations. Earlsfort Terrace is an international commercial and supply chain hub for Allergan products throughout Europe, Africa, the Middle East and Asia Pacific, and is integral in the procurement and management of Third Party Manufacturers (TPMs) outside of the US.

The Westport campus also maintains close links with its sister campus in Waco, Texas, which is currently undergoing an expansion. Allergan plc, the global parent entity, is headquartered in Ireland. Its global headquarters offices are in Clonsaugh, Dublin, from which it manages the strategic direction of the company and oversight of its global business. The Clonsaugh campus also accommodates global Procurement and global Pharmaceutical Technology shared services.



Allergan's operations have made significant contributions to the Irish economy. There are a number of dimensions to these contributions, namely:

1. Impacts are analysed in terms of:

- Investment,
- Sales and exports,
- Employment, and
- Economic output, i.e., GDP.

2. Included in the analysis are:

- the impact of Allergan's investment in and operation of its plants in Ireland – the "direct effect;"
- the additional activity generated in Irish suppliers, i.e., as a result of Allergan's purchases of Irish goods and services – the "indirect effect;" and
- the additional spending of wages in the wider economy as a result of the direct and indirect effects – the "induced effect."

3. The study addresses the current operational impacts (using 2015 as the reference year) and the cumulative impacts of investments made in the two campuses over the last 40 years.

2.0 ECONOMIC IMPACT

The findings of our analysis of Allergan's activities in Ireland are summarised below. Allergan has made a major contribution to the Irish economy since its establishment here in 1977.

2.1 OPERATIONS

Allergan has developed a sizeable economic presence in Ireland, and now employs a combined workforce of almost 1,700 across its various operations.

The majority of product lines manufactured at the Westport campus are related to eye care, while Botox is the other major output from the facility. The Clonshaugh campus mainly produces solid dose pharmaceuticals, many of which address conditions such as depression and Alzheimer's disease, as well as hypertension.

FIGURE 2.1 KEY PRODUCTS MANUFACTURED BY ALLERGAN IN IRELAND

WESTPORT & THERAPEUTIC CATEGORIES			
CENTRAL NERVOUS SYSTEM/WOMEN'S HEALTH & UROLOGY		DERMATOLOGY & AESTHETICS	
			
EYE CARE			
			
			
CLONSHAUGH & THERAPEUTIC CATEGORIES			
DEPRESSION			
			
ALZHEIMER'S			
			
IRRITABLE BOWEL SYNDROME & CHRONIC CONSTIPATION		BIPOLAR DISORDER	
			
HYPERTENSION		FIBROMYALGIA	
			

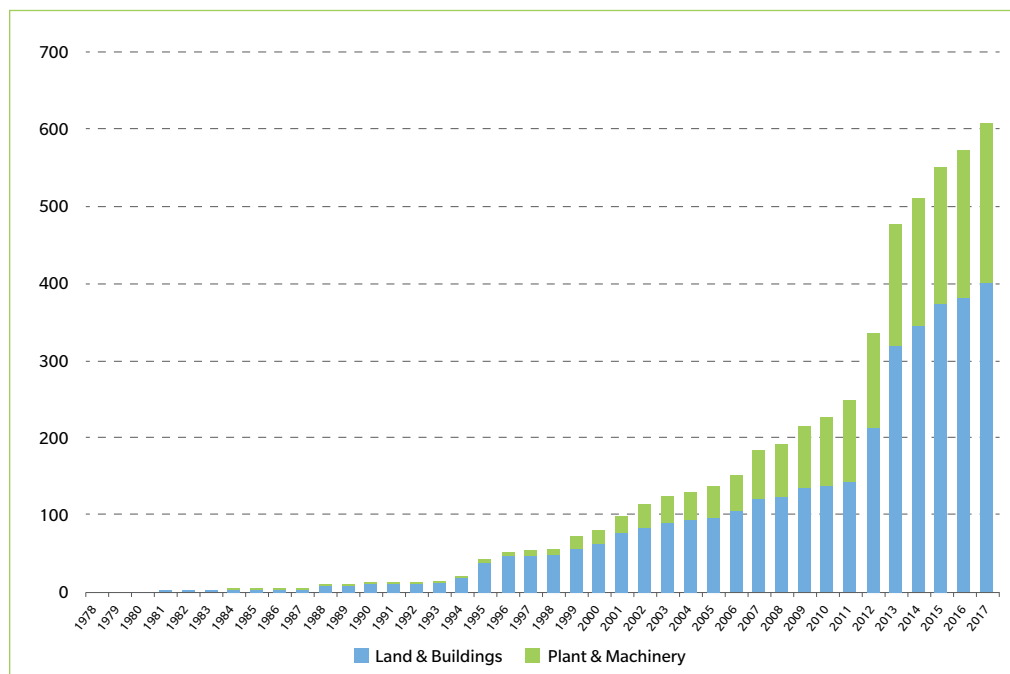
2.2 INVESTMENTS IN IRELAND

Allergan has made investments valued at a cumulative €610 million (\$670 million) in 2017. Through these investments, Allergan has created state-of-the-art manufacturing facilities that produce pharmaceutical products for the global market. Considerable acceleration in capital investment since 2010, coinciding with the recent deep recession, represents a strong vote of confidence in Ireland during those challenging years.

Allergan's Irish operations continue at a high level with an estimated investment of €42 million (\$50 million) in 2017. As a result of this investment, the Clonshaugh manufacturing site will be able to support the "Open Science" strategy of Allergan. This means that Clonshaugh will provide the critical small scale pilot and "Good Manufacturing Practice" (GMP) manufacturing capability for oral solid dosage forms of some of Allergan's important pipeline products. In Westport, the investment will add additional capacity to its Eye Care manufacturing operations and the expansion of its Ocular Implant manufacturing facility to accommodate both a capacity increase for existing products and also the capability to accommodate new products using this technology platform.

Combined investments at the two campuses are summarized in the following chart.

FIGURE 2.2 CUMULATIVE INVESTMENT IN ALLERGAN CAMPUSES, 1977-2017 (2015 € MILLION)



Source: Allergan; CSO, Central Bank of Ireland.

KNOWLEDGE ECONOMY & COMPETITIVENESS

"Allergan and Ireland have enjoyed a fruitful relationship over the past 40 years. From 1977 when Allergan first put down roots in Westport, with modest plans for growth, to date where the company currently employs nearly 1,700 people across all its operations. Over time, the company has embedded itself deeply into the communities in which it operates, and is especially relevant to the economy of the West of Ireland.

IDA Ireland has partnered with Allergan as it transformed its operations into centres of strategic importance within its global network. Allergan's campuses are flagship centres of excellence for advanced manufacturing within Ireland's biopharmaceutical sector.

As such, the company's operations in Ireland have assisted IDA over the years to showcase Ireland's ability to host such high quality investment and to win further new business for Ireland in this important sector."

(Martin Shanahan, CEO, IDA Ireland)

2.3 SALES

Total sales by Allergan's Irish operations amounted to €2.96 billion (\$3.28 billion) in 2015, predominantly export.

2.4 EMPLOYMENT IMPACT

Allergan directly employs almost 1,700 people in Ireland and makes significant purchases in the Irish economy that support over 600 further jobs in the supply chain and 500 jobs in the wider economy. The average employment term for a permanent employee is 8-12 years, with very low staff turnover, indicating a good work environment.

TABLE 2.4 ALLERGAN DIRECT EMPLOYMENT, LATE 2016

	Employees
Westport	1,238
Clonshaugh	370
Earlsfort Terrace	55
Total	1,663

Source: Allergan

2.5 IMPACT ON GDP

Allergan's operations in Ireland added approximately €414 million (\$462 million) to Ireland's GDP in 2015. This represents 0.2% of the entire national GDP.

TABLE 2.5.1 GDP IMPACT OF AGGREGATE ALLERGAN OPERATIONS IN IRELAND, 2015

	€ million	USD million
Direct - Allergan	323	358
Indirect - Irish supply chain	50	57
Induced - Wider consumer spending	41	46
Total GDP Impact	414	462

Individual values may not sum to total due to rounding. Sources: Allergan; Central Bank of Ireland; DKM estimates





"Allergan has supported DCU's INTRA Programme for almost 20 years, giving students a real sense of working in their chosen fields, predominantly in chemistry and biotechnology. Participation in the Programme is seen as highly desirable by employers, and a big selling point for our students. Follow-up indicates that all Programme participants found employment or progressed to further studies subsequent to completion of their courses."

(Carol Power, INTRA Coordinator, DCU)

The following table summarises Allergan's contribution to GDP at the regional and local (county) level. The Westport campus is particularly significant, accounting for over 1.5% of regional GDP and over 5% of county GDP.

TABLE 2.5.2 REGIONAL/LOCAL GDP IMPACT OF ALLERGAN'S OPERATIONS, AND AS A PROPORTION OF TOTAL 2015 GDP

	REGIONAL		LOCAL (COUNTY)		AS A PROPORTION OF 2015 GDP	
	€ million	USD million	€ million	USD million	Regional	Local
Westport campus*	297	330	283	314	1.58%	5.23%
Clonsaugh campus	71	79	71	79	0.06%	0.06%

*including Earlsfort Terrace. Source: CSO, DKM estimates.

Allergan's operations in Ireland embody the industrial strategy of IDA Ireland, in terms of:

- occupying the key target sectors and activities identified in the IDA 2015-2019 development strategy;
- making a strong contribution to regional investment targets, as a key part of the North-West Life Sciences arc stretching from Sligo to Westport;
- acting as flagship campuses for other pharmaceutical firms considering investing in Ireland;
- employing a high proportion of 3rd level graduates; and
- investing strongly in R&D on both campuses.

3.0 : CORPORATE SOCIAL RESPONSIBILITY

Allergan's presence in Ireland is characterised by more than its economic activity. It is a company that prioritises its corporate social responsibilities and one that has deep connections within the community . Through philanthropic giving as well as community and education programmes, Allergan has become a part of the fabric of the community.

Allergan has built strong relationships and collaborates closely with local and national Universities and Institutes of Technology, assisting in the design and provision of courses, and providing internships and permanent employment opportunities for students. The Allergan campuses are noteworthy in being in areas that exhibit geographic and socio-economic challenges, making the economic benefits they generate particularly valuable.

"IT Sligo and Allergan have had a long standing relationship, and Allergan's commitment to the IT has been vitally important in terms of employing our graduates, advising on courses, and inputting to our programmatic reviews.

Allergan staff have also acted as external examiners and provided research opportunities to post-graduates. Regular site visits to Allergan allow our students to see the relevance of their courses, and understanding they can find employment in their chosen field within their region is a real motivator. Given the number of our graduates that have been employed by Allergan over the years, it feels like part of an extended family."

(Jeremy Bird, School of Science, & Fiona McArdle, Department of Life Sciences, IT Sligo)

"Allergan and the town of Westport have grown in tandem over the last 40 years. The company's impact on the town has been unquantifiable: Westport is now a vibrant, multi-cultural, cosmopolitan community - it's a place that people want to visit, live in and relocate to. Allergan is continuously breathing new life into the town through its investments and employment. It has enabled local businesses to flourish, as well as supporting education, charitable, sporting and cultural initiatives that contribute greatly to the community."

(Neill O' Neill, President, Westport Chamber of Commerce)

3.1 ALLERGAN INTERNATIONAL FOUNDATION

Allergan has also made significant funding contributions to the local communities in which it is based, notably through the Allergan International Foundation (AIF). AIF was established in 2010 as a vehicle to fund charitable and community-based organisations providing a lasting and positive impact on communities where Allergan employees live and work. AIF supports four philanthropic areas:

- the arts,
- civic programmes,
- education, and
- health and human services, which includes initiatives to improve patient diagnosis, treatment, care and quality of life, or to otherwise promote access to quality health care.

Since 2010, AIF has awarded €370,000 (\$414,000) to Irish-based organisations. A typical grant value is €7,000-9,000 (\$8,000-10,000). Irish organisations supported by AIF range broadly from local community services to nationally recognised organisations. Examples include:

IRISH-BASED BENEFICIARIES	€'000s
Alzheimer's Society of Ireland	14
Irish Hospice Foundation	27
Westport United Community Soccer Club Ltd.	35
Neurofibromatosis Association of Ireland	14
Coolock Community Enterprise Centre	9
Fighting Blindness	50

4.0 CONCLUSIONS

Allergan has made a major contribution to the Irish economy since its establishment here in 1977. Among the key impacts have been:

- Investments in Ireland:
 - > Valued at a cumulative **€610 million** (\$670 million) to 2017;
 - > Delivering state-of-the-art manufacturing facilities producing pharmaceutical products for the global market;
 - > Generating almost **5,000** years of employment throughout the economy;
 - > A considerable acceleration in capital investment since 2010, coinciding with the recent deep recession, and representing a strong vote of confidence in Ireland during those challenging years.
- Total sales by Allergan's Irish operations amounted to **€2.96 billion** (\$3.28 billion) in 2015, predominantly for export.
- Allergan's operations in Ireland added **€414 million** (\$462 million) to Ireland's GDP in 2015. This represents 0.2% of the entire national GDP.
- Allergan directly employs almost **1,700** people in Ireland.
- The firm makes significant purchases in the Irish economy, which support over **600** further jobs in the supply chain and **500** in the wider economy.
- Allergan is the largest industrial employer in County Mayo, responsible for generating over **5%** of the county GDP and over **1.5%** of the GDP of the West region.
- Allergan's operations in Ireland embody the industrial strategy of IDA Ireland, in terms of:
 - > occupying the key target sectors and activities identified in the IDA 2015-2019 development strategy;
 - > making a strong contribution to regional investment targets, as a key part of the North-West Life Sciences arc stretching from Sligo to Westport;
 - > acting as flagship campuses for other pharmaceutical firms considering investing in Ireland;
 - > employing a high proportion of **3rd level graduates**; and
 - > investing strongly in **R&D** on both campuses.
- Allergan has built strong **relationships** and **collaborates** closely with local and national Universities and Institutes of Technology, assisting in the design and provision of courses, and providing internships and permanent employment opportunities for **students**.
- The Allergan campuses are noteworthy in being located in areas that exhibit geographic and socio-economic challenges, making the **economic benefits** they generate particularly valuable.
- Allergan International Foundation (AIF) funds charitable and community-based organisations providing a lasting and positive impact on the communities where Allergan employees live and work. Since its establishment in 2010, AIF has awarded Irish charities and community organisations with grants amounting to **€370,000** (\$414,000).



This report was produced by DKM Economic Consultants. DKM is based in Dublin, and is one of the longest established economic research firms in Ireland. Founded in 1981 as part of Stockbrokers Davy, it was bought out by its management team in 2006.

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