

# Update on Current All-island Initiatives: The All-island Urban Clusters Study

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# INTRODUCTION & CONTEXT: CHANGING PLANNING ENVIRONMENT

## The National Spatial Strategy 2002 - 2020 People, Places and Potential

**PLACES TO LIVE** GOOD PLANNING WILL BE ESSENTIAL TO MANAGE IRELAND'S GROWING POPULATION AND SIMULTANEOUSLY SUPPORT A BALANCED ECONOMY AND A HIGH QUALITY OF LIFE. **PLACES TO WORK** JOBS AND PEOPLE CAN BE BROUGHT CLOSER BUT ONLY WITHIN A STRONGER STRUCTURE OF CITIES, TOWNS AND RURAL AREAS. **PEOPLES QUALITY OF LIFE** QUALITY OF LIFE IS INCREASINGLY IMPORTANT, NOT ONLY TO PEOPLE BUT THE COMPETITIVENESS OF PLACES AND GOOD PLANNING IS A KEY INSTRUMENT TO DELIVER THIS. **GOOD PLANNING** BRINGING PEOPLE AND JOBS/OTHER ACTIVITIES CLOSER – WITHIN A STRUCTURE OF STRENGTHENED CITIES, ENABLING RURAL AREAS TO PLAY TO THEIR STRENGTHS, EFFICIENT TRANSPORT – PUBLIC AND PRIVATE. **GETTING THINGS DONE** THE IMPORTANCE OF HAVING GOOD AND INTEGRATED PLANS AT NATIONAL REGIONAL AND LOCAL LEVELS AND COMMUNICATION BETWEEN PUBLIC, LOCAL, AUTHORITIES, DEPARTMENTS AND AGENCIES AND THE PRIVATE SECTOR.



## Shaping our FUTURE



## Regional Development Strategy for Northern Ireland 2025

# 2025



# Core concepts

- Critical mass
- Polycentricity
- Complementarity
  - Complementary role of regions
  - Complementary roles of urban centres
  - Complementary strength
  - Complementing land uses
  - Complementary functions
  - Complementary positions
  - Complementary development
  - Complementary infrastructure



# Complementarity

- No formal definition in either document
- Most often used in the sense of difference and synergy of elements that make up a more complete whole
  - “The aim is to build on the distinctive and complementary roles of each of the component urban centres within the BMA (...)” (RDS, p.65)

# Our first attempt to quantify the concept of complementarity

- Part of a larger investigation into the existing level of complementarity at different scales
- Complementarity = f (specialisation / distinctiveness)
- Complementarity on a national and all-Island basis
- Focus on complementarity in profile of employment by industrial group

# The Data

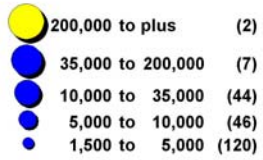
- ‘Intermediate Industrial Groups’ (N = 22, excluding the residual category)
- Specially commissioned tabulation for NI to match RoI data
- Roughly comparable to NACE 2-digit classes
- Data are for workers **resident in**, not necessarily **employed in**, each town

# Urban Areas

	Northern Ireland	Republic of Ireland
Population size	1,500 +	1,500 +
Number of centres	75	144
Definition of centres	'Settlements'	'Towns plus environs'

# All-Island Urban Area Population, 2001/02

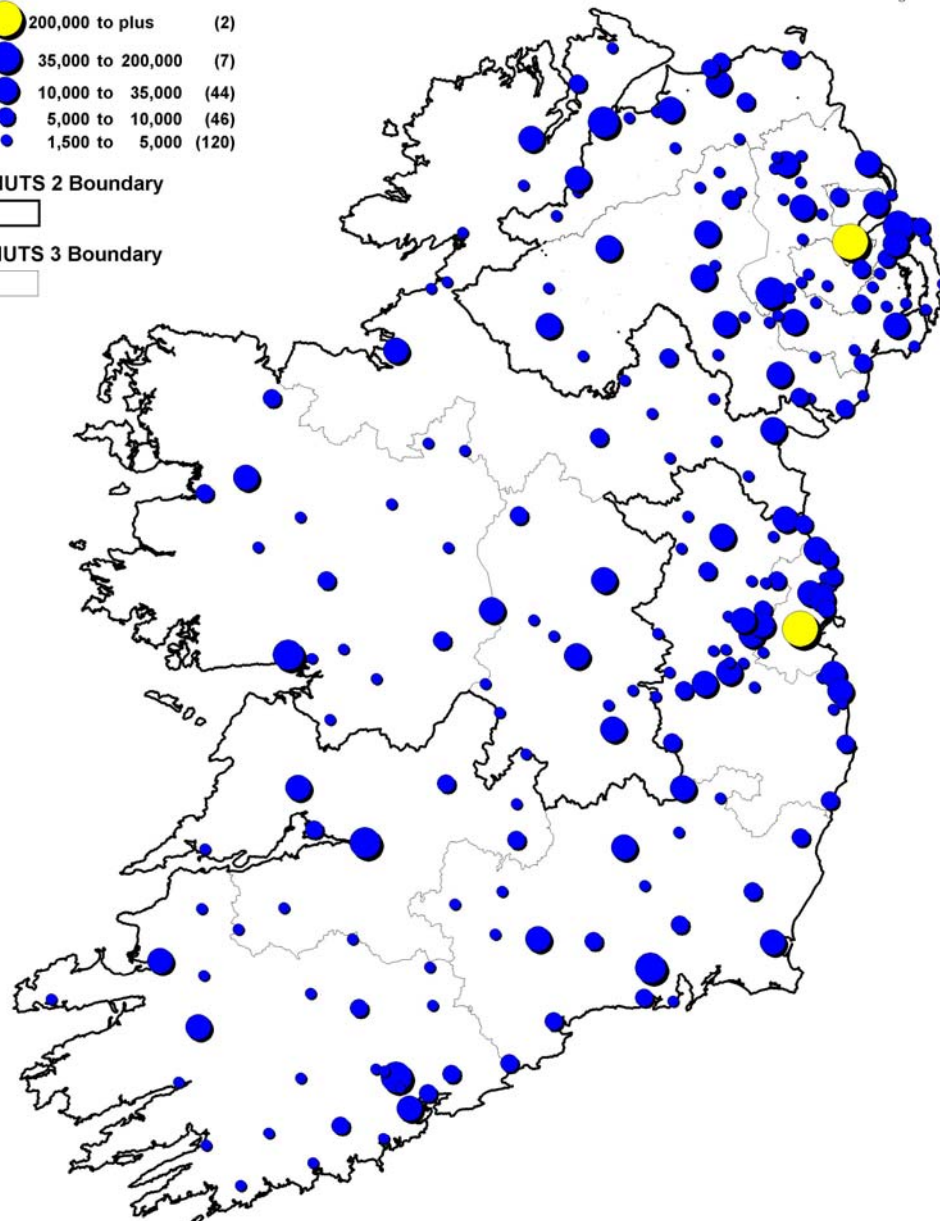
## Urban Area Population 2001/02 Census



NUTS 2 Boundary



NUTS 3 Boundary

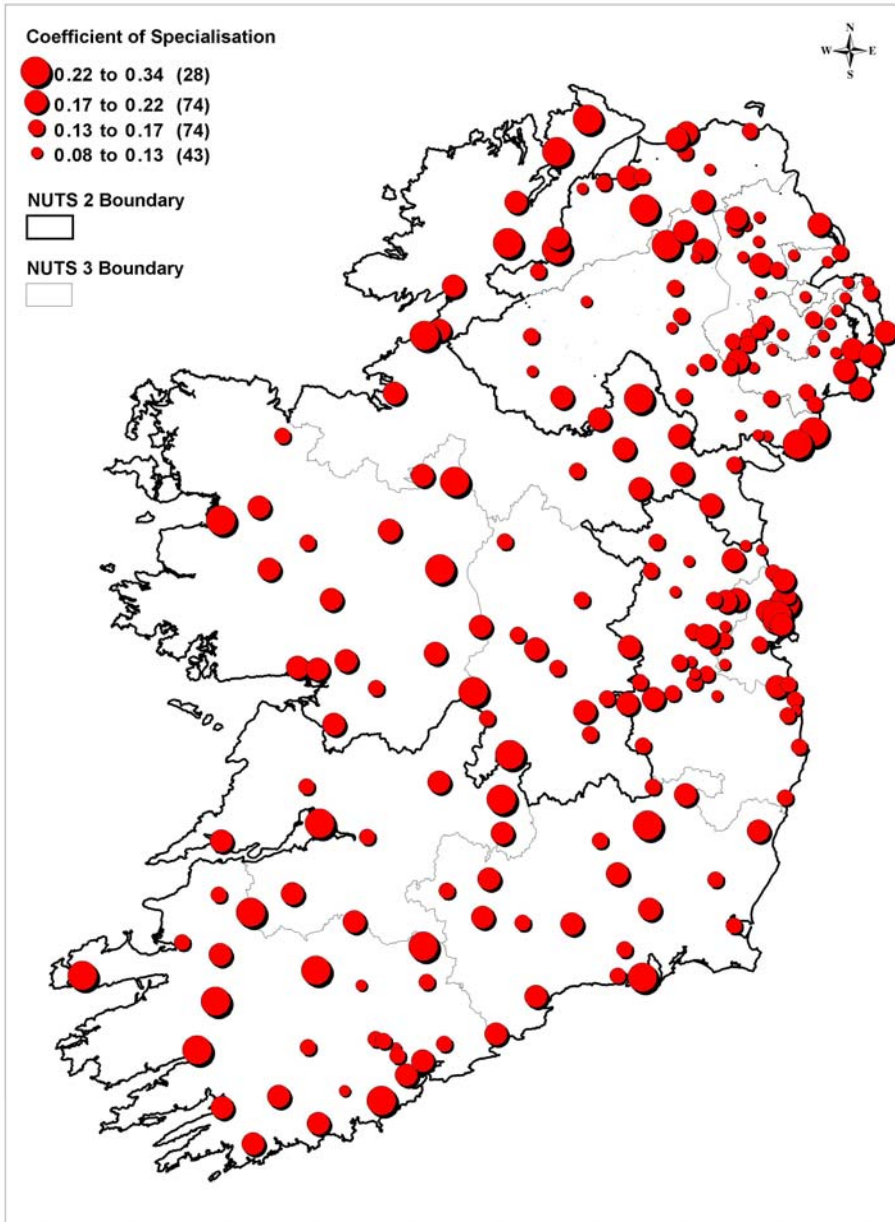


# Analysis

- *Degree* of specialisation:
  - Coefficient of Specialisation (CS)
- *Type* of specialisation:
  - Classification using Index of Surplus (Basic) Workers
- Examination of specialisation / complementarity patterns for regional groupings:
  - NUTS3 (NI = 4; RoI = 8)
  - Cross-border groups

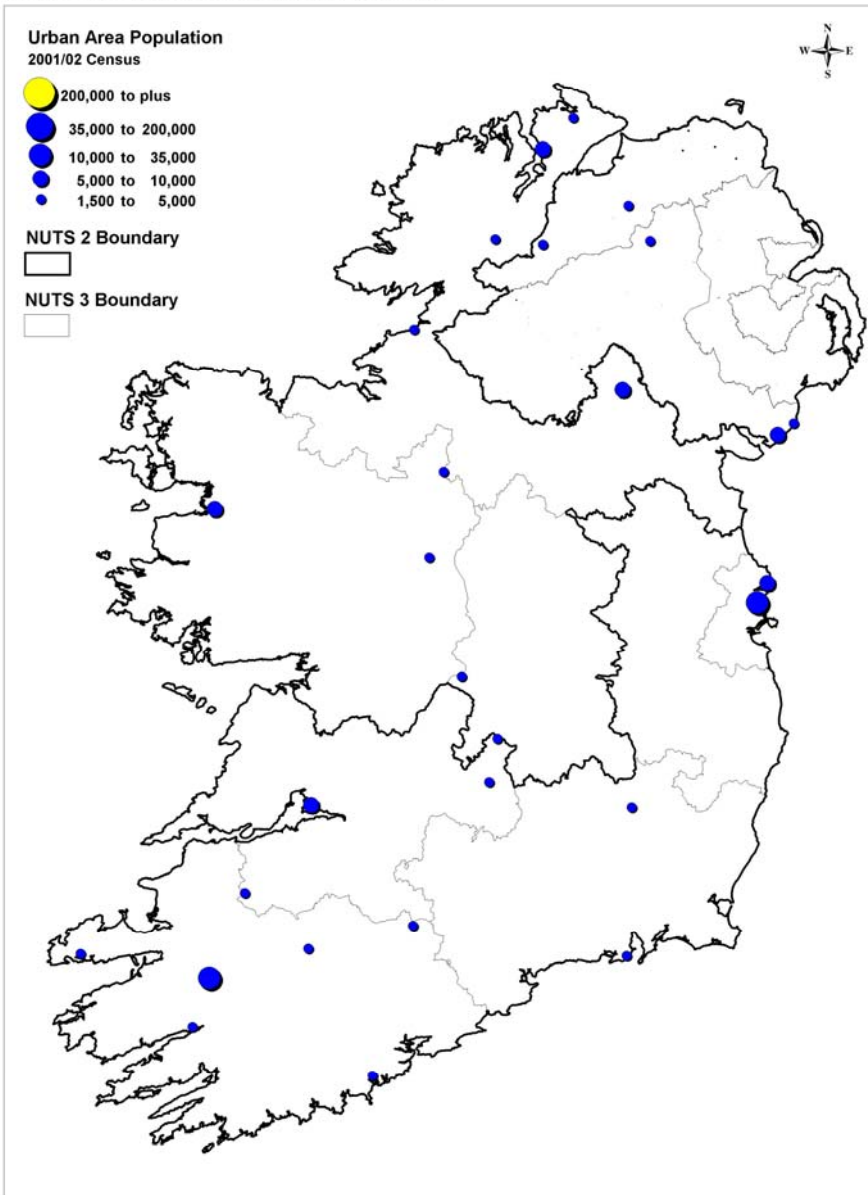
# Results: Patterns in the Levels of Specialisation

Coefficient of Specialisation - Urban Centres over 1,500 population

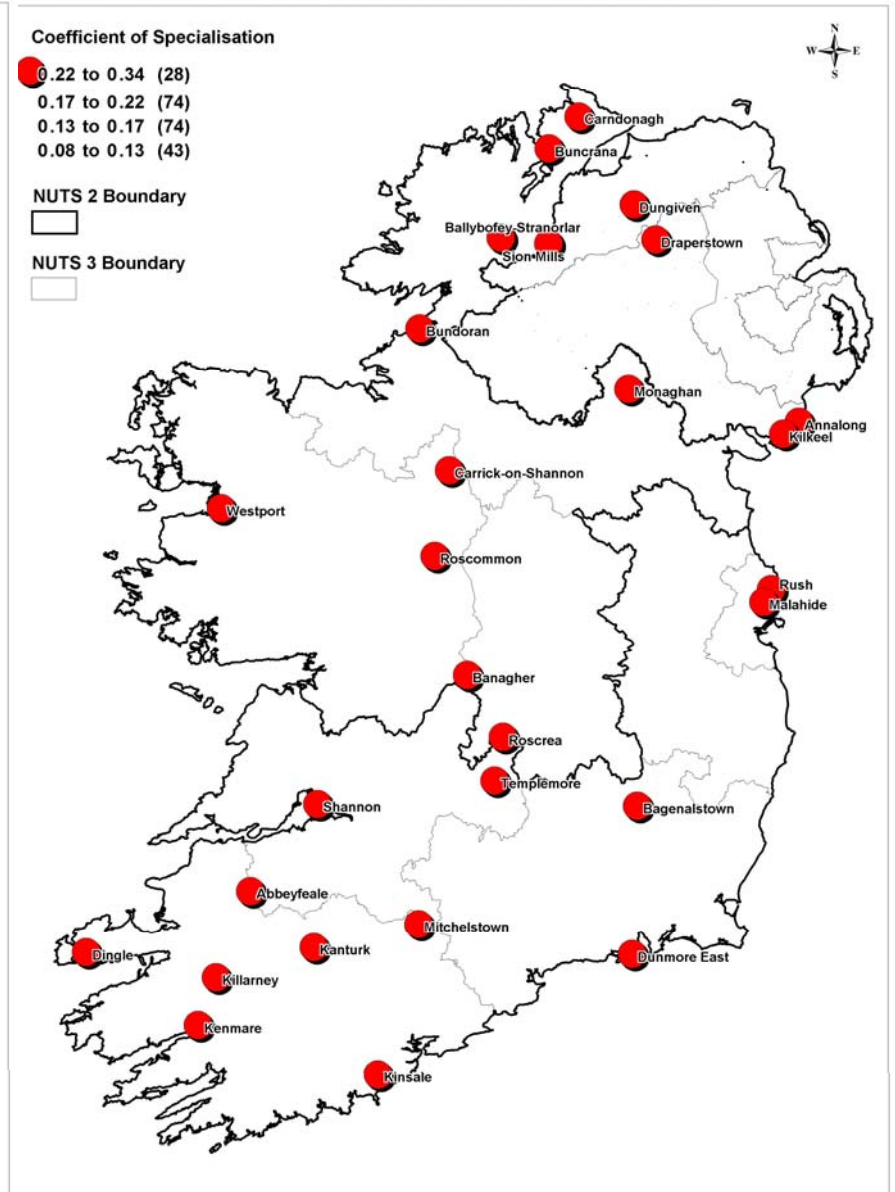


- Some spatial patterns evident
- More diversified centres tending to be located in eastern part of NI and RoI
- Inverse relationship between CS and Size
  - NI:  $R_s = -0.40$
  - RoI:  $R_s = -0.36$

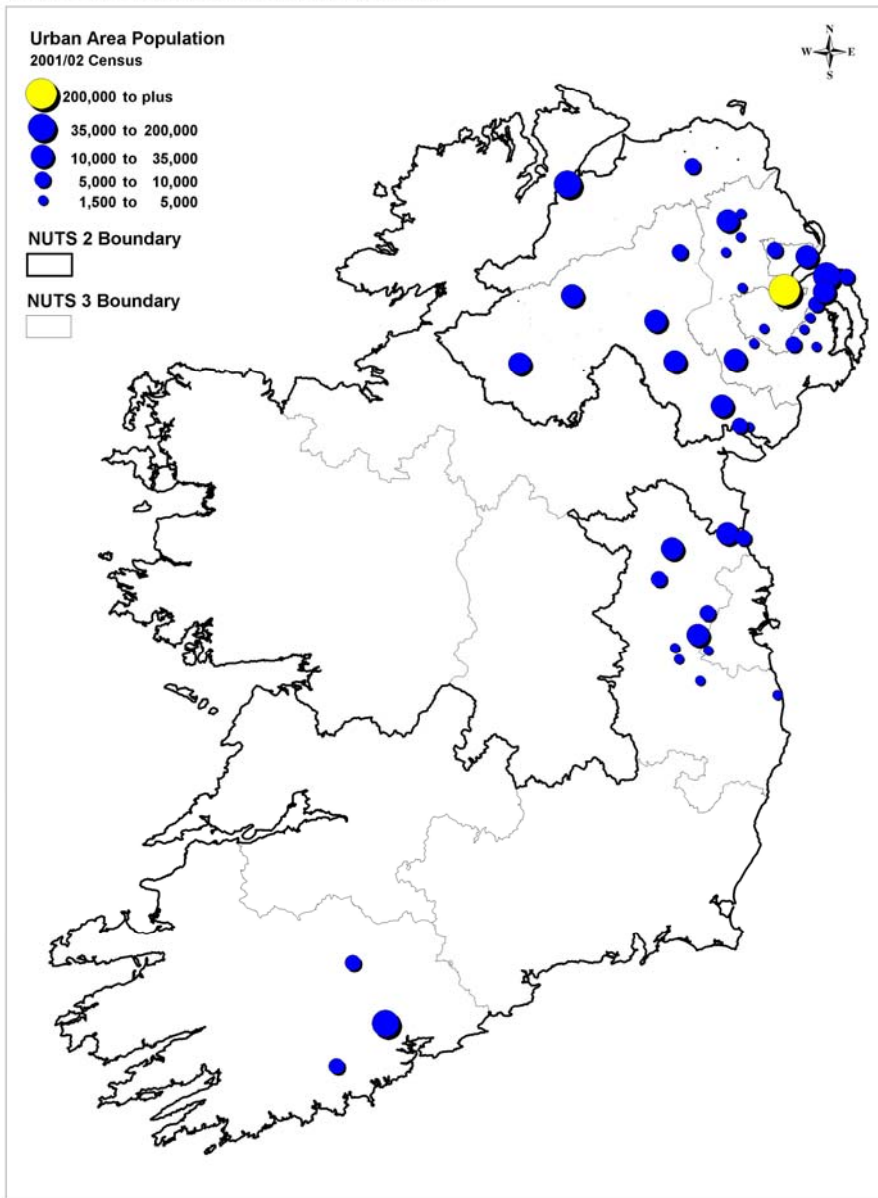
### All-Island Urban Area Population, 2001/02



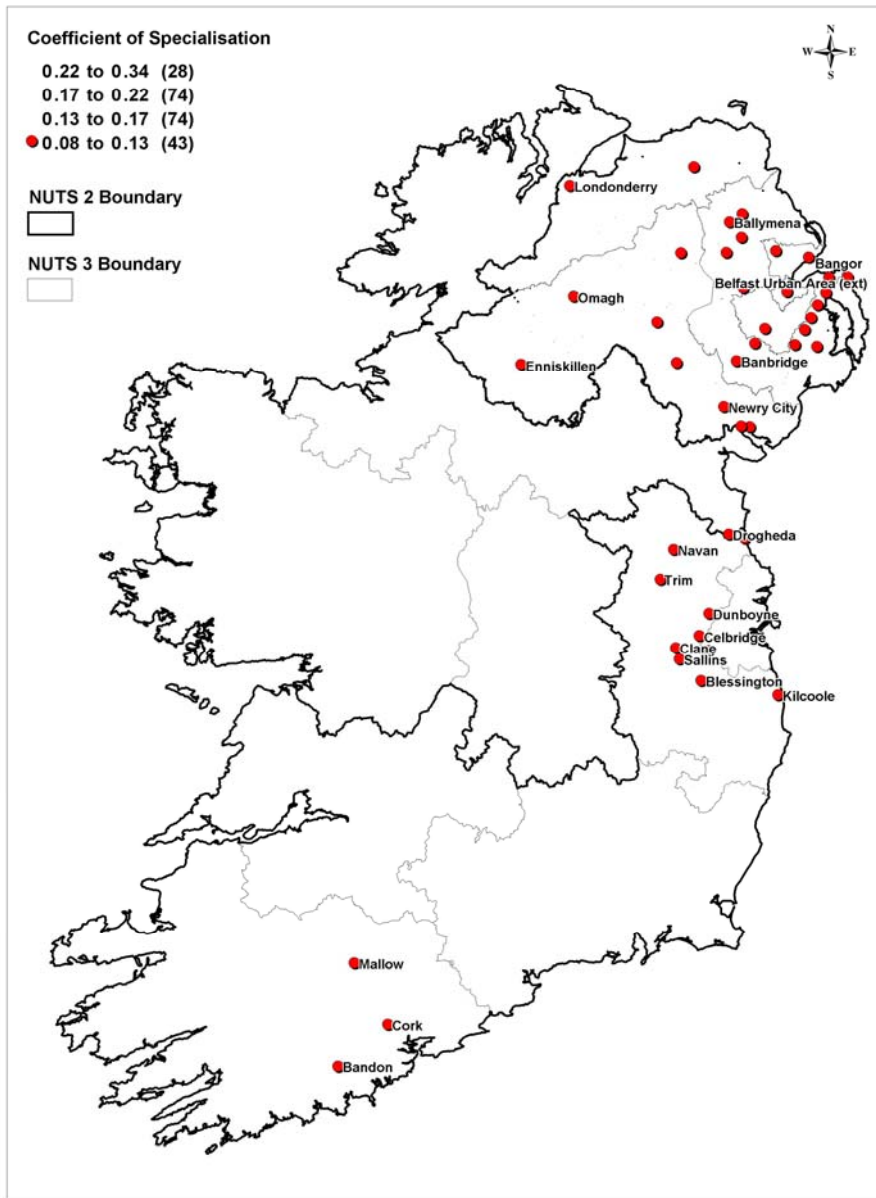
### Coefficient of Specialisation - Urban Centres over 1,500 population



All-Island Urban Area Population, 2001/02



Coefficient of Specialisation - Urban Centres over 1,500 population



# Level of Specialisation by Region

Region	Number of Centres	Mean CS
<b>Northern Ireland</b>		
North	14	0.171
West & South	20	0.152
East	32	0.133
Belfast	9	0.124
<b>Republic of Ireland</b>		
Mid-West	11	0.208
Border	19	0.197
West	15	0.186
South East	17	0.182
Dublin	12	0.179
South West	26	0.178
Midland	12	0.169
Mid-East	32	0.142

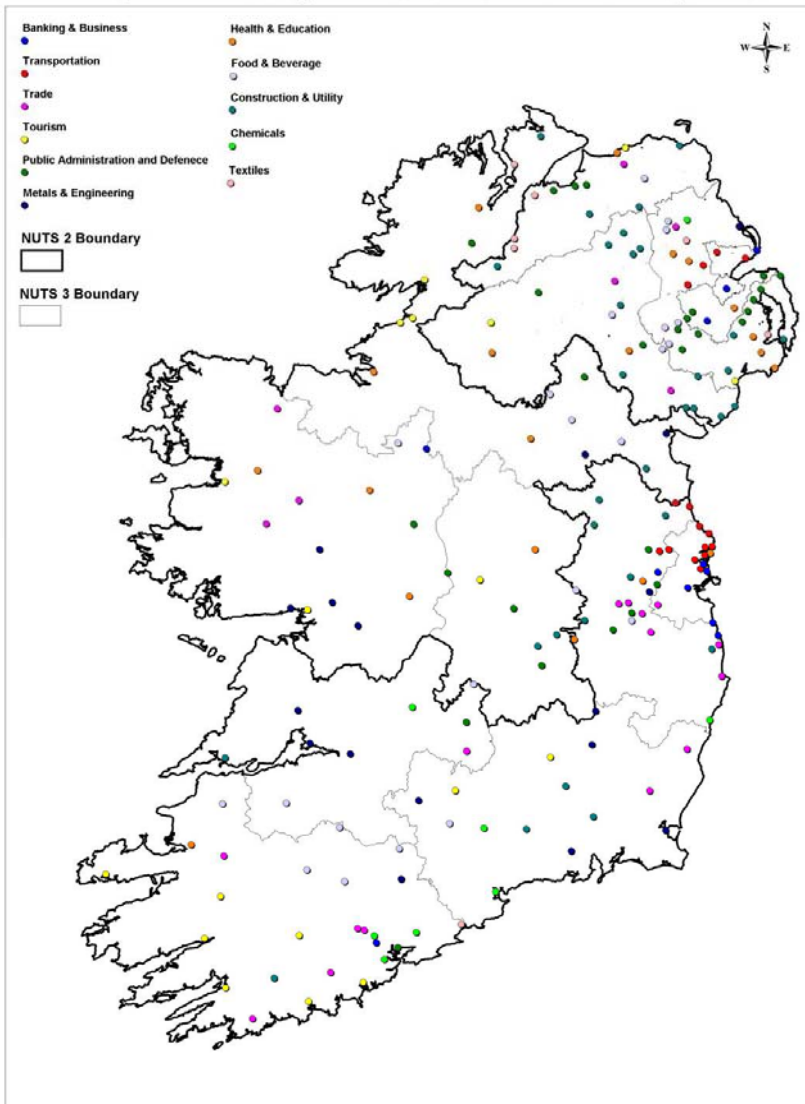
Specialisation levels in RoI appears higher than in NI

Peripheral regions (NI - West and South; RoI - Border) tend to be most specialised

Cannot be attributed to size differences

# Results: Patterns in the Type of Specialisation

Industrial Specialisation Categories for Urban Centres within Ireland, 2001/02



## Assessment of complementarity

Type of specialisation in each centre and hence the differences (complementarities) between centres within regions

Strong evidence of association between type of centre and location at NUTS3 level for both jurisdictions

Cramer's V

RoI = 0.39

NI = 0.50

Indicative of weak intra-regional complementarities

## Urban Centres Specialisation Category: Food and Beverage

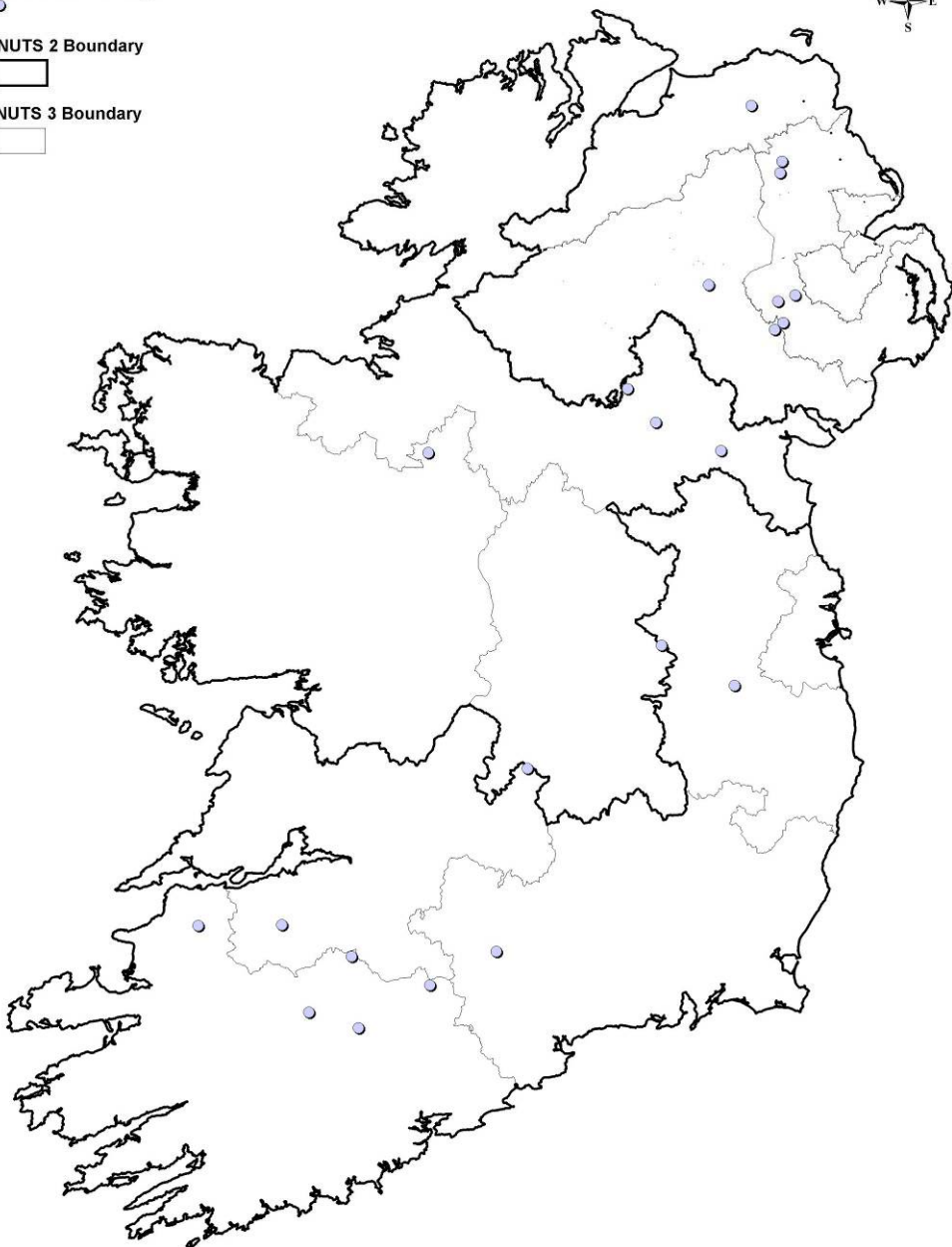
Food & Beverage



NUTS 2 Boundary



NUTS 3 Boundary



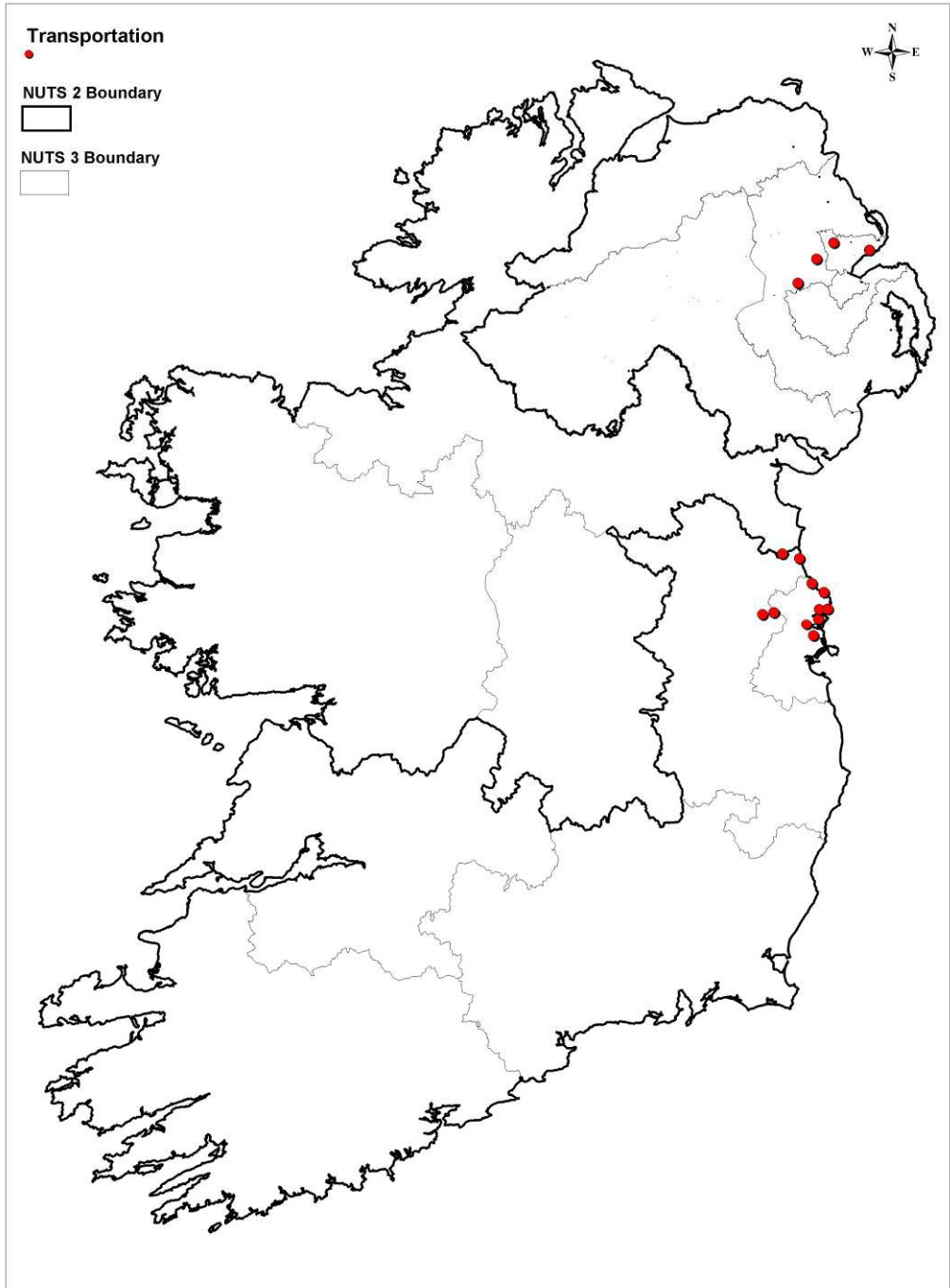
## Food and Beverages

Inter-regional clustering:

SW region in RoI; East  
Region in NI

Importance of Golden  
Vale region and of  
poultry farming in  
Monaghan

# Urban Centres Specialisation Category: Transportation

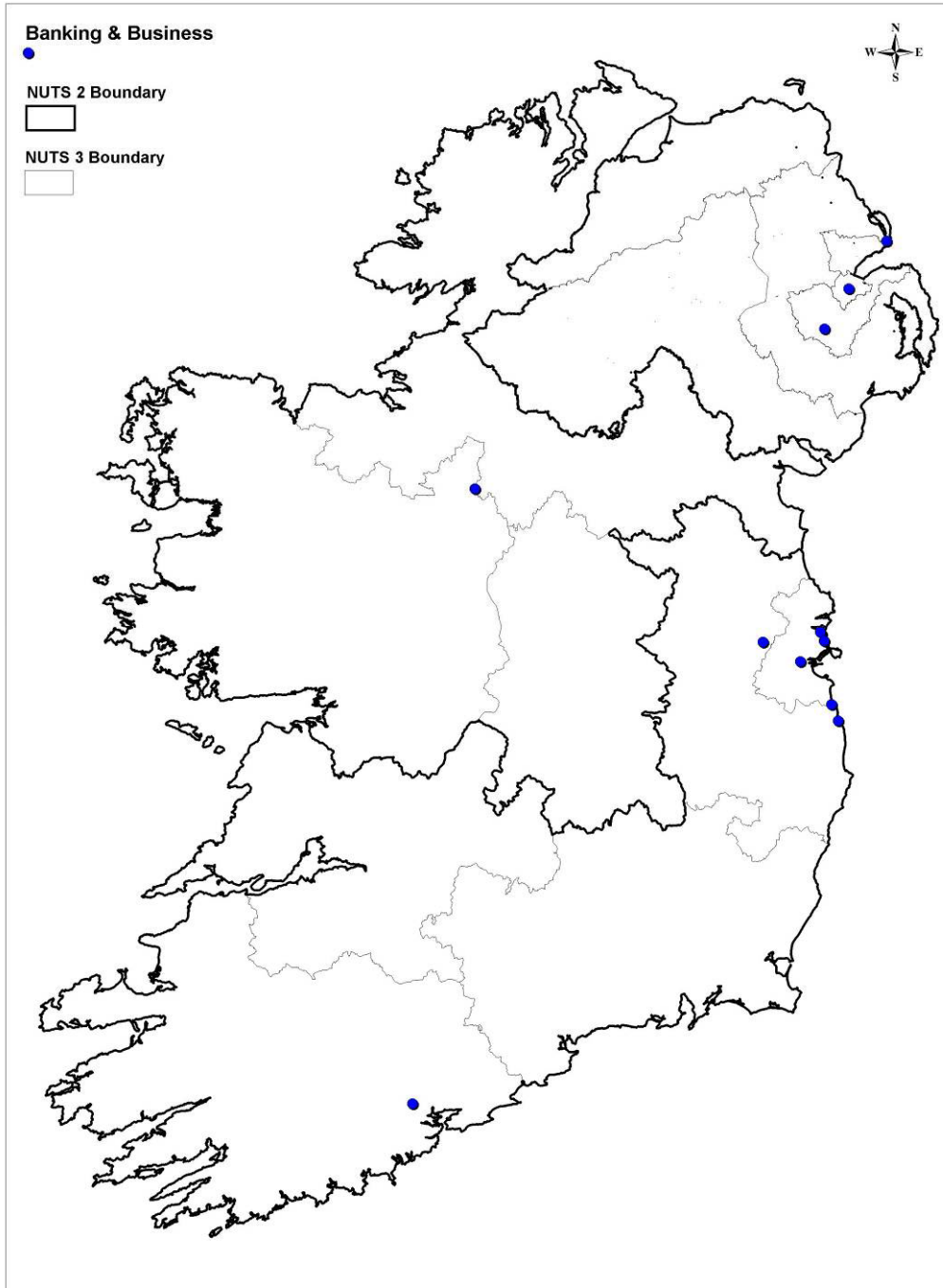


## Transportation & Communication

Strong local clustering around capital cities

Major transportation hubs

## Urban Centres Specialisation Category: Banking & Business



## Banking and Business

Clustering around Dublin reflects the strong producer service component in this sector

# Urban Centres Specialisation Category: Public Administration and Defence

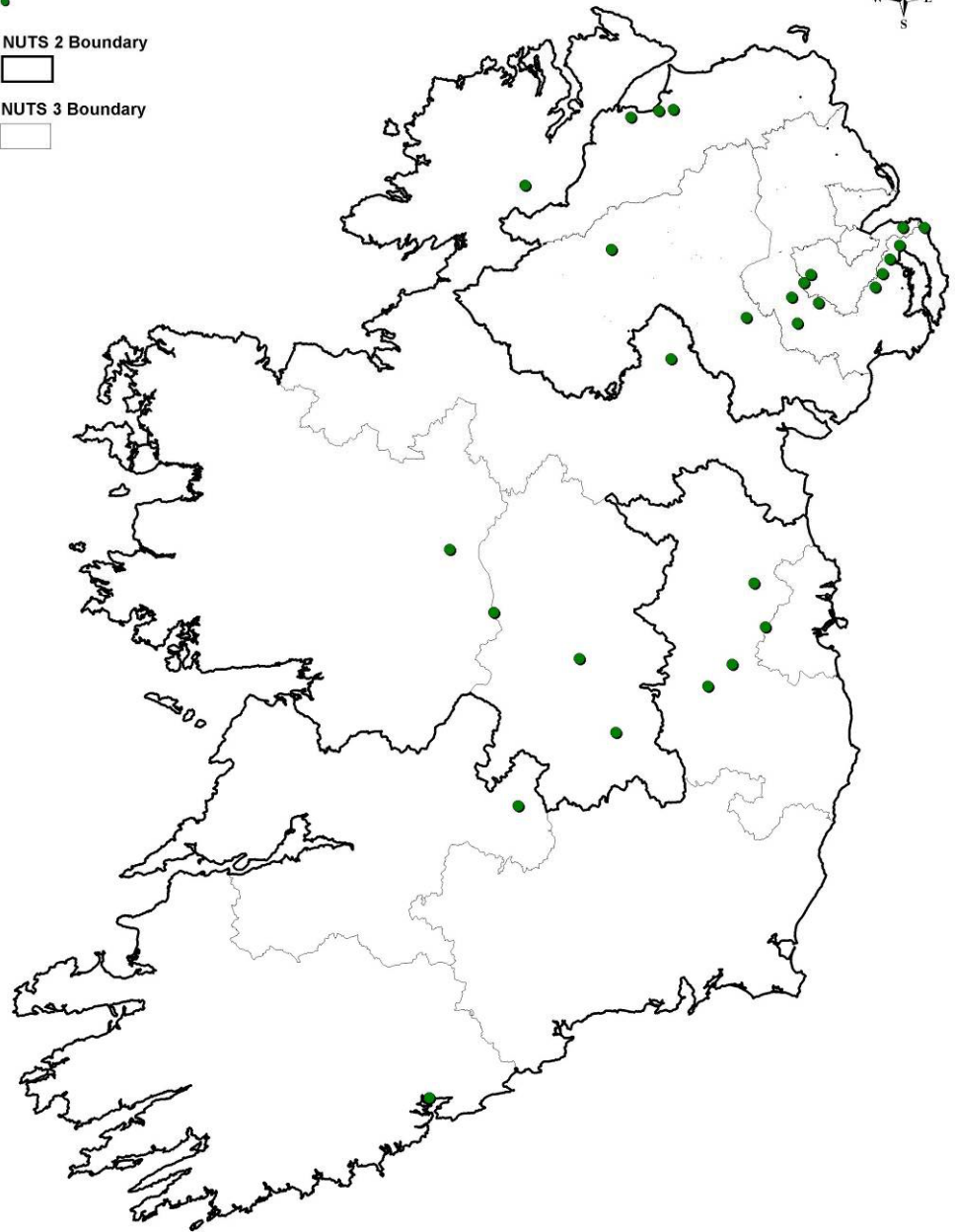
Public Administration and Defence



NUTS 2 Boundary



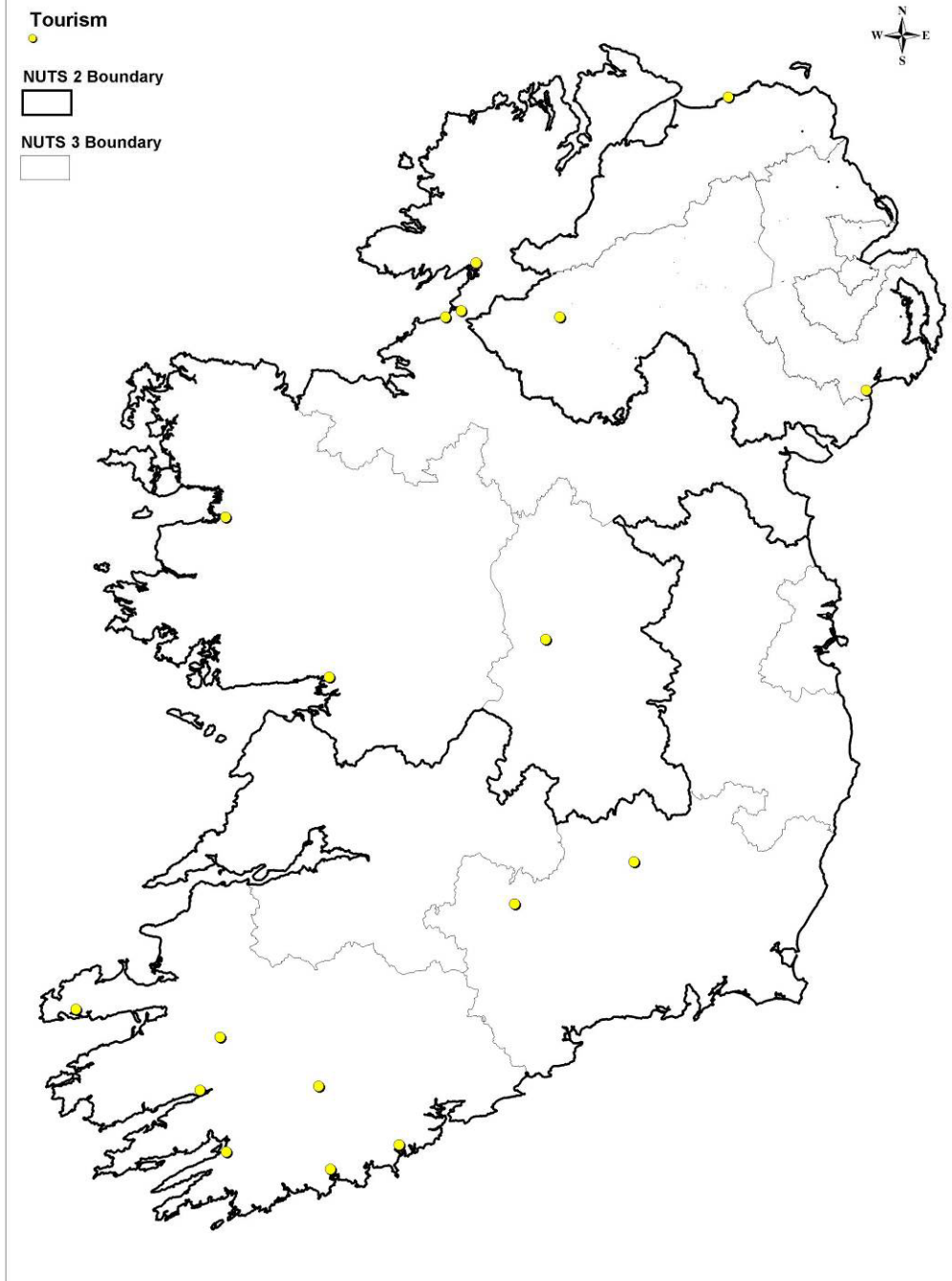
NUTS 3 Boundary



## Public Administration and Defence

Strong concentration in North around Belfast and Derry; and in RoI in Curragh/Midlands

## Urban Centres Specialisation Category: Tourism

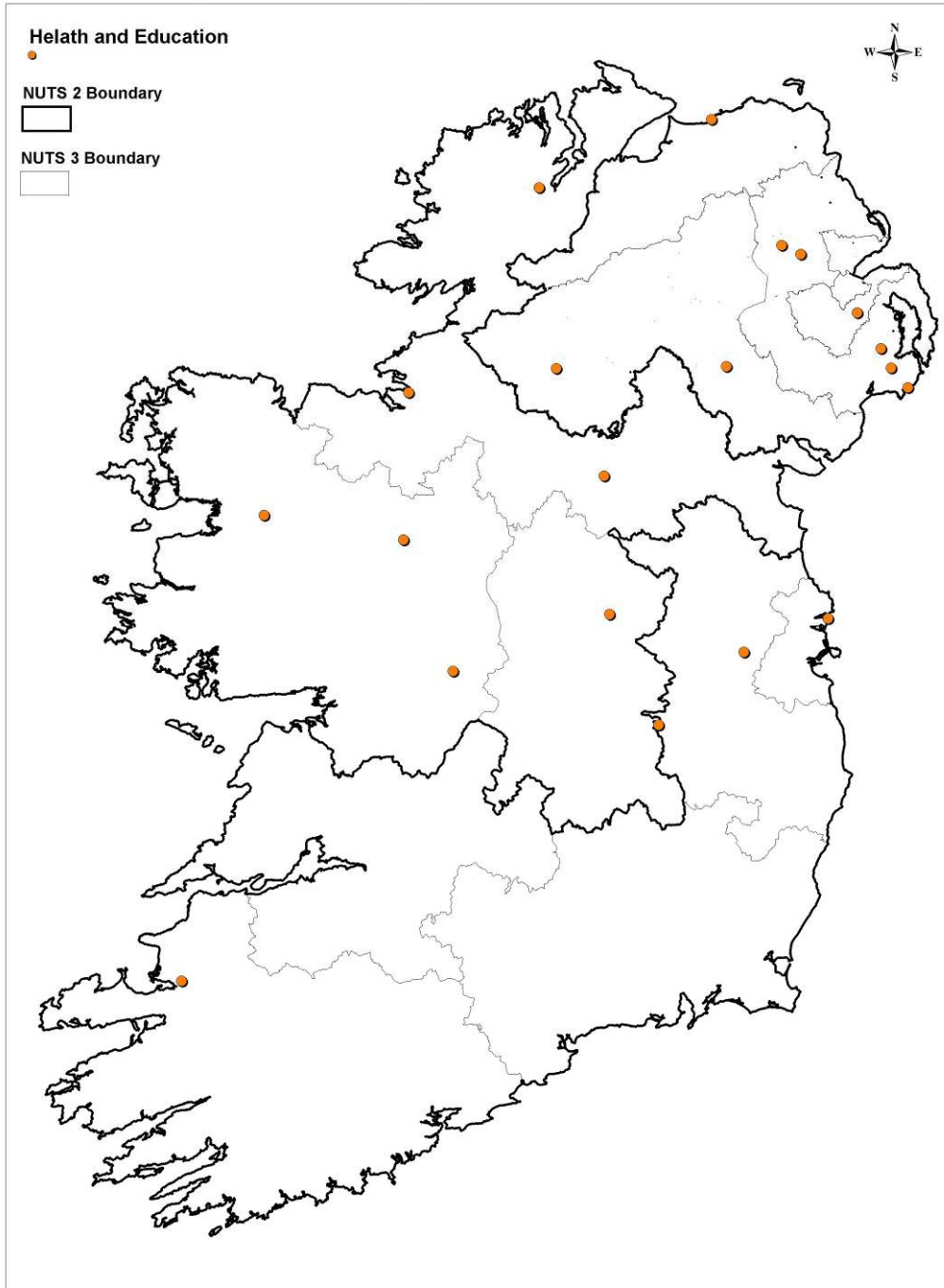


## Tourism

Some concentration of centres in the South-West

Importance of coastal resorts is evident both North and South

## Urban Centres Specialisation Category: Health and Education



## Health & Education

Dispersed pattern – reflecting strong consumer-service focus

Noticeable sparseness in the S&E Region in ROI

# Results: Complementarities in Cross-Border Regions

- Focus on existence (or absence) of complementarities among groups of centres defined on a Cross-Border basis
- Difference in Employment profiles between pairs of centres (e.g., Newry-Dundalk) measured using the Index of Dissimilarity
  - Higher values indicate greater differences : higher levels of sectoral complementarity

# Dissimilarity Index for Selected Urban Clusters

Cluster/ Town	Town				Average DI for centre	Group Average
<b>North Border</b>	Derry	Letterkenny	Strabane			<b>16.18</b>
Derry		11.92	15.33		<b>13.63</b>	
Letterkenny	11.92		21.29		<b>16.61</b>	
Strabane	15.33	21.29			<b>18.31</b>	
<b>West Border</b>	Enniskillen	Sligo	Bundoran	Ballyshannon		<b>22.28</b>
Enniskillen		19.35	27.54	18.70	<b>21.86</b>	
Sligo	19.35		26.37	22.39	<b>22.70</b>	
Bundoran	27.54	26.37		19.34	<b>24.42</b>	
Ballyshannon	18.70	22.39	19.34		<b>20.14</b>	
<b>Central Border</b>	Monaghan	Armagh	Castleblaney	Keady		<b>20.93</b>
Monaghan		17.54	14.15	24.05	<b>18.58</b>	
Armagh	17.54		22.11	21.06	<b>20.24</b>	
Castleblaney	14.15	22.11		26.64	<b>20.97</b>	
Keady	24.05	21.06	26.64		<b>23.92</b>	
<b>East Border</b>	Dundalk	Newry				<b>17.87</b>
Dundalk		17.87			<b>17.87</b>	
Newry	17.87				<b>17.87</b>	
<b>Midland Gateway</b>	Athlone	Mullingar	Tullamore			<b>16.25</b>
Athlone		19.09	17.15		<b>18.12</b>	
Mullingar	19.09		12.52		<b>15.81</b>	
Tullamore	17.15	12.52			<b>14.84</b>	

North Border Cluster contains the most similar urban centres

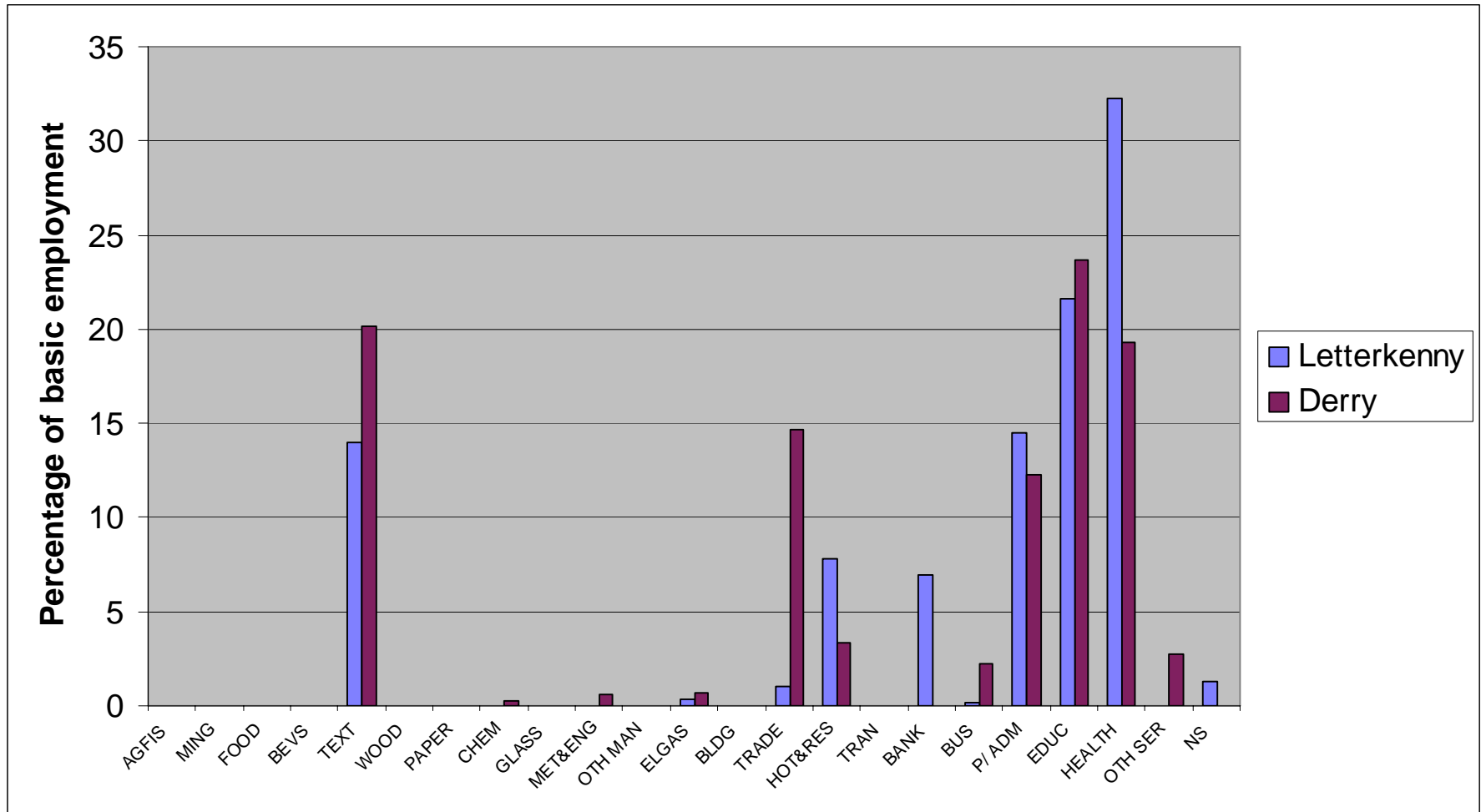
ATM also has a low Group Average

Dissimilarity is being pushed up by smaller towns – e.g Strabane, Bundoran

Degree of Dissimilarity between Derry-Letterkenny is lower than any other pair within the clusters

Restricted inter-sectoral complementarity but high potential for intra-sectoral complementarity

# Basic Employment Profile



# Conclusions

- Strong degree of regional clustering of towns according to dominant industry
- Hence low levels of intra-regional inter-sectoral complementarity at the level of intermediate industrial groups
- This suggests that it may be more fruitful to group urban centres on the basis of complementarities at the intra-industry level (firms in the same industry group may have complementary functions)
- This approach in any case is more consistent with the notion of industrial cluster development