

Economic Scrutiny Workshop Series

Module 3:

Sectors and Productivity – What are key groups of institutions in the Northern Ireland economy; and how is their economic activity categorised?

Research and Information Service
Finance and Economics Research Team

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Economic Scrutiny Workshop Series

Overall Aim:

To better equip Members of the Legislative Assembly (MLAs) and those who support them (staffers, political party researchers, Assembly officials and others) in Northern Ireland Assembly plenaries and committees

Related Objectives:

Through accessible explanation, reducing complexity and confusion, the themed modules seek to:

1. Increase knowledge and understanding of economics
2. Raise awareness of good practice in economic development
3. Nurture applied learning amongst MLAs and those who support them
4. Strengthen Northern Ireland Assembly scrutiny in plenaries and committees
5. Support delivery of efficient, transparent and accountable governance in Northern Ireland through informed scrutiny and oversight

Four themed modules:

1. Economic Performance:

Why measure economic performance (overall economic output and growth) in Northern Ireland; and how is that done?

2. The Labour Market:

Why be aware of Northern Ireland's labour market performance?

3. Sectors and Productivity:

What are key groups of institutions in the Northern Ireland economy; and how is their economic activity categorised?

4. Economic Impact:

What are key impacts of individual economic events; and how do those impacts subsequently affect the wider economy?

Themes for today:

❖ Sectors

- What are sectors; and why do we need to know about them?
- Structure and hierarchy of sectors

❖ Productivity

- What is productivity; and how do we measure it?
- Why is productivity important?
- Northern Ireland's productivity “gap”

❖ Policy considerations

❖ Key takeaways

❖ Sectors

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What are sectors; and why do we need to know about them?

- ❖ Sectors are a simple way of categorising economic activity into a common structure
- ❖ They enable us to:
 - Categorise important information, such as economic output (as discussed in Module 1 of this Series) and employment (Module 2)
 - Allows us to look beyond the headline metrics and understand the following:
 - Which sectors are contributing the most to economic growth?
 - Which sectors are creating (or losing) the most jobs?
 - Which sectors should we be giving more support to?
 - In which sectors does Northern Ireland have strengths / weaknesses?

Structure and hierarchy of sectors

- ❖ Northern Ireland, the United Kingdom as a whole and the Republic of Ireland all use a hierarchical 4 “digit” system, which effectively are 4 levels of detail
- ❖ 19 **sections** (for example, “Manufacturing”, “Professional services”, etc.)
 - 88 **divisions** (such as “Manufacture of food products”):
 - 272 **groups** (for example, “Processing of fruit and vegetables”)
 - 615 **classes** (such as “Processing of potatoes”)

Section (1 digit)	Division (2 digit)	Group (3 digit)	Class (4 digit)
C: Manufacturing	10: Manufacture of food products	10.1: Processing of meat and meat products	10.11: Processing of meat
			10.12: Processing of poultry
			10.13: Production of meat & poultry
		10.3: Processing of fruit and vegetables	10.31: Processing of potatoes
			10.32: Manufacture of fruit and vegetable juice
	14: Manufacture of wearing apparel	14.1: Manufacture of wearing apparel (apart from fur)	14.11: Manufacture of leather clothes
			14.12: Manufacture of workwear
			14.13: Manufacture of outerwear
J: Information & communication	58: Publishing activities	58.1: Publishing of books and other periodicals	58.11: Book publishing
			58.12: Publishing of mailing lists
			58.13: Publishing of newspapers
	62: Computer programming	62.0: Computer programming & consultancy	62.01: Computer programming
			62.02: Computer consultancy
			62.03: Computer facilities management

Source: [ONS](#) (2022)

❖ Other ways to aggregate sectors, for example:

Agriculture, forestry & fishing
Mining & quarrying
Manufacturing
Electricity, gas, steam
Water supply & waste management
Construction
Wholesale & retail
Transportation & storage
Accommodation & food service
Information & communication
Financial & insurance
Real estate
Professional services
Administrative services
Public administration & defence
Education
Health & social work
Arts & entertainment
Other services

Private

Public

Private

Agriculture, forestry & fishing
Mining & quarrying
Manufacturing
Electricity, gas, steam
Water supply & waste management
Construction
Wholesale & retail
Transportation & storage
Accommodation & food service
Information & communication
Financial & insurance
Real estate
Professional services
Administrative services
Public administration & defence
Education
Health & social work
Arts & entertainment
Other services

Agriculture

Production

Construction

Services

Public

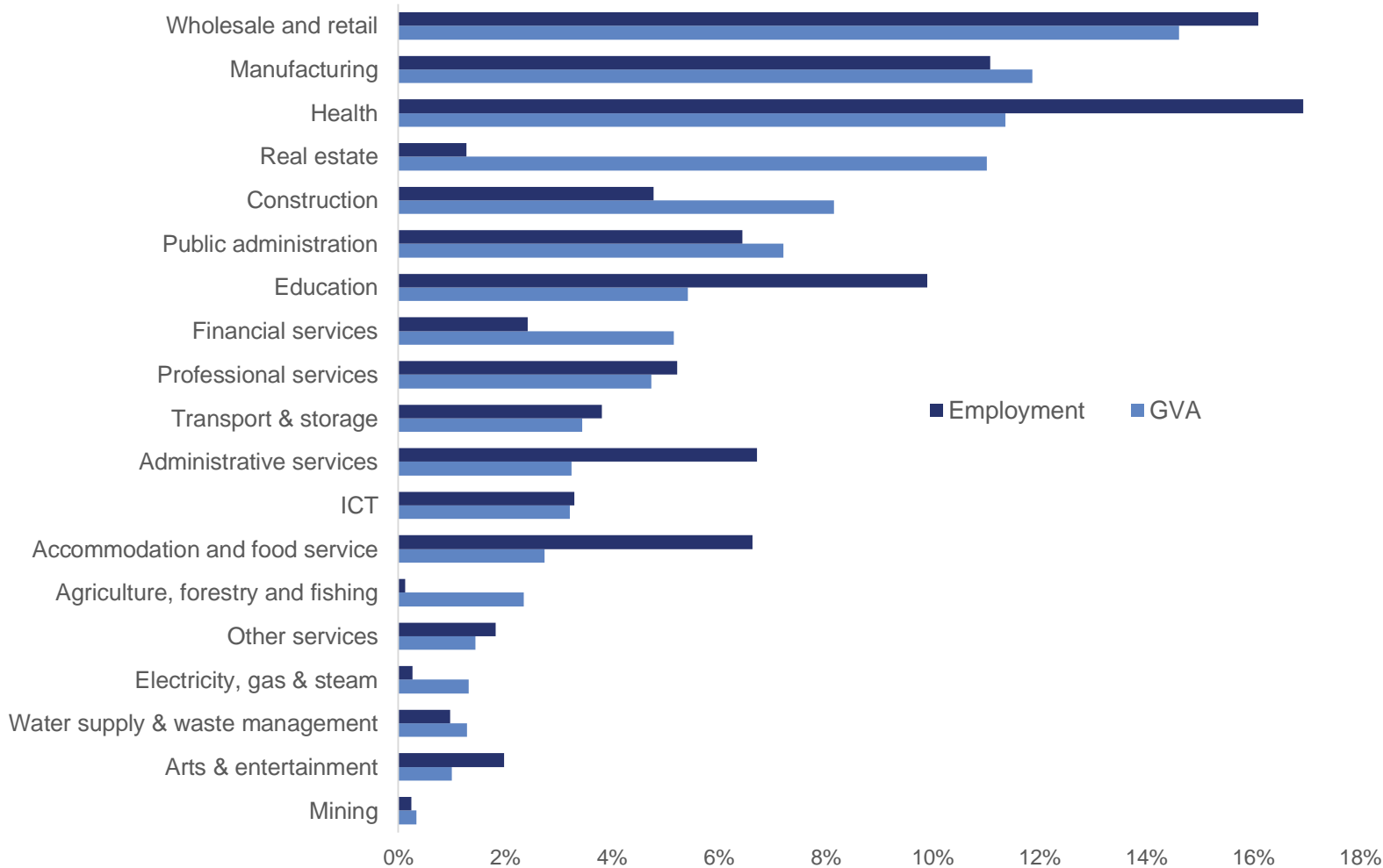
Services

Beyond headline figures

- ❖ Headline statistics often can mask the details of what is really driving trends
- ❖ The same is true at sectoral levels, as headline figures can hide the underlying trends within the sector
- ❖ For example, Manufacturing employment increased just 0.8% between 2019 and 2022
 - However, that figure hides significant variation at the division – the “2-digit” level - as follows:
 - Manufacture of chemicals +29%
 - Manufacture of pharmaceutical products +16%
 - Manufacture of electrical equipment -17%
 - Manufacture of motor vehicles -18%
- ❖ **KEY POINT:** Important to bear this in mind when looking at figures about growth and decline in certain sectors

Northern Ireland – biggest and smallest sectors

Sectoral employment and GVA as a % of the total, Northern Ireland, 2023



Source: [NISRA](#), [ONS](#) (2024)

Fast growing sectors:

- ❖ Professional services
- ❖ Construction
- ❖ Wholesale & Retail

Fast growing divisions:

- ❖ Motion picture & TV production
- ❖ Scientific R&D
- ❖ Manufacture of beverages

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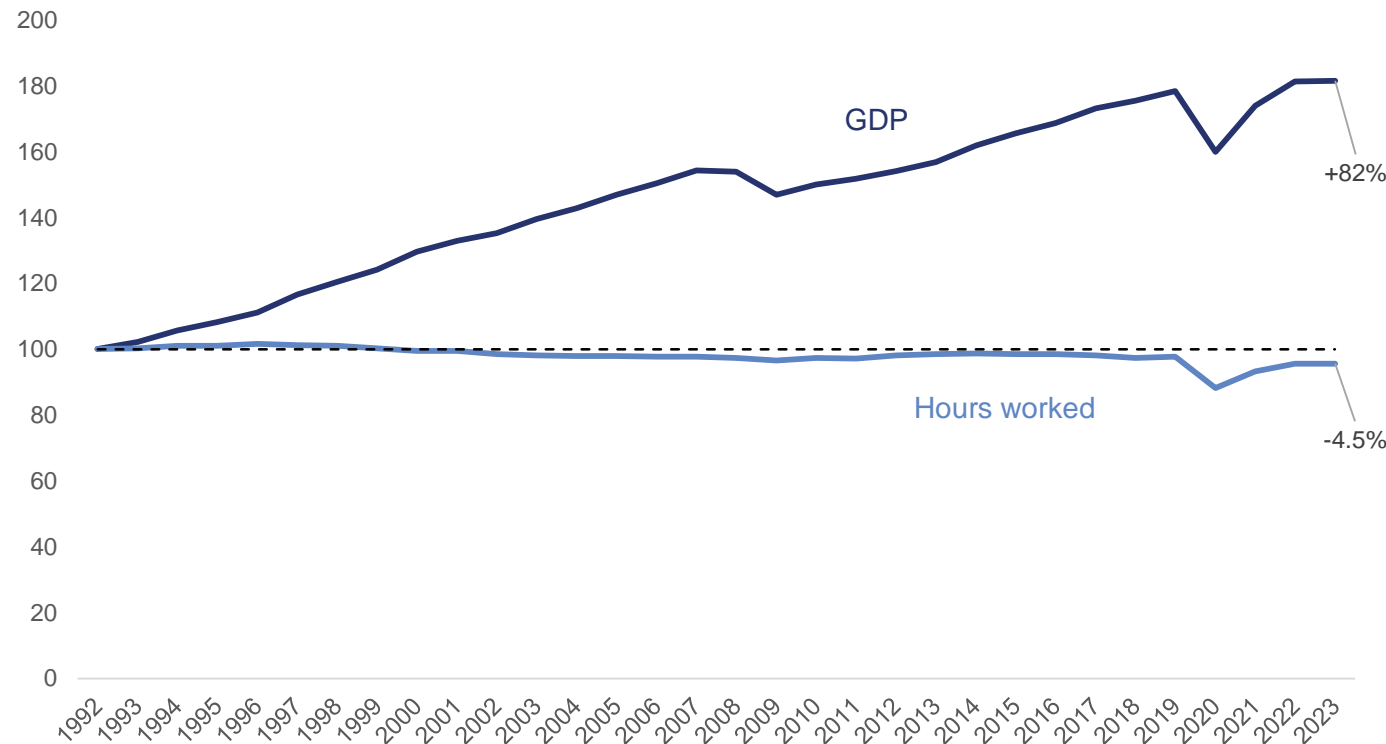
What is productivity; and how do we measure it?

- ❖ Productivity is the ability to produce outputs (such as goods or services), with a certain amount of inputs (raw materials or labour)
- ❖ The primary productivity measures are:
 - [Gross Value Added (GVA) / Employment] – that is, **GVA per job**
 - [GVA / Number of hours worked] – **GVA per hour worked**
- ❖ A more productive economy can produce more outputs than another country would with the same inputs
- ❖ Higher productivity = higher wages and better living standards
- ❖ **KEY POINT:** Productivity is **not** simply how hard people work, nor how many hours they work

Why is productivity important?

- ❖ Is a key driver of increased economic growth and living standards over time
- ❖ Improves competitiveness relative to other regions and countries
- ❖ Indicates the region's/country's economy produces more goods and services with the same number of jobs or the same number of hours worked

UK GDP vs. hours worked, 1992-2022, 1992=100



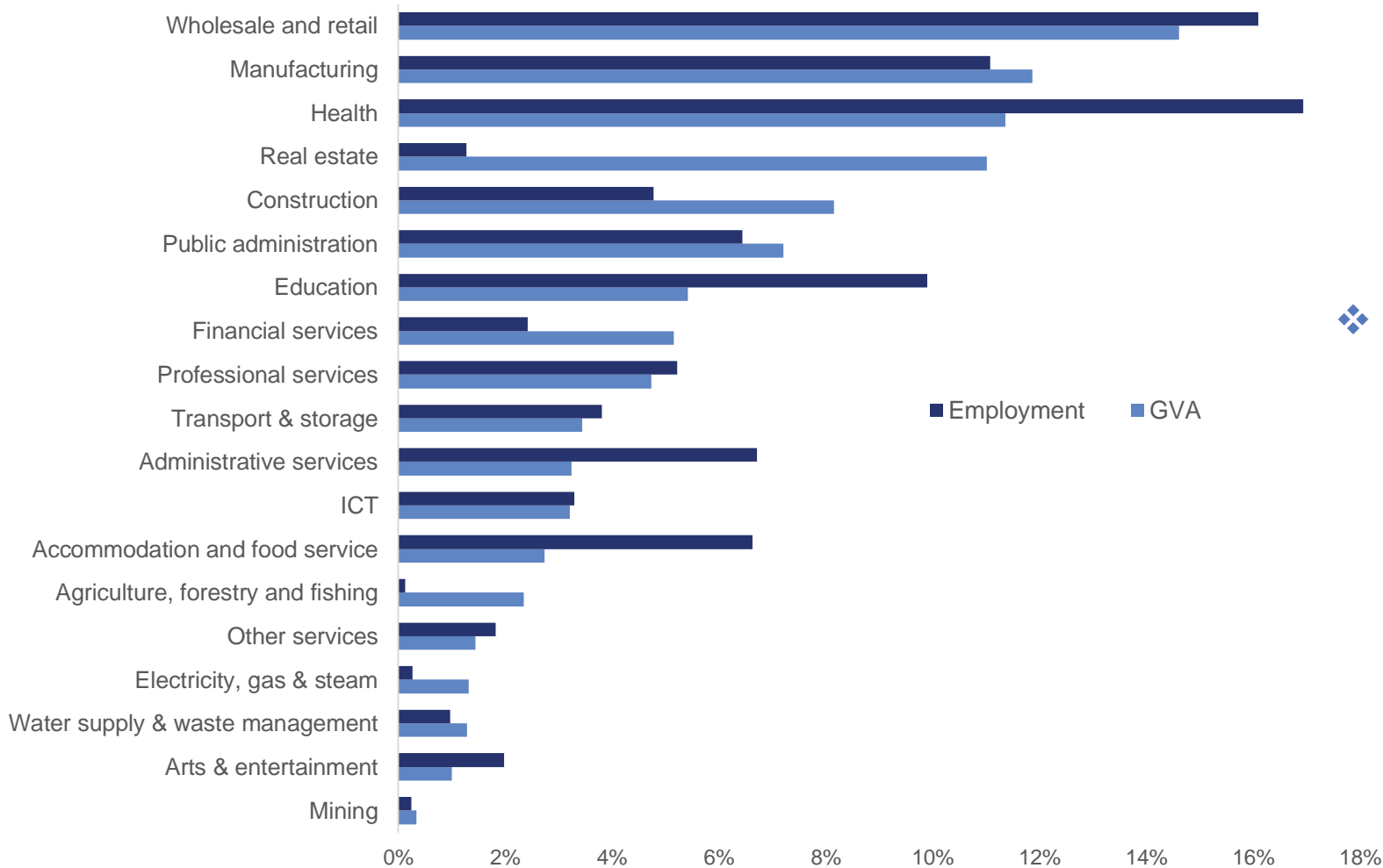
Source: [ONS](#), [ONS](#) (2024)

Northern Ireland's productivity “gap”

- ❖ Low productivity is one of Northern Ireland's most significant and long-term economic problems
- ❖ Its productivity “gap” is worse than the United Kingdom's – which itself has a significant gap when contrasted with [many other jurisdictions](#)
- ❖ Northern Ireland's productivity gap arises from:
 1. **Sectoral mix of the Northern Ireland economy** – more reliance on lower-productivity sectors relative to the United Kingdom / Republic of Ireland; and,
 2. **Productivity differences within Northern Ireland's economic sectors** – lower productivity in particular relative to the same sectors in the United Kingdom and Republic of Ireland
- ❖ Closing Northern Ireland's gap requires significant changes in both those areas – for example:
 - Ulster University's [May 2019](#) research estimated a fall in Northern Ireland's headline productivity gap of 13% to 5%, if productivity in its sectors matched the United Kingdom averages
 - Theoretically speaking, a reduction in the number of lower productivity jobs in the economy and an increase in higher productivity ones would help close the gap – but would require other significant changes as well, if there is to be a realistic solution

What does Northern Ireland's sectoral mix tell us about its productivity?

Sectoral employment and GVA as a % of the total, Northern Ireland, 2023



❖ Some sectors account for larger % shares of GVA than jobs (for example, Manufacturing):

- Why is this?
- Why are those shares not the same?

❖ Remember:

- $\text{Productivity} = \text{GVA per job}$
- $\text{GVA} > \text{jobs} = \text{more productive}$ – for example, Manufacturing, Construction, Financial services
- $\text{GVA} < \text{jobs} = \text{less productive}$ – for example, Retail, Accommodation/food service

Source: [NISRA](#), [ONS](#) (2024)

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❖ Limitations of sectoral analysis:

- A number of key sectors are not “official”, but are constructed from divisions, groups and classes of others; and some may even overlap – for example:
 - **Hospitality / tourism** = Beverage service, hotels, camping, event catering
 - **Digital** = Manufacture of electrical components, communications equipment, software publishing, computer programming, repair of computer and equipment
 - **Creative industries** = Publishing of books/newspapers, motion picture production, TV and radio programming, computer programming, photography, performing arts
 - **Agri-food** = Agriculture, manufacture of food, retail of food & drink products, catering
- Existing sectoral structure therefore potentially limits analysis examining new or emerging sectors prioritised in governmental strategies, such as: Department for Economy’s [10X Strategy](#); the Economy Minister’s [Economic Vision](#) (AI, cyber-security, robotics etc)

Policy considerations

❖ Productivity assumption and related questions:

- If low productivity in Northern Ireland is a consequence of what the regional economy does and or how it does it, then key policy questions could be:
 - Does Northern Ireland need to grow the more productive sectors, and alter the sectoral structure of the economy?
 - Does it need businesses and institutions across sectors to perform better – for example, investment in leadership and training, better use of technology?
 - Is the solution a combination of both – focussing on both structure and performance?

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Key takeaways

Sectors

❖ What are they; and **why** are they useful?

- Simple way of categorising industrial activities into a common structure
- Can help us in understanding what is driving changes in the economy

❖ Hierarchy

- Sectors are organised into different hierarchies
- This lets us understand in more detail what each sector of the economy is doing

Productivity

❖ What is productivity; and why is it important?

- GVA per job **or** GVA per hour worked
- Key driver of increased economic growth and living standards over time

❖ Northern Ireland's productivity gap, when compared to the United Kingdom's



- A combination of both Northern Ireland's sectoral mix and the productivity within those sectors

Any Questions

