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Western Cape List of Occupations in High Demand

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Content

- What is the List of Occupations in High Demand?
- How do we identify occupations in high demand?
- Context: The Western Cape economy and Labour Market
- Analysis of secondary data
- Analysis of survey data
- Final results

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What is the List of Occupations in High Demand?

Purpose of the List of OIHD

- Signal the need for the development of new or alterations to qualifications,
- Act as a signpost for enrolment planning, and
- Inform career guidance for learners and work-seekers.

How do we identify occupations in high demand?

Four criteria for an occupation to be classified as being in high demand

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Employment growth

- Secondary data analysis

Wage growth

- Secondary data analysis

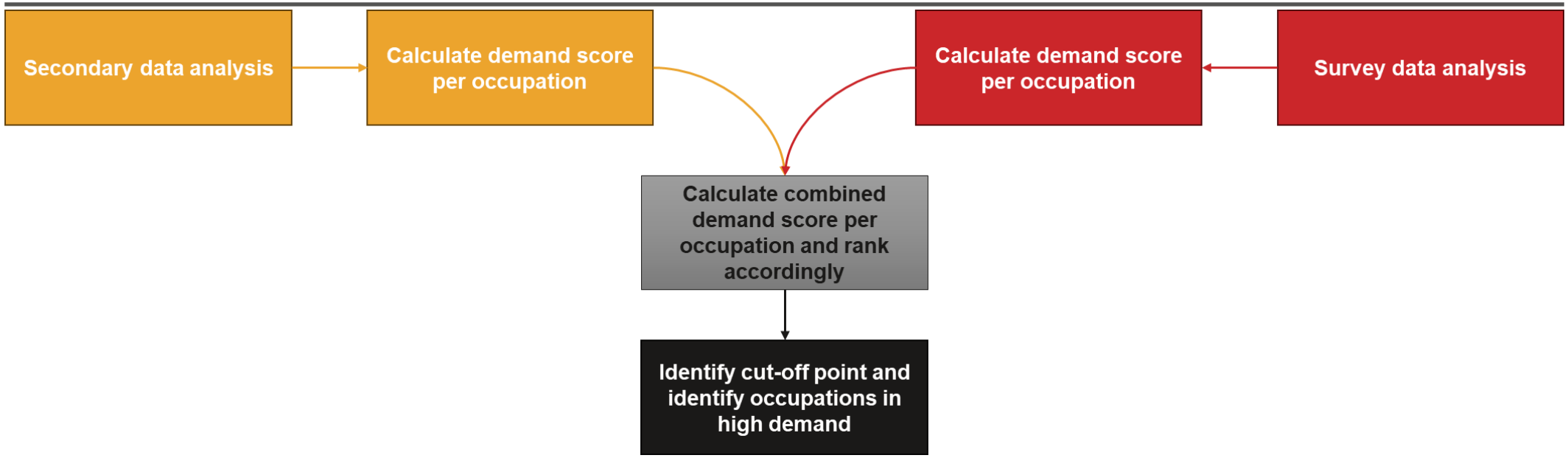
Vacancy growth

- Secondary data analysis

High likelihood of seeing recruitment activity in the medium-term

- Primary data collection (survey)

Approach to identifying occupations in highest demand



- As in previous iterations, approach still heavily inspired by UK's Migration Advisory Committee
- Most significant change from 2020 methodology is the use of a survey instead of a "Call for Evidence"

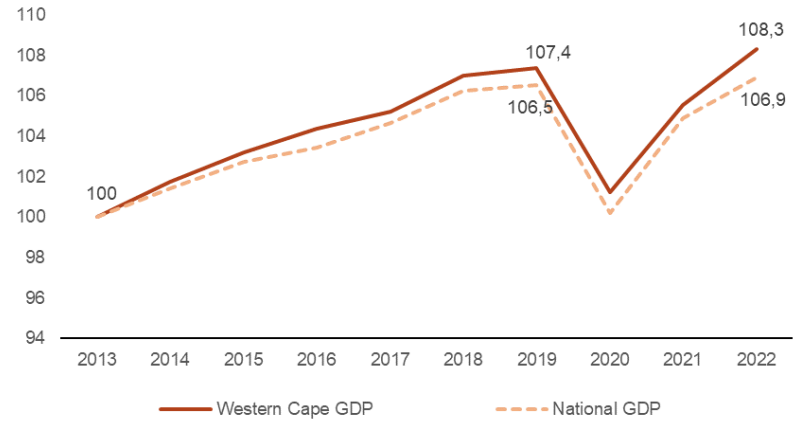
Context: The Western Cape economy and labour market

The current context

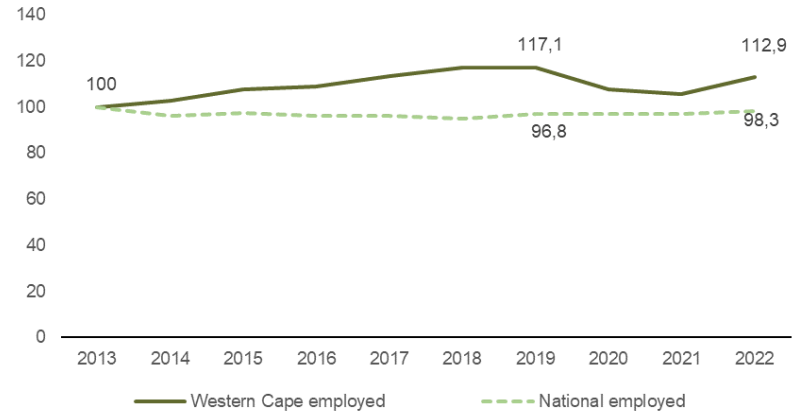
- *Western Cape has grown faster than the rest of the country in terms of output and employment*

- Between 2019 and 2022, national real GDP grew by a mere 0.4% compared to average real growth of 0.9% in Western Cape.
- While employment in Western Cape has grown faster than the rest of the country over the last decade, the post-covid recovery has been a bit slower.
  - 2022 vs 2019
    - WC: 3.6% fewer people employed
    - SA: 1.5% more people employed

Western Cape and National real GDP (indexed, base year 2013)



Western Cape and National employed persons (indexed, base year 2013)

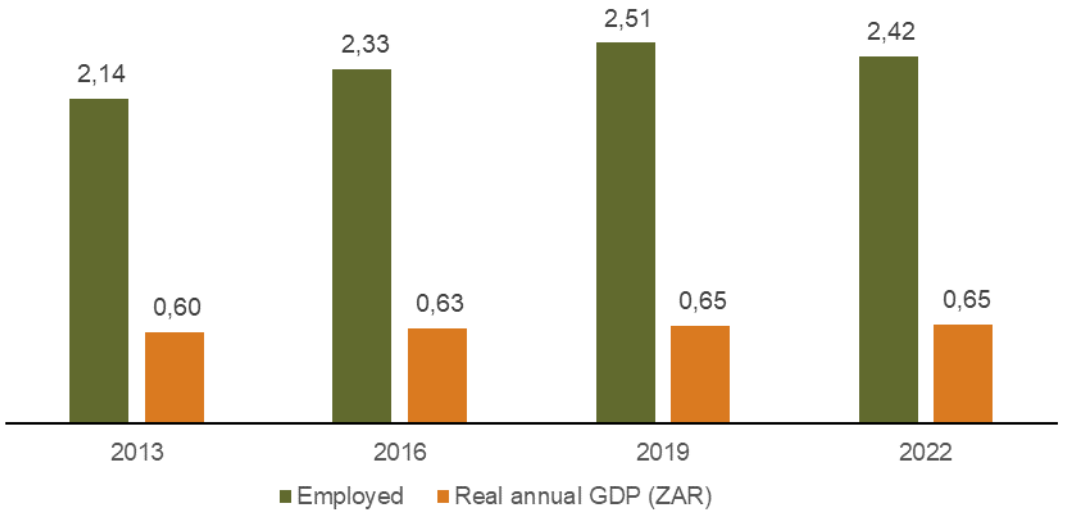


The current context

- Although recovering, employment and GDP were significantly impacted by COVID-pandemic

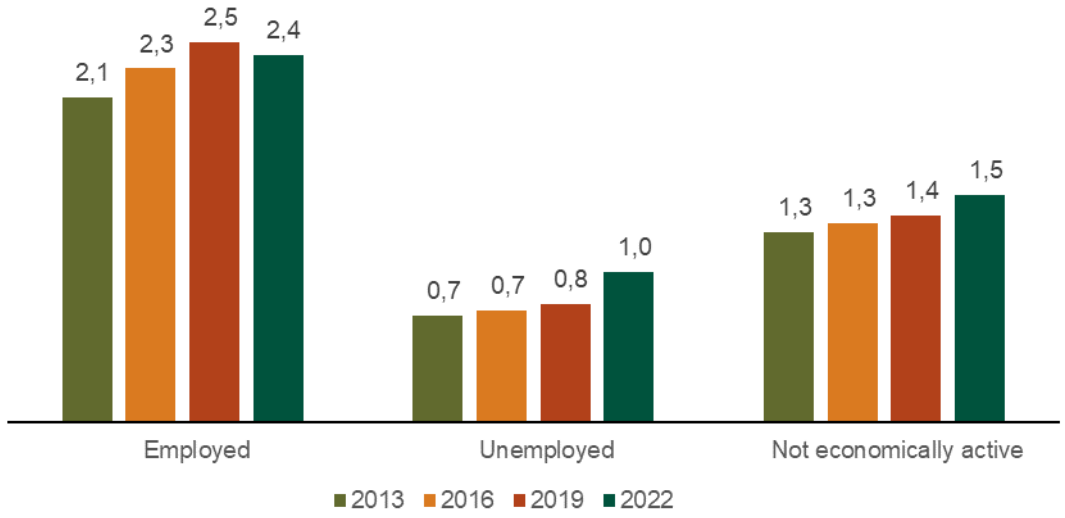
- Economic growth p.a.
  - 2013 – 2019: 1.2%
  - 2019 – 2022: 0.3%
- Employment growth p.a.
  - 2013 – 2019: 2.7%
  - 2019 – 2022: -1.2%

Western Cape GDP (in trillions) and number of employed persons (in millions)



Although there has been recovery in the labour market and broader economy since the pandemic, overall labour market demand is low.

The number of unemployed and discouraged work seekers have increased substantially



2013 - 2019

- Employed: Up 0.4m
- Unemployed: Up 0.1m
- Discouraged work seekers: Up 0.1m

2019 - 2022

- Employed: Down 0.1m
- Unemployed: Up 0.2m
- Discouraged work seekers: Up 0.1m

Over the last three years, the labour market has failed to absorb the increase in the labour force,

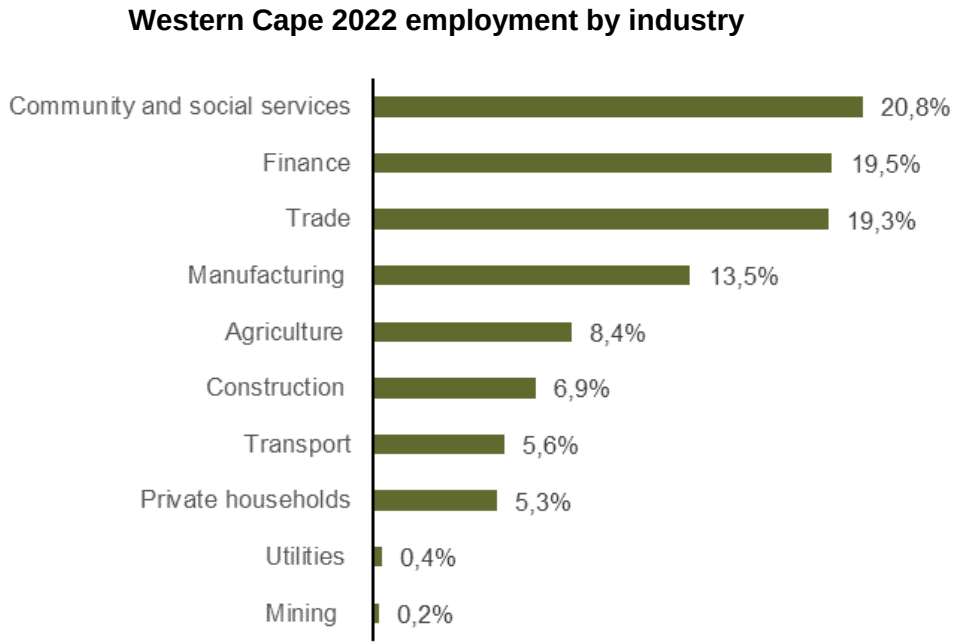
→ ***Oversupply***

→ ***Skills mismatch***

Employment by industry

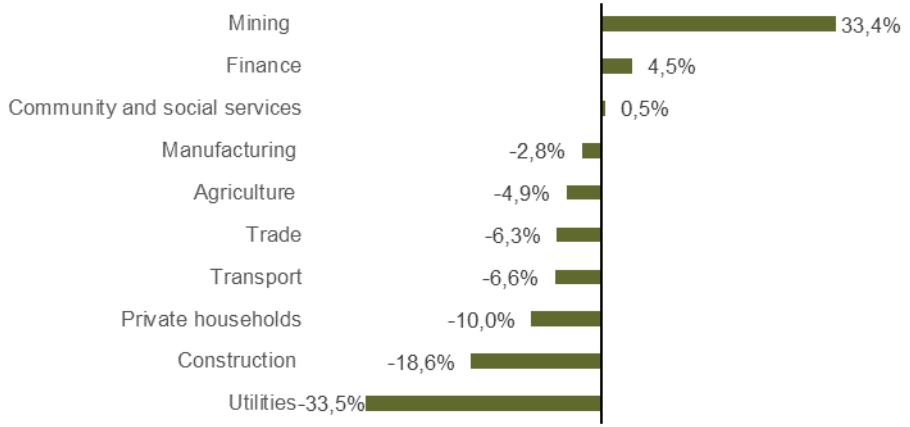
- Most employed individuals in the WC worked in community and social services, finance, and trade

- A significant portion of the Western Cape's workforce (20.8%) works in community and social services, finance (19.5%) and trade (19.3%).
- Only 0.2% and 0.4%, worked in the utilities and mining sectors, respectively.

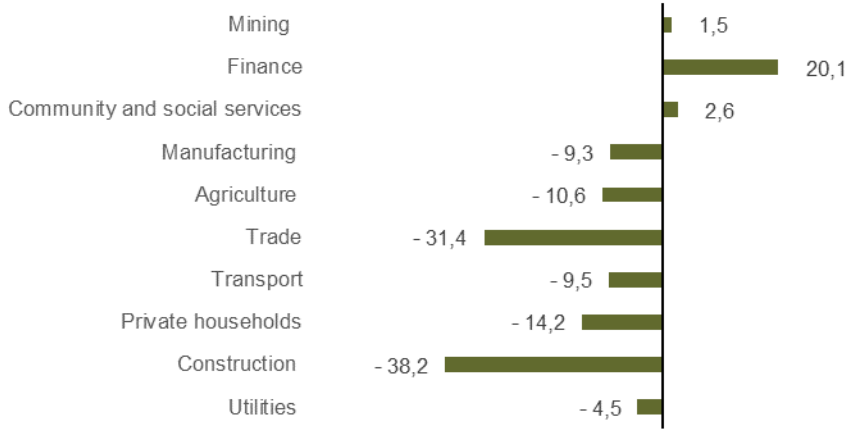


In the WC only Mining, Finance, and Community and Social Services have shown employment growth since 2019

Western Cape percentage change in employed persons (2019 – 2022)



Western Cape change in employed persons (000s), 2019 – 2022



Largest contributors to the decrease in employment in the Western Cape:

- Construction: Net decrease of 38 244 people → 18.6%
- Trade: Net decrease of 31 419 people → 6.3%
- Private households: Net decrease of 14 163 → 10%

If not for Finance, particularly, the total employment decrease in the Western Cape would have exceeded 100 000.

Analysis of secondary data

Quantitative analysis

Aim: Rank occupations from highest to lowest demand

- *Map SASCO codes to OFO codes*
- *Analyse Employment Pressure Data in QLFS*
- *Analyse Wage Pressure data in LMDS*
- *Analyse Vacancy Pressure data in CJ/PNET dataset*
- *Produce ranked list (3-digit).*

Secondary data analysis

Dimension	Source	Variable (indicator)	Description
Employment pressure	Quarterly Labour Force Survey	Employment growth	Number of employed in 2022 relative to 2019
		Employment intensity	Average weekly hours in 2022 relative to 2019
		Employment duration	Average time employed in 2022 relative to 2019
Wage pressure	Labour Market Dynamics Survey	Mean wage growth	Average wage in 2022 relative to 2019
		Median wage growth	Median wage in 2022 relative to 2019
		Conditional mean wage growth	Conditional mean wage in 2022 relative to 2019
Vacancy pressure	PNET and Career Junction	Vacancies	Number of vacancies in 2022
		Vacancy growth	Vacancies in 2022 relative to 2019
		Renewal rate	Percentage of 2022 vacancies that had to be re-advertised
		Renewal rate growth	Renewal rate in 2022 relative to renewal rate in 2019

Step 1: Assign rank to each unit group for each indicator

Step 2: Calculate average rank across all indicators

- $Average\ rank\ (\bar{R}_j) = \frac{\sum_i w_i R_{ij}}{\sum_i w_i}$

Step 3: Calculate secondary data demand score for each unit group

- $Secondary\ data\ Demand\ Score_j(S_j) = 1 - \left(\frac{\bar{R}_j - \bar{R}^{min}}{\bar{R}^{max} - \bar{R}^{min}}\right)$

Step 4: Rank unit groups according to demand score

Top 10 Minor Groups

OFO code	Minor group
2021-322	Nursing Midwifery Associate Professionals
2021-132	Manufacturing, Mining, Construction and Distribution Managers
2021-681	Food Processing and Related Trades Workers
2021-325	Other Health Associate Professionals
2021-422	Client Information Workers
2021-343	Artistic, Cultural and Culinary Associate Professionals
2021-441	Other Clerical Support Workers
2021-121	Business Services and Administration Managers
2021-342	Sports and Fitness Workers
2021-643	Painters, Building Structure Cleaners and Related Trades Workers

Top 5 Minor Groups based on secondary data analysis

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1) Nursing Midwifery Associate Professionals
Enrolled Nurse
Mother Craft Nurse
Assistant Midwife

2) Manufacturing, Mining, Construction and Distribution Managers
Manufacturer
Manufacturing Operations Manager
Engineering Manager
Power Generation Operations Manager
Manufacturing Quality Manager
Quality Manager
Metrologist
Quality Systems Auditor
Mining Manager
Mineral Resources Manager
Rock Engineering Manager
Construction Project Manager
Project Builder
Supply and Distribution Manager
Logistics Manager
Road Transport Manager
Warehouse Manager
Fleet Manager
Railway Station Manager
Airport or Harbour Manager
Grain Depot Manager
Fuel Manager
Maritime Search and Rescue Mission Coordinator

3) Food Processing and Related Trades Workers
Slaughterer
Red Meat De-boner
Butcher
Fishmonger
Poultry Slaughterer
Confectionary Baker
Pastry Cook
Confectionery Maker
Dairyman
Fruit or Vegetable Preserver
Oil Expeller
Jam Maker
Cheese Grader / Tester
Food Taster / Grader
Tea Taster / Grader
Wine Taster / Grader
Fruit and Vegetable Grader / Classer
Livestock Product Analyst
Cigar Maker
Green Tobacco Storage Controller / Manager
Tobacco Processing Machine Operator

4) Other Health Associate Professionals
Dental Assistant
Oral Hygienist
Health Information Manager
Health Promotion Practitioner
Dispensing Optician
Massage Therapist
Hydrotherapist
Electrotherapist
Physiotherapy Technician
Clinical Associate
Environmental and Occupational Health Inspector
Marine Safety Officer
Agricultural / Horticultural Produce Inspector
Aquaculture Produce Analyst
Safety Inspector
Ammunition Technician
Mine Health and Safety Inspector
Magazine Master
Ambulance Officer
Intensive Care Ambulance Paramedic / Ambulance Paramedic
Chiropractor
Osteopath

5) Client Information Workers
Tourist Information Officer
Travel Consultant
Inbound Contact Centre Consultant
Outbound Contact Centre Consultant
Contact Centre Real Time Advisor
Contact Centre Resource Planner
Contact Centre Forecast Analyst
Call or Contact Centre Agent
Switchboard Operator
Hotel or Motel Receptionist
Enquiry Clerk
Receptionist (General)
Medical Receptionist
Survey Interviewer
Admissions Clerk
Ship's Purser

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Analysis of survey data

Primary data collection and analysis

Aim: Collect views of employers regarding occupational demand

- *Develop online surveys*
- *Disseminate surveys to network*
- *Consolidate data as received*

Survey description

Please list the specific occupations your organisation or the organisations you represent are likely to recruit for over the next three years.

- **Column 1: Indicate the name of the specific occupation you will be recruiting for. BE AS SPECIFIC AS POSSIBLE WITH THE NAME OF THE OCCUPATION (e.g. "Logistics Manager", rather than just "Manager" or "Welder" rather that just "Artisan")**
- **Column 2: Indicate your level of certainty that recruitment will take place on a scale of 1 – 4: 1. "possibly", 2. "probably", 3 "nearly certain", and 4 “definitely ”.**

- **Date: 8 August 2023 – 1 October 2023 (8 weeks)**
- **Total survey responses: 353 (National: 1 730)**
- **Responses to demand question: 194 (National: 788)**

Approach to analysing survey responses

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Step 1: Map occupations specified in survey to the Organising Framework of Occupation classification

Step 2: Rank occupations according to the number of mentions and average level of certainty

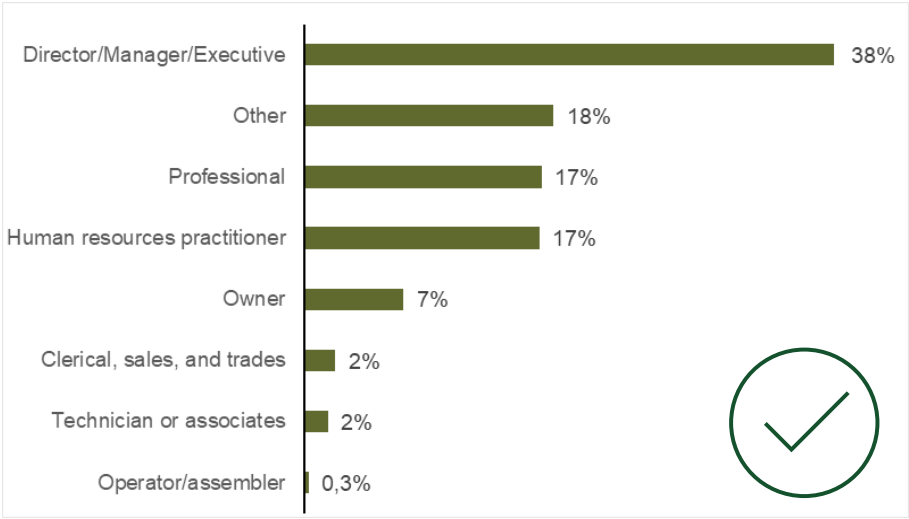
Step 3: Calculate mentions demand score (M_j)

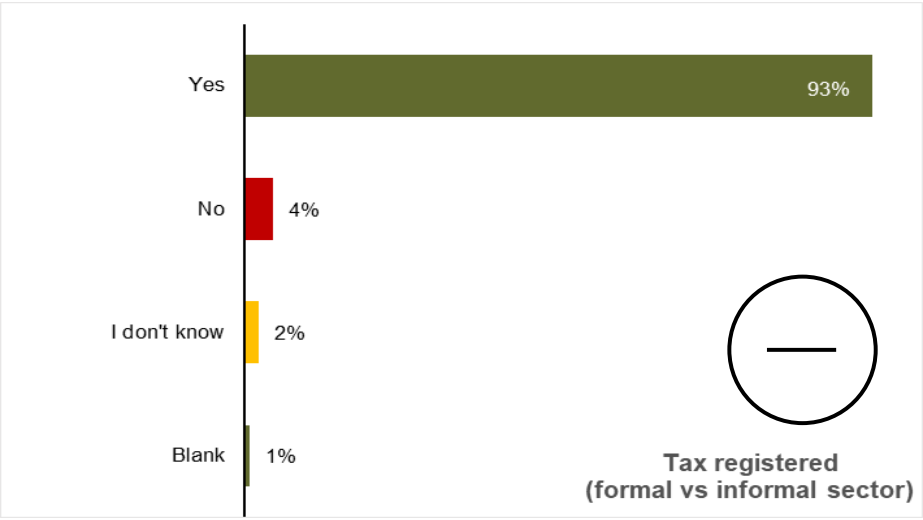
- $M_j = 1 - \left(\frac{R_j^M}{R^{M,max}}\right)$

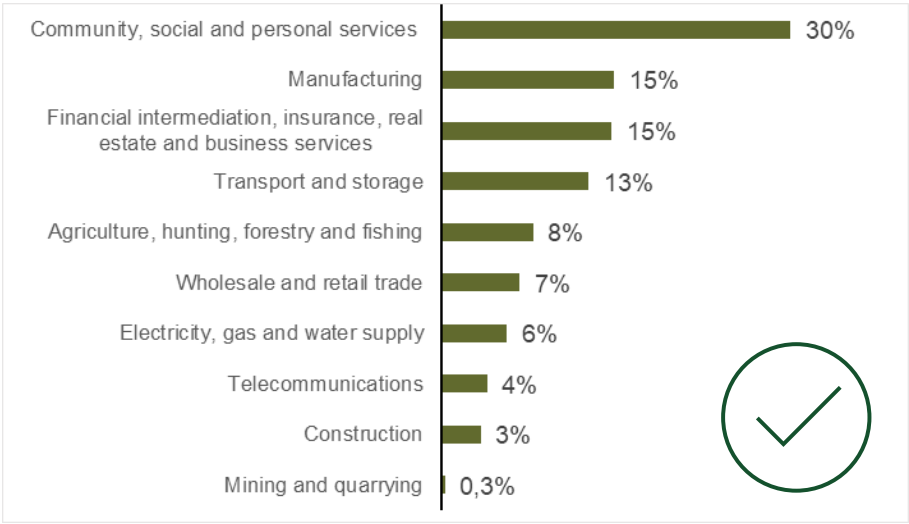
Step 4: Calculate certainty demand score (C_j)

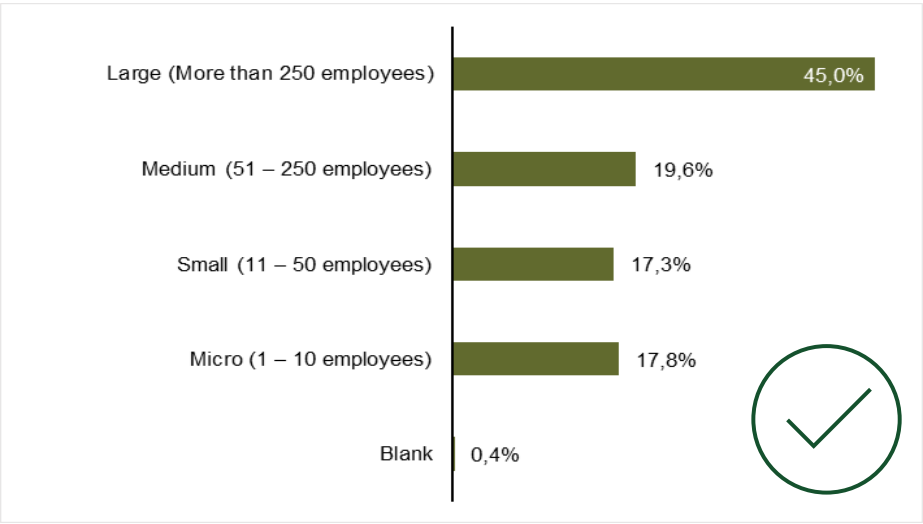
- $C_j = 1 - \left(\frac{R_j^C}{R^{C,max}}\right)$

Sample description

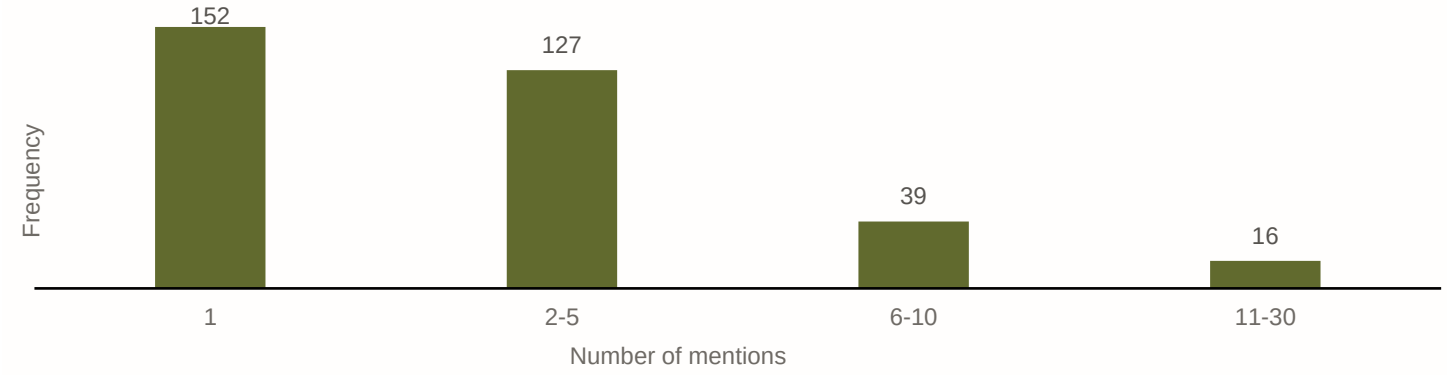


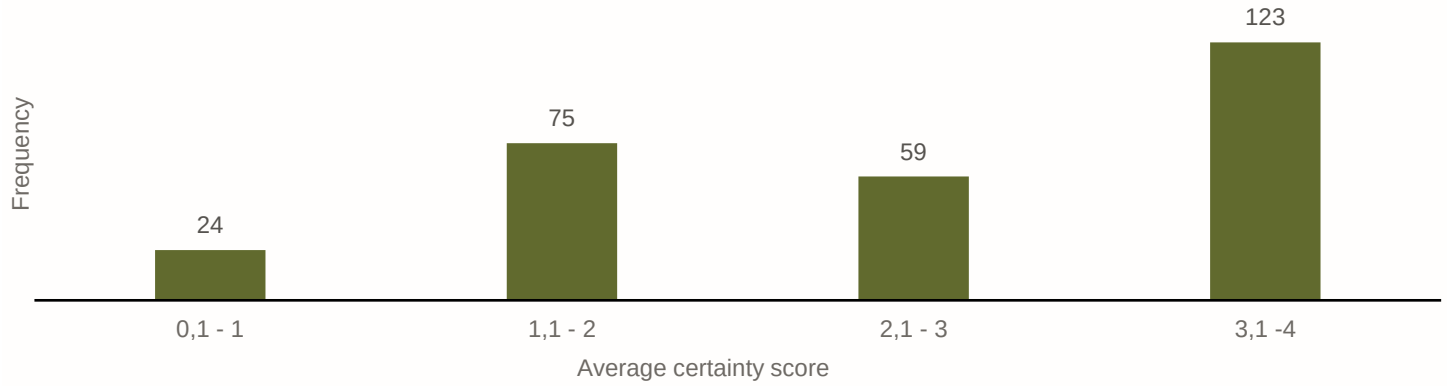






Survey results frequency





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Final results

The list of Occupations in High Demand

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What we have now:

- Occupations ranked based on secondary data according to demand → Demand score (S_j)
- Occupations ranked based on number of mentions → Demand score (M_j)
- Occupations ranked based on average demand rating→ Demand score (C_j)

Next step:

- Rank occupations according to combined demand score → Weighted average score (D_j)

$$D_j = \frac{w_s S_j + w_m M_j + w_c C_j}{w_s + w_m + w_c}$$

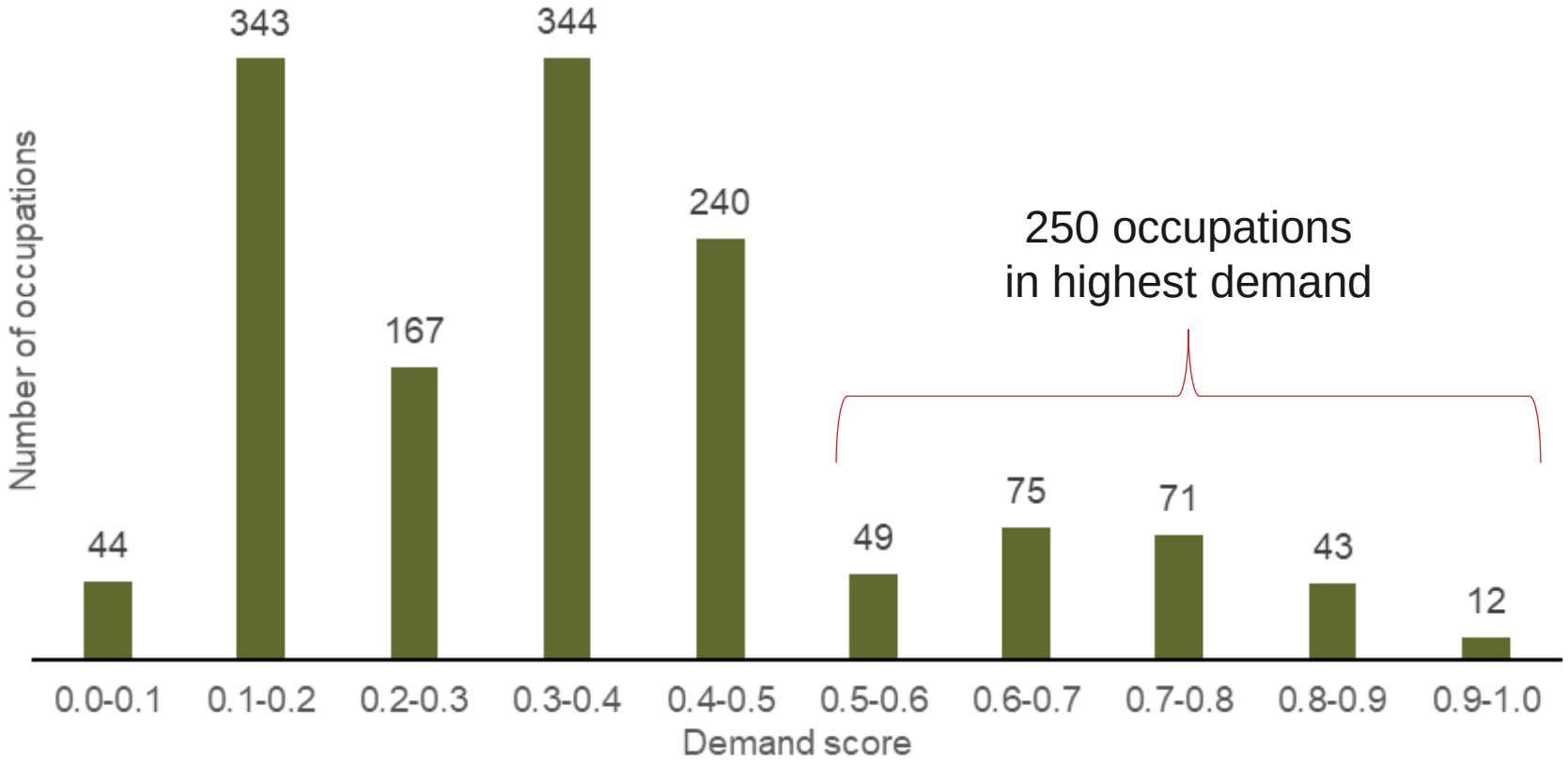
$$w_s = 1$$

$$w_m = 1$$

$$w_c = 0.1$$

w_c *has small weight to small variance in responses*

Demand score distribution



Introducing the List of 245 OIHD

Link to Excel Sheet with List of Occupations in High Demand

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