Mapping of smart specialisation in Georgia: economic and innovation potential for Imereti region

Submission date: 23 July 2020

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under a contract to the Joint Research Centre
("Mapping of smart specialisation in Imereti region, Georgia")

Data provided by *Geostat* (National Statistics Office of Georgia)

(image created with https://wordart.com/create)

Contents

1   Introduction

This report discusses a coherent methodology that can be applied to all Georgian regions using the latest available data for measuring the economic and innovation potential of industries in regions. The methodology will only be applied to the region of Imereti.

Imereti is a region situated in the Western part of Georgia. After Tbilisi, Imereti is the biggest Georgian region with a population of 487,000 in 2020. The largest towns are Kutaisi (population of 147,600 and the third biggest city in Georgia), Samtredia (25,300), Zestafoni 20,800), Chiatura (12,800) and Tsqaltubo (11,300).

The number of registered enterprises has been growing over time from about 55,500 in 2010 to 94,600 in 2018. Imereti accounts for about 14% of the total number of registered enterprises in Georgia, a share that has relatively stable over time. The number of employed persons has been growing over time from about 35,000 in 2010 to 52,900 in 2018. Imereti accounts for about 8% of the total number of employed persons in Georgia, a share that has been declining over time.

Turnover and value added have been increasing between 2010 and 2018 and Imereti accounts for about 5% of both turnover and value added in Georgia. Investments in fixed assets at first dropped after 2012 but then gradually increased again and in 2018 the amount of investments surpassed that in 2012. Average montly earning have also been increasing over time but remain well below average monthly erarnings in Georgia at a relative level of about 65%.
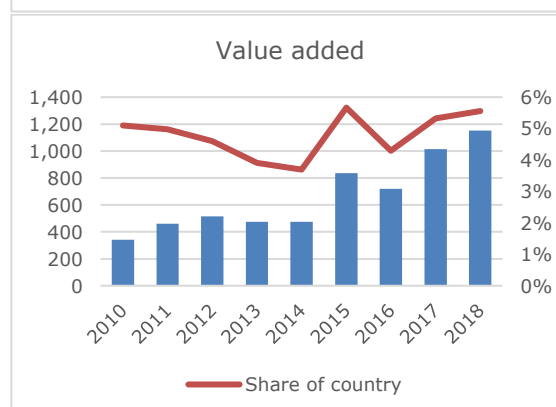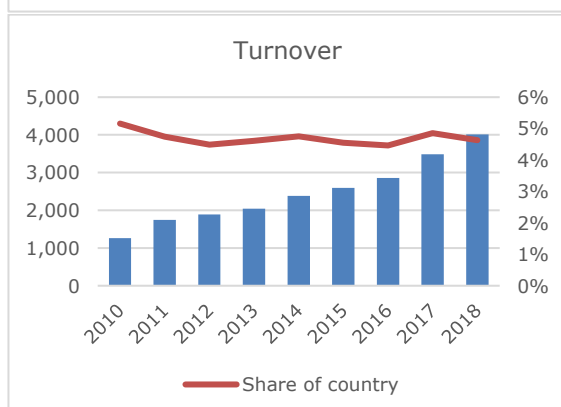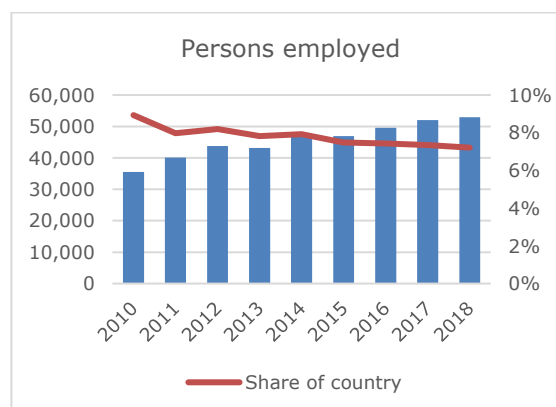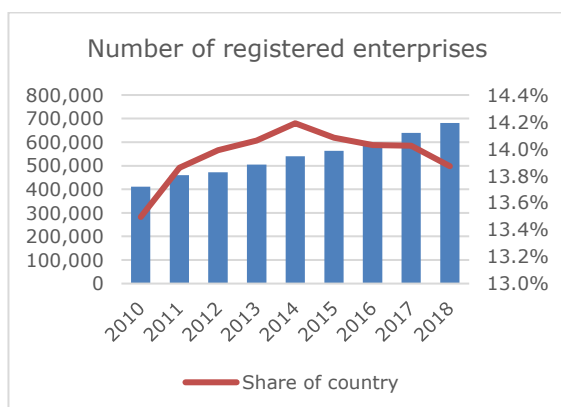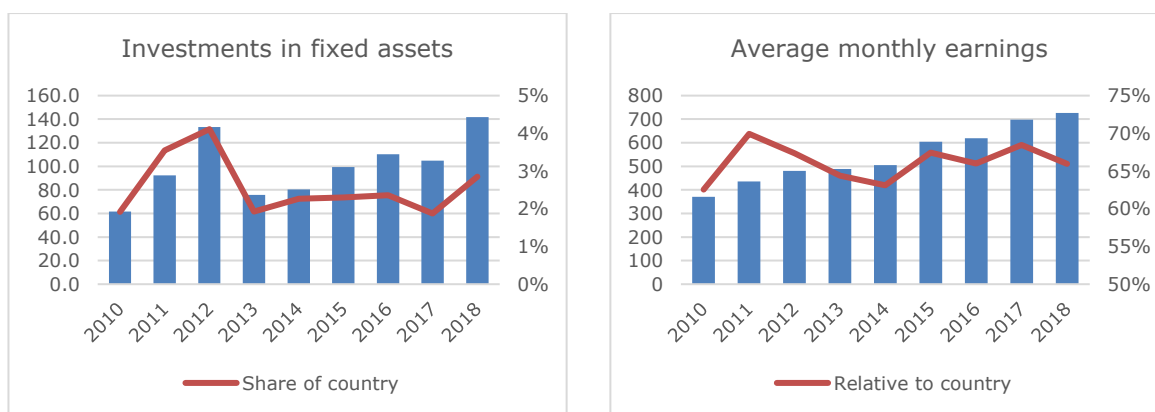
Section 2 develops a quantitative analysis framework for mapping the economic potential using one-digit NACE data and provides instructions how to apply the framework for mapping the economic potential. Section 3 develops a quantitative analysis framework for mapping the innovation potential and provides instructions how to apply the framework for mapping the innovation potential. Section 4 discusses the results of mapping the economic and innovation potentials of Imereti. Section 5 gives recommendations.

2   Mapping economic potential

The objective of the mapping is to identify economic priority domains: these are industries with proven or emerging economic strengths having a potential to drive economic transformation. Section 2.1 discusses data availability for mapping the economic potential of Imereti and possibly other Georgian regions. Section 2.2 discusses the methodology for identifying economic priority domains. Section 2.3 presents and discusses the results for Imereti.

2.1 Data availability

For the mapping of the economic potential of Imereti and other Georgian regions, two data sources have been made available. At first, published regional data from the *Statistical Survey of Enterprises*[1] were made available by *Geostat*, the National Statistics Office of Georgia. For all regions, published regional data include Section level or NACE one-digit level data for the period 2006 to 2018 for the following variables: Turnover, Production value, Value added, Intermediate consumption, Number of employed persons, Number of employees, Personnel costs, Salary, Purchases of goods and services, Purchases of goods and services for re-sale, and Investments.

For the initial mapping, data at more detailed NACE levels were not available. Following the methodologies used in the mapping exercises for other countries and regions[2], only data on Turnover, Value added, Number of employed persons, Number of employees, and Salary were used in the initial mapping at NACE one-digit level[3].

Geostat also shared firm-level data for 2018 from the *Statistical Survey of Enterprises*, including regional identifiers, to explore if such data could be used to estimate more detailed industry level data using e.g. the 'small area estimation' statistical technique. All records in the database include four-digit NACE codes for among others the following variables: Total turnover, Total remuneration paid to employees, Average annual number of persons employed, Average annual number of employees, and Number of hours worked by employees. The more detailed NACE data from this database were not used in the initial mapping analysis for Imereti as data were available for only one year and an email communication with *Geostat* had confirmed that for regions the sample size of the *Statistical Survey of Enterprises* only allowed the use of Section level data (NACE one-digit) for all regions in Georgia. For Georgia as a country however, data at more detailed NACE levels could be used, including data for 76 industries at Chapter level or NACE two-digit level, 109 industries at Group level or NACE three-digit level, 91 industries at Class level or NACE four-digit level, and 9 industries at National Subclass level or NACE five-digit level.

Further communications with *Geostat* and the Georgian S3 team in June 2020, then revealed that more detailed NACE industry level data from the *Statistical Survey of Enterprises* could also be used for Imereti if for a particular industry data are available for at least 3 enterprises. In addition to the detailed 2018 firm-level data shared earlier, *Geostat* also shared detailed firm-level data for 2013-2017. These detailed data for 6 years (2013-2018) allow an analysis at the NACE three-digit level and these data have been used in this report, replacing the results from the initial mapping.

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[1] Aggregate results are available at https://www.geostat.ge/en/modules/categories/326/statistical-survey-of-enterprises. The questionnaires for the survey are available at ('Annual Business Survey (legal persons)' and 'Annual Business Survey (individual)'): https://www.geostat.ge/en/modules/categories/558/questionnaires-business-statistics

[2] E.g. the recent mapping exercises for Northern Macedonia, Republic of Moldova, Montenegro (http://www.mna.gov.me/ministarstvo/Strategija_pametne_specijalizacije/), Serbia and Ukraine.

[3] The results of this initial mapping are available in the draft mapping report that was submitted 31 May 2020 and revised 6 June 2020.

2.2 Methodology for mapping economic potential

The objective of mapping a region's economic potential is to identify industries with both current strengths and a potential to drive economic transformation. For the economic mapping three-digit NACE data, from the *Statistical Survey of Enterprises*, will be used for number of employees and average wages. The analysis will include both a static ('proven strengths') and a dynamic ('potential strengths') analysis to identify industries where regions have or are expected to have a critical mass of economic activities and specialisation.

2.2.1 Static analysis

The following criteria are used to identify industries with current economic potential:

- Critical mass ('size'): specialisation (see next criterion) is not a sufficient criterion to identify industries with an economic potential, as too small industries, with only a very small weight in the regional economy, are less relevant for developing and implementing policies. The absolute size of industries matters and industries' size or 'critical mass' is measured by the share of employees in that industry in the region:

  $$cm_i = e_i / e$$

  where,

  cm_i = critical mass or relative size of industry *i* in the regional economy

  e_i = number of employees in industry *i* in the regional economy

  e = total number of employees in the regional economy

- Specialisation: measures if, in relative terms, an industry is more important for the regional economy than it is for the national economy. Specialisation is measured using Location Quotients (LQs), which are defined as:

  $$LQ_i = (e_i / e) / (E_i / E)$$

  where,

  LQ_i = location quotient for industry *i* in the regional economy

  e_i = number of employees in industry *i* in the regional economy

  e = total number of employees in the regional economy

  E_i = number of employees in industry *i* in the national economy

  E = total number of employees in the national economy

  An LQ above 1 shows an above average concentration in the industry, i.e. the share of employment of that industry in the region is higher than the share of employment of that same industry in Georgia. An LQ below 1 shows a below average concentration in the industry, i.e. the share of employment of that industry in the region is lower than the share of employment of that same industry in Georgia.

- Average wages ('productivity'): average wages per employee (calculated as the ratio of Total remuneration paid to employees and Number of employees) is used as an additional criterion for selecting industries with an economic potential. Industries with close to or above average wages are expected to contribute more to the economic development of a region. Average wages should be above a certain threshold compared to both average wages for all industries in the region and average wages in the same industry for Georgia:

  aw_i = average wages in industry *i* in the regional economy

  aw = average wages in the regional economy

$$AW_i \quad = \text{average wages in industry } i \text{ in the national economy}$$

The mapping exercise identifies industries as having a static economic potential or proven strength for which:

- Size is sufficiently high, i.e. above a pre-defined threshold value:

$$cm_i > X$$

- Specialisation (LQ) is sufficiently high, i.e. above a pre-defined threshold value:

$$LQ_i > Y$$

- Average wages are sufficiently high compared to average wages for all industries in the region:

$$aw_i > Z_1 * aw$$

- Average wages are sufficiently high compared to average wages in the same industry in the country:

$$aw_i > Z_2 * AW_i$$

The threshold values X, Y, Z_1 and Z_2 can be defined separately for each Georgian region to ensure that a representative number of industries is selected. There are no set rules for determining these threshold values, the most common practice is to start with threshold values which are also used in other studies and then to either use these if the number of selected industries matches policy needs, or to decrease a threshold if the number of selected industries is considered to be too small or to increase a threshold if the number of selected industries is considered to be too high.

Threshold values for Imereti are shown in Table 1. In order to identify industries performing strongly for most years and showing consistent performance for the 2013-2018 period, industries should pass these thresholds for at least 5 out of 6 years of the 2013-2018 period and for the average of the 2013-2018 period. The thresholds for selecting industries are as follows:

- Industries should account for at least 0.1% of total employment in the region

- Industries with a degree of specialisation above 1.25 are considered to be specialised

- Industries with wages higher than 0.8 the level of average wages in the region are considered as performing close to or above the region average

- Industries with wages higher than 0.6 the level of average wages in the same industry at the country level are considered as performing close to or above the industry average

Table 1 Threshold values used for the economic mapping of Imereti

Criteria	Threshold	Value	Time period
Critical mass	X	0.1%	for at least 5 out of 6 years AND for the average over the 2013-2018 period
Degree of specialisation	Y	1.25 (specialised)	
Wages relative to Imereti	Z_1	0.8 (close to or above region average)	
Wages relative to national industry	Z_2	0.6 (close to or above industry average)	

2.2.2 Dynamic analysis

Changes over time for the number of employees and average wages are estimated using the slope of a linear regression over the 2013-2018 period. The slope should be positive and statistically significant at the 5% significance level. To reduce the effect of sometimes high volatility of year to year data values, changes over time are measured using two-year averages, i.e. the available time series for 2013-2018 have been transformed in a time series for 2014-2018, using the average of 2013 and 2014 for 2014, the average of 2014 and 2015 for 2015, etc.

An industry is identified as having a potential strength is both the number of employees and averages wages increase significantly between 2013 and 2018. For the degree of specialisation, average wages relative to Imereti, and average wages relative to the same industry in Georgia, no results for changes over time have been used due to the relatively small number of industries showing a positive and significant change for these variables (see the discussion of results in section 2.3.2).

2.3 Results for Imereti

2.3.1 Data description

From the *Statistical Survey of Enterprises*, the following variables are used for the mapping analysis:

- R220 Remuneration paid to employees, total
- R420 Average annual number of employees

The variable R400 'Average annual number of persons employed' is not used as variable R220 is related to the number of employees. Average wages are calculated as the ratio between R220 and R420.

The firm-level database of the *Statistical Survey of Enterprises* also includes information on main industrial activity using the NACE Rev. 1.1 classification, regional identifiers and weights taking into account sampling differences by industry and enterprise size. All results in this report are based on weighted data. The *Statistical Survey of Enterprises* covers the entire business sector except financial corporations. All NACE two-digit industries at the country level with the exception of the following industries: NACE 12 Mining of uranium and thorium ores, NACE J Financial intermediation (including NACE 65 Financial intermediation, except insurance and pension funding, NACE 66 Insurance and pension funding, except compulsory social security, and NACE 67 Activities auxiliary to financial intermediation), NACE L or NACE 75 Public administration and defence; compulsory social security, NACE 91 Activities of membership organizations n.e.c., NACE P Activities of households (including NACE 95 Activities of households as employers of domestic staff, NACE 96 Undifferentiated goods producing activities of private households for own use, and NACE 97 Undifferentiated services producing activities of private households for own use), and NACE Q or NACE 99 Extra-territorial organizations and bodies.

For the mapping analysis a mix of NACE two-digit and NACE three-digit industries is used. The NACE four-digit level is not used as for too many industries the number of enterprises included for each industry is below the confidentiality level of three enterprises, i.e. results for an industry can only be used if there are data for at least three enterprises.

2.3.2 Static results

An industry is identified as having a static economic potential if it fulfils all of the following criteria:

1. Confidentiality criterion: data for at least three enterprises

2. Size or critical mass criterion: industries should account for at least 0.1% of total employment in the region for at least 5 out of 6 years of the 2013-2018 period and for the average of the 2013-2018 period

3. Specialisation criterion: the degree of specialisation (Location Quotient) should be higher than 1.25 for at least 5 out of 6 years of the 2013-2018 period and for the average of the 2013-2018 period

4. Wages relative to region: average wages in the industry should be higher than 0.8 the level of average wages in the region for at least 5 out of 6 years of the 2013-2018 period and for the average of the 2013-2018 period

5. Wages relative to industry: average wages in the industry should be higher than 0.6 the level of average wages in the same industry in the country for at least 5 out of 6 years of the 2013-2018 period and for the average of the 2013-2018 period

Table 2 shows the number of industries that passes each criterion, with full details given in Annex A. For 86 industries data are available for three or more enterprises allowing the inclusion of these industries in the mapping analysis. The size criterion has been kept low to allow the inclusion of most of these industries.[4] The threshold for the specialisation criterion has been set at 1.25, a value which also has been used in mapping studies for other countries[5], with 24 industries passing the threshold.[6] For average wages relative to those of the region, the threshold has been set at 0.8, or averages wages should be at least 80% of average wages for the whole region, with 37 industries passing this threshold. This threshold is relatively low as it is below 1, but increasing it would significantly reduce the number of industries passing all criteria.[7] For average wages relative to those of the same industry in the country, the threshold has been set at 0.6, or averages wages should be at least 60% of average wages for the whole region, with 25 industries passing this threshold. This threshold is relatively low as it is below 1 but increasing it would significantly reduce the number of industries passing all criteria.[8] In total 15 industries pass all criteria.

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[4] Increasing the threshold from 0.1% to 0.25% would reduce the number of industries passing the threshold from 82 to 64. Increasing the threshold from 0.1% to 0.5% would reduce the number of industries passing the threshold from 82 to 46.

[5] See the studies mentioned in footnote 2.

[6] Increasing the specialisation threshold from 1.25 to 1.5 would reduce the number of industries passing the threshold from 24 to 21. Decreasing the specialisation threshold from 1.25 to 1.0 would increase the number of industries passing the threshold from 24 to 31.

[7] Increasing the threshold from 0.8 to 1.0 would reduce the number of industries passing the threshold from 37 to 24 and the number of industries passing all criteria from 15 to 12.

[8] Increasing the threshold from 0.6 to 0.8 would reduce the number of industries passing the threshold from 25 to 15 and the number of industries passing all criteria from 15 to 11.

Table 2 Number of industries passing static criteria

Criteria	Threshold	Number of industries passing threshold
Confidentiality	>= 3	86
Size or critical mass	> 0.1%	82
Specialisation	> 1.25	24
Wages relative to region	> 0.8	37
Wages relative to industry	> 0.6	25
All criteria		**15**

Annex A presents full results:

- Column 1 shows the NACE Rev 1.1 code of the industry
- Column 2 shows the name of the industry
- Column 3 shows the result for the static analysis
- Column 4 shows the result for the dynamic analysis (cf. section 2.3.3)
- Column 5 shows the result for the confidentiality criterion. An industry passing this criterion is highlighted by a '1' against a yellow background
- Column 6 shows the result for the size criterion. An industry passing this criterion is highlighted by a '1' against a yellow background
- Column 7 shows the result for the specialisation criterion. An industry passing this criterion is highlighted by a '1' against a yellow background
- Column 8 shows the result for wages relative to the region's wages criterion. An industry passing this criterion is highlighted by a '1' against a yellow background
- Column 9 shows the result for the wages relative to the industry's wages criterion. An industry passing this criterion is highlighted by a '1' against a yellow background
- Column 10 shows the result for all criteria combined. An industry passing all criteria is highlighted by a '1' against a green background. The results in column 10 correspond to those in column 3
- Columns 11 to 19 are explained in section 2.3.3

Annex C provides detailed results for each individual industry.

Table 3 shows the 15 industries that pass all criteria, including 7 industries at NACE two-digit and 8 industries at NACE three-digit, of which 6 NACE three-digit industries are included in a higher aggregate NACE industry. NACE two-digit industries highlighted in red are excluded as the included NACE three-digit industries account for 80% or more of the number of employees (last column). The selected **12 industries have a static economic potential**, and, excluding double-counting of all NACE three-digit industries included in NACE two-digit industries, account for 30% of the average number of employees for 2013-2018. By far the largest share, about 19.5%, of these employees are working in NACE 85.1 Human health activities. The other 11 industries account for about 10.5% of total employment.

Table 3 Industries with a static economic potential

NACE Rev 1.1 two-digit industry	NACE Rev 1.1 three-digit industry	*Share of corresponding NACE Rev. 1.1 two-digit industry*
13 Mining of metal ores	13.2 Mining of non-ferrous metal ores, except uranium and thorium ores	*100%*
14 Other mining and quarrying	14.2 Quarrying of sand and clay	*68%*
	15.1 Production, processing and preserving of meat and meat products	
20 Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	20.1 Sawmilling and planning of wood; impregnation of wood	*58%*
27 Manufacture of basic metals	27.1 Manufacture of basic iron and steel and of ferro-alloys	*81%*
	27.5 Casting of metals	
29 Manufacture of machinery and equipment n.e.c.		
31 Manufacture of electrical machinery and apparatus n.e.c.		
85 Health and social work	85.1 Human health activities	*99%*
	92.6 Sporting activities	

Figure 1 visualizes the selection criteria for size and specialisation for number of employees. The top graph shows the share in the total number of employees on the horizontal axis and the degree of specialisation on the vertical axis. The horizontal axis shows several industries with high employment shares, including among others NACE 85.1 Human health activities (19.5%), NACE 45 Construction (12.1%), and NACE 45.2 Building of complete constructions or parts thereof; civil engineering (11.0%). The vertical axis shows several industries with high degrees of specialisation, including among others NACE 13.2 Mining of non-ferrous metal ores, except uranium and thorium ores (14.831), NACE 27.1 Manufacture of basic iron and steel and of ferro-alloys (8.660) and NACE 19.3 Manufacture of footwear (7.192). To increase readability, the bottom graphs shows the same results using a logarithmic scale for both axes. All industries to the right of the vertical red line and above the horizontal green line pass the selection criteria for both size and specialisation.

Figure 2 visualizes the selection criteria for wages relative to the region and relative to the industry. The graph shows wages relative to the region on the horizontal axis and wages relative to the industry on the vertical axis. A few industries have very high averages wages relative to the region, including NACE 72.2 Software consultancy and supply (353), NACE 72.5 Maintenance and repair of office, accounting, and computing machinery (307) and NACE 92.6 Sporting activities (237). The vertical axis shows several industries with very high averages wages relative to the industry, including NACE 72.5 Maintenance and repair of office, accounting, and computing machinery (175), NACE 20.1 Sawmilling and planing of wood; impregnation of wood (130), NACE 92.6 Sporting activities (122), NACE 20 Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials (117) and NACE 72.2 Software consultancy and supply (115). All industries to the right of the vertical red line and above the horizontal

green line pass the selection criteria for both wages relative to the region and relative to the industry.

Figure 1 Visualisation of selection criteria for number of employees

Green horizontal and red vertical lines show thresholds for selection criteria
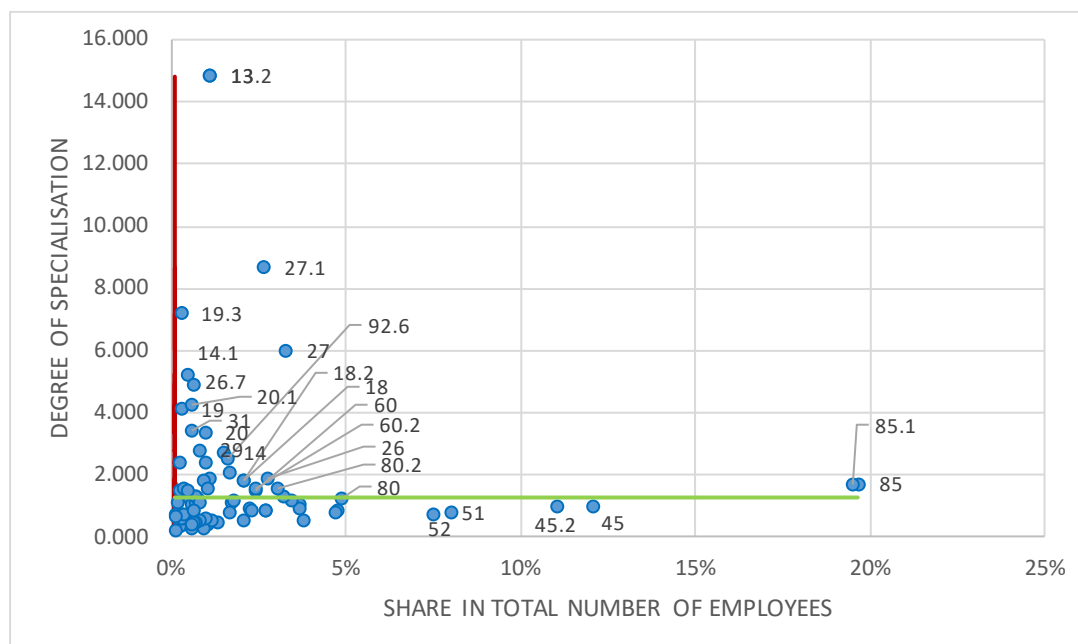
Same graph using logarithmic scales

Figure 2 Visualisation of selection criteria for wages relative to region and wages relative to the same industry in the country

Green horizontal and red vertical lines show thresholds for selection criteria

2.3.3 Dynamic results

An industry is identified as having a dynamic economic potential if it fulfils all of the following criteria:

1. Significant increase over time in the number of employees
2. Significant increase over time in average wages

Changes over time for the number of employees and average wages are estimated using the slope of a linear regression using two-year averages for the 2014-2018 period.

Table 4 shows the number of industries that passes each criterion, with full details given in Annex A. For completeness, Table 4 also shows the results for the changes in size or critical mass, specialisation, wages relative to the region, and wages relative to the industry, although these changes are not used in selecting industries with a dynamic economic potential as the number of selected industries for these criteria would be too low as only one industry would pass all of these four criteria.

For 27 industries the number of employees has been increasing and for 39 industries average wages have been increasing. In total 11 industries pass both criteria and are selected as industries with a dynamic economic potential.

Table 4 Number of industries passing dynamic criteria

Criteria	Threshold	Number of industries passing threshold
Employees	Significantly increasing	27
Average wages	Significantly increasing	39
Size or critical mass	Significantly increasing	13
Specialisation	Significantly increasing	14
Wages relative to region	Significantly increasing	10
Wages relative to industry	Significantly increasing	11
Employees & Average wages	**--**	**11**
Size & Specialisation & Wages relative to region & Wages relative to industry	*--*	*1*
Employees & Average wages & Specialisation	*--*	*6*

Annex A presents full results:

- Column 4 shows the result for the dynamic analysis

- Column 11 shows the result for the change in employees. An industry passing this criterion is highlighted by a '1' against a yellow background

- Column 12 shows the result for the change in average wages. An industry passing this criterion is highlighted by a '1' against a yellow background

- Column 13 shows the result for the non-used change in critical mass. An industry passing this criterion is highlighted by a '1' against a yellow background

- Column 14 shows the result for the non-used change in specialisation. An industry passing this criterion is highlighted by a '1' against a yellow background

- Column 15 shows the result for the non-used change in wages relative to the region. An industry passing this criterion is highlighted by a '1' against a yellow background

- Column 16 shows the result for the non-used change in wages relative to the same industry of the country. An industry passing this criterion is highlighted by a '1' against a yellow background

- Column 17 shows the result for the two criteria for employees and wages combined. i.e. the results in columns 11 and 12. An industry passing all criteria is highlighted by a '1' against a green background. In total 11 industries are selected. The results in column 17 correspond to those in column 4

- Column 18 shows the result for the four non-used criteria for critical mass, specialisation, wages relative to the region, and wages relative to the same industry of the country. i.e. the results in columns 13 to 16. An industry passing all criteria is highlighted by a '1' against a green background. In total only 1 industry would be selected

- Column 19 shows the result for a non-used alternative combining the criteria for employees and wages with that for specialisation, i.e. the results in columns 11, 12 and 14. An industry passing all criteria is highlighted by a '1' against a green background. In total 6 industries would be selected, which is about half of the number of selected industries when only the change in employees and wages is used

Annex C provides detailed results for each individual industry.

Table 5 shows the 10 industries that pass all criteria, including 5 industries at NACE two-digit and 6 industries at NACE three-digit, of which 2 NACE three-digit industries are included in a higher aggregate NACE industry. The NACE two-digit industry highlighted in red is excluded as the included NACE three-digit industry accounts for 100% of the number of employees (last column). The selected **9 industries have a dynamic economic potential**, and, excluding double-counting of NACE three-digit industries included in NACE two-digit industries, account for 28% of the average number of employees for 2013-2018. By far the largest share, about 12%, of these employees are working in NACE 45 Construction.

Table 5 Industries with a dynamic economic potential

NACE Rev 1.1 two-digit industry	NACE Rev 1.1 three-digit industry	*Share of corresponding NACE Rev. 1.1 two-digit industry*
01 Agriculture, hunting and related service activities	01.1 Growing of crops; market gardening; horticulture	*59%*
18 Manufacture of wearing apparel; dressing and dyeing of fur	18.2 Manufacture of other wearing apparel and accessories	*100%*
	26.6 Manufacture of articles of concrete, plaster, and cement	
45 Construction		
50 Sale, maintenance and repair of motor vehicles and motorcycles; retail sale of automotive fuel		
	51.5 Wholesale of non-agricultural intermediate products, waste, and scrap	
	55.1 Hotels	
80 Education		

2.3.4 Discussion

Table 6 shows key average descriptive statistics for 2013-2018 for the industries with a static or dynamic economic potential. Some additional observations can be made for each of following industries, including a subjective differentiation in 6 low, 8 medium and 7 high priority industries:

- 01 Agriculture, hunting and related service activities

    Non-specialised industry with a dynamic potential but relatively low economic importance given below average wages and a very low degree of specialisation.

- 01.1 Growing of crops; market gardening; horticulture

    Non-specialised industry with a dynamic potential but relatively low economic importance given below average wages and a very low degree of specialisation. This would be a low priority industry.

- 13.2 Mining of non-ferrous metal ores, except uranium and thorium ores

    Industry with a static potential and a very high degree of specialisation and wages are well above the regional average. Wages have also been increasing significantly over time and employment has almost grown significantly over time. This would be a high priority industry.

- **14 Other mining and quarrying**

  Industry with a static potential with a relatively high degree of specialisation. Wages are relatively high and have been increasing significantly over time. Employment has almost grown significantly over time. This would be a medium priority industry.

- **14.2 Quarrying of sand and clay**

  Industry with a static potential with a high degree of specialisation and wages above the regional average. Wages have also been increasing significantly over time. This would be a medium priority industry.

- **15.1 Production, processing and preserving of meat and meat products**

  Industry with a static potential with wages above those of the region. Employment has also been increasing significantly over time and wages have almost been increasing significantly over time. This would be a high priority industry.

- **18.2 Manufacture of other wearing apparel and accessories**

  Specialised industry with a dynamic potential. The industry also meets all criteria for the static potential except that wages are less than 80% of wages in the region. This would be a high priority industry.

- **20 Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials**

  Industry with a static potential with high wages above those of the region and the industry in Georgia. Wages have also been increasing significantly over time and employment seems to be falling. This would be a medium priority industry.

- **20.1 Sawmilling and planning of wood; impregnation of wood**

  Industry with a static potential with high wages above those of the region and the industry in Georgia. Wages have also been increasing significantly over time and employment seems to be falling. This would be a medium priority industry.

- **26.6 Manufacture of articles of concrete, plaster, and cement**

  Specialised industry with a dynamic potential. The industry also meets all criteria for the static potential, except that wages are less than 60% of wages in the industry in Georgia for 2 out of 6 years. This would be a high priority industry.

- **27.1 Manufacture of basic iron and steel and of ferro-alloys**

  Highly specialised Industry with a static potential with wages above those of the region and the industry in Georgia. Employment has also been increasing significantly over time, but wages have not changed significantly. This would be a medium priority industry.

- **27.5 Casting of metals**

  Industry with a static potential accounting for a small share of regional employment and with high wages above those of the region. Employment has also been increasing significantly over time, but wages have not changed significantly. This would be a low priority industry.

- **29 Manufacture of machinery and equipment n.e.c.**

  Industry with a static potential with wages above those of the region. But neither employment nor wages have changed significantly over time. This would be a low priority industry.

- 31 Manufacture of electrical machinery and apparatus n.e.c.

  Industry with a static potential with wages well above those of the region. Wages have increased significantly over time, but employment has decreased significantly over time. This would be a medium priority industry.

- 45 Construction

  Specialised industry with a dynamic potential. The industry is highly specialised accounting for 12% of total employment and wages are above average wages in the region. This would be a high priority industry.

- 50 Sale, maintenance and repair of motor vehicles and motorcycles; retail sale of automotive fuel

  Non-specialised industry with a dynamic potential and below average wages. This would be a medium priority industry.

- 51.5 Wholesale of non-agricultural intermediate products, waste, and scrap

  Non-specialised industry with a dynamic potential. Wages are well the regional average. This would be a medium priority industry.

- 55.1 Hotels

  Non-specialised industry with a dynamic potential but below average wages. This would be a low priority industry.

- 80 Education

  Specialised industry with a dynamic potential but below average wages. This would be a low priority industry.

- 85.1 Human health activities

  Industry with a static potential. The industry accounts for 19.5% of total employment and wages are above average wages in the region and have been increasing over time. This would be a high priority industry.

- 92.6 Sporting activities

  Industry with a static potential with very high and increasing wages. This would be a high priority industry.

Table 6 Industries with an economic potential

NACE Rev 1.1 Code	Industry name	Type of economic potential	Emplo-yees	Share in employ-ment	Degree of speciali-sation	Average wages	Wages relative to region	Wages relative to industry	Employ-ment growth (slope)	Employ-ment growth (p-value)	Average wages growth (slope)	Average wages growth (p-value)	*Priority status*
01	Agriculture, hunting and related service activities	Dynamic	200	0.6%	0.305	3,790	54.2	53.6	**23.9**	**0.001**	**644.5**	**0.003**	*Low*
01.1	Growing of crops; market gardening; horticulture	Dynamic	120	0.3%	0.448	4,110	57.9	**60.8**	**28.4**	**0.017**	**770.2**	**0.035**	*Low*
13.2	Mining of non-ferrous metal ores, except uranium and thorium ores	Static	380	1.1%	**14.831**	11,390	**163.7**	**89.2**	56.3	0.059	**1843.7**	**0.000**	*High*
14	Other mining and quarrying	Static	480	1.5%	**2.728**	6,630	**96.3**	**77.5**	16.4	0.582	**877.8**	**0.018**	*Medium*
14.2	Quarrying of sand and clay	Static	330	1.0%	**2.378**	7,810	**112.7**	**88.6**	16.5	0.196	**1166.8**	**0.014**	*Medium*
15.1	Production, processing and preserving of meat and meat products	Static	370	1.1%	**1.885**	8,200	**119.6**	**86.7**	**47.3**	**0.008**	783.6	0.050	*High*
18.2	Manufacture of other wearing apparel and accessories	Dynamic	700	2.1%	**1.846**	5,090	75.1	**86.9**	**131.2**	**0.009**	**344.7**	**0.002**	*High*
20	Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	Static	310	0.9%	**3.348**	8,990	**134.1**	**117.3**	-8.5	0.764	**374.6**	**0.038**	*Medium*
20.1	Sawmilling and planning of wood; impregnation of wood	Static	180	0.6%	**4.246**	7,450	**110.0**	**129.6**	-9.7	0.532	684.8	0.052	*Medium*

NACE Rev 1.1 Code	Industry name	Type of economic potential	Emplo-yees	Share in employ-ment	Degree of speciali-sation	Average wages	Wages relative to region	Wages relative to industry	Employ-ment growth (slope)	Employ-ment growth (p-value)	Average wages growth (slope)	Average wages growth (p-value)	Priority status
26.6	Manufacture of articles of concrete, plaster, and cement	Dynamic	560	1.7%	**2.068**	7,560	**111.6**	**68.6**	**36.7**	**0.006**	**523.3**	**0.004**	*High*
27.1	Manufacture of basic iron and steel and of ferro-alloys	Static	880	2.6%	**8.660**	9,530	**143.7**	**103.3**	**58.4**	**0.021**	59.5	0.777	*Medium*
27.5	Casting of metals	Static	70	0.2%	**2.410**	8,640	**130.6**	**86.4**	**12.0**	**0.007**	42.5	0.815	*Low*
29	Manufacture of machinery and equipment n.e.c.	Static	260	0.8%	**2.802**	11,580	**180.2**	**94.7**	13.4	0.603	-847.8	0.536	*Low*
31	Manufacture of electrical machinery and apparatus n.e.c.	Static	190	0.6%	**3.412**	8,850	**130.1**	**86.2**	-10.2	0.010	**910.4**	**0.019**	*Medium*
45	Construction	Dynamic	4,030	12.1%	0.973	8,210	**121.0**	56.4	**268.8**	**0.022**	**588.4**	**0.014**	*High*
50	Sale, maintenance and repair of motor vehicles and motorcycles; retail sale of automotive fuel	Dynamic	900	2.7%	0.879	4,350	63.2	43.4	**99.7**	**0.016**	**540.2**	**0.033**	*Medium*
51.5	Wholesale of non-agricultural intermediate products, waste, and scrap	Dynamic	750	2.2%	0.925	6,980	**103.6**	**62.6**	**66.2**	**0.030**	**442.3**	**0.005**	*Medium*
55.1	Hotels	Dynamic	570	1.7%	0.772	4,550	64.3	44.3	**86.9**	**0.037**	**882.6**	**0.008**	*Low*
80	Education	Dynamic	1,600	4.8%	**1.257**	3,630	52.8	50.6	**40.0**	**0.042**	**500.0**	**0.004**	*Low*
85.1	Human health activities	Static	6,480	19.5%	**1.703**	8,560	**126.0**	**83.6**	184.8	0.101	**590.7**	**0.023**	*High*
92.6	Sporting activities	Static	540	1.6%	**2.514**	16,590	**236.6**	**121.8**	92.8	0.157	**3636.7**	**0.042**	*High*

Values in bold for specialisation, wages relative to region, wages relative to industry and change over time above threshold values.

3 Mapping innovation potential

3.1 Data availability

For mapping the innovation potential, ideally innovation survey data should be used[9], as these provide the required data on number of enterprises that innovate and different types of innovations. *Geostat* has made available NACE Rev. 2 data for 2016, 2017 and 2018 from the survey on the *Innovative activity of enterprises*. The Georgian innovation survey is a close copy of the questions used in the innovation survey used by most other European countries. The survey covers the entire business sector, including non-financial corporations.[10] Anonymous firm-level data for 2016, 2017 and 2018 are available for the following variables (with firms answering either yes or no to each of them):

General information about the enterprise
- Enterprise belongs to an enterprise group

Product innovation (good or service)
- Enterprise introduced a product innovation: Goods innovation
  - Goods innovation developed by enterprise itself

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[9] Data on R&D activities are not available from the R&D survey as the 2019 R&D survey collecting data for 2018 is currently still in the field. Depending on the NACE coverage of the R&D survey, the following data would be of use for future mapping exercises: Total expenditure on R&D; Breakdown by type of costs: Labour costs; Other current costs; Land and buildings; Machinery and equipment; Capitalised computer software; Other intellectual property products; Not specified.

[10] At country level all NACE two-digit industries are covered with the exception of the following industries (where for industries highlighted with an * the number of enterprises responding to the survey is less than 3, where 3 enterprises is the minimum requirement for having representative results to be allowed to include an industry in the mapping exercise):

- NACE 02 Forestry and lodging and NACE 03 Fishing and aquaculture, resulting in only a limited coverage of NACE A Agriculture, forestry and fishing, with the inclusion of NACE 01 Crop and animal production, hunting and related service activities

- NACE 09 Mining support service activities (part of NACE B Mining and quarrying)

- * NACE 29 Manufacture of motor vehicles, trailers and semi-trailers (part of NACE C Manufacturing)

- NACE 50 Water transport (part of NACE H Transportation and storage)

- NACE K Financial and insurance activities (including NACE 64 Financial service activities, except insurance and pension funding, NACE 65 Insurance, reinsurance and pension funding, except compulsory social security, and NACE 66 Activities auxiliary to financial services and insurance activities)

- * NACE O or NACE 84 Public administration and defence; compulsory social security

- * NACE 87, Residential care activities and NACE 88 Social work activities without accommodation, resulting in only a limited coverage of NACE Q Human health and social work activities, with the inclusion of NACE 86 Human health activities

- NACE 90 Creative, arts and entertainment activities, NACE 91 Libraries, archives, museums and other cultural activities, and * NACE 93 Sports activities and amusement and recreation activities, resulting in only a limited coverage of NACE R Arts, entertainment and recreation, with the inclusion of NACE 92 Gambling and betting activities

- NACE 94 Activities of membership organisations and * NACE 95 Repair of computers and personal and household goods, resulting in only a limited coverage of NACE S Other service activities, with the inclusion of NACE 96 Other personal service activities

- NACE T Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use (including NACE 97 Activities of households as employers of domestic personnel and NACE 98 Undifferentiated goods- and services-producing activities of private households for own use)

- NACE U or NACE 99 Activities of extraterritorial organisations and bodies

- o Goods innovation developed by enterprise together with others
- o Goods innovation developed by adapting or modifying
- o Goods innovation developed by others
- Enterprise introduced a product innovation: Services innovation
  - o Services innovation developed by enterprise itself
  - o Services innovation developed by enterprise together with others
  - o Services innovation developed by adapting or modifying
  - o Services innovation developed by others
- Product innovations are new to market
- Product innovations are new to firm

Process innovation

- Enterprise introduced a process innovation: new or significantly improved methods
- Enterprise introduced a process innovation: new or significantly improved logistics
- Enterprise introduced a process innovation: new or significantly improved supporting activities
  - o Process innovation developed by enterprise itself
  - o Process innovation developed by enterprise together with others
  - o Process innovation developed by adapting or modifying
  - o Process innovation developed by others

Ongoing or abandoned innovation activities for product or process innovations

- Enterprise had abandoned or suspended innovation activities
- Enterprise had ongoing innovation activities

Innovation activities

- Enterprise had innovation activities: In-house R&D
- Enterprise had innovation activities: Continuous in-house R&D
- Enterprise had innovation activities: External R&D
- Enterprise had innovation activities: Acquisition machinery
- Enterprise had innovation activities: Acquisition external knowledge
- Enterprise had innovation activities: Training
- Enterprise had innovation activities: Market introduction
- Enterprise had innovation activities: Design activities
- Enterprise had innovation activities: Other activities

Public financial support for product and process innovation activities

- Enterprise received public financial support from local authorities
- Enterprise received public financial support from central government
- Enterprise received public financial support from EU

Organisational innovation

- Enterprise introduced an organisational innovation: new business practices
- Enterprise introduced an organisational innovation: new methods for organising work
- Enterprise introduced an organisational innovation: new methods for organising external relations

Marketing innovation

- Enterprise introduced a marketing innovation: significant changes in design
- Enterprise introduced a marketing innovation: new media techniques
- Enterprise introduced a marketing innovation: new methods for product placement

- Enterprise introduced a marketing innovation: new methods for pricing products

Regional identifiers are included in the anonymised datafile, and results can be used if data are available for at least three enterprises. The survey on the *Innovative activity of enterprises* can thus be used to analyse the innovation potential of up to NACE three-digit industries in Imereti if data are available for three or more enterprises.

3.2 Methodology for mapping innovation potential

For mapping the innovation potential, a different methodology will be used as for mapping the economic potential as the survey on the *Innovative activity of enterprises* includes a smaller number of respondents and covers less years than the *Statistical Survey of Enterprises*.

3.2.1 Data preparation

The first step in the methodology is to calculate the required data. Three indicators have been calculated:

- Size, i.e. the percentage share of the number of enterprises in the industry (ideally this should be calculated using the employment data in the innovation survey, but employment data are not available in the database shared by *Geostat*)

- Share of PPMO innovators, i.e. the share of enterprises with at least one product, process, marketing, or organisational innovation:
  - Calculate at firm-level if an enterprise has introduced at least one product, process, marketing, or organisational innovation
  - Aggregate 2016-2018 firm-level results to the NACE two- or three-digit level using the weights in the database
  - Calculate the share of PPMO innovators for each NACE two- or three-digit industry by dividing the number of PPMO innovators by the total number of enterprises in the same industry

- Share of high-innovation intensive innovators, i.e. those PPMO innovators that introduced at least two different types of innovations (this indicator serves as a proxy for differences in innovation intensities):
  - Calculate at firm-level if an enterprise has introduced at least two different types of innovation, i.e. more than one product, process, marketing, or organisational innovation
  - Aggregate 2016-2018 firm-level results to the NACE two- or three-digit level using the weights in the database
  - Calculate the share of PPMO innovators for each NACE two- or three-digit industry by dividing the number of PPMO innovators with at least two different types of innovations by the total number of PPMO innovators in the same industry (the share of high-innovation intensive innovators and other PPMO innovators in each industry always adds up to 100 per cent)

3.2.2 Selection process

Industries are selected having an innovation potential if they qualify the following three criteria:

- Confidentiality criterion: data for at least three enterprises

- Size or critical mass criterion: the industry should represent at least 0.5% of all enterprises covered in the innovation survey
- PPMO innovators: the share of PPMO innovators should be above the average for the region
- High-innovation intensive innovators: the share of high-innovation intensive innovators should be above the average for the region

Any industry passing all criteria will be identified as having an innovation potential. As the sample sizes of the innovation survey are relatively small[11], in particular at the regional level, the analysis will be done using data for the 2016-2018 period, and not for the individual years in this time period.

3.3 Results for the innovation mapping

For Imereti, 19 NACE two- or three-digit industries pass all criteria, with full details given in Annex B:

- In total 94 industries pass the confidentiality threshold, i.e. data are available for at least 3 enterprises (third column in Annex B)
- In total 68 industries pass the size or critical mass criterion, i.e. the number of enterprises in the industry is at least 0.5% of the total number of enterprises in the region (fourth column in Annex B)
- In total 62 industries pass the criterion of having an above average share of PPMO innovators (fifth column in Annex B)
- In total 45 industries pass the criterion of having an above average share of high innovation-intensive innovators (sixth column in Annex B)
- In total 19 industries pass all four criteria (seventh column in Annex B)

Annex D provides detailed results for each individual industry.

Table 7 shows the 19 industries that pass all criteria, including 8 industries at NACE two-digit and 11 industries at NACE three-digit, of which 7 NACE three-digit industries are included in a higher aggregate NACE industry. The NACE two-digit industries highlighted in red are excluded as the included NACE three-digit industries account for 80% or more of the number of enterprises. The selected **15 industries have an innovation potential**.

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[11] For Imereti the database includes results for277 enterprises in 2016, 252 enterprises in 2017, and 337 enterprises in 2018 (unweighted results). Combined the database includes results for 866 enterprises for 2016-2018.

Table 7 Industries with an innovation potential

NACE Rev. 2 two-digit industry	NACE Rev. 2 three-digit industry	*Share of corresponding NACE Rev. 2 two-digit industry*
	10.3 Processing and preserving of fruit and vegetables	
	10.6 Manufacture of grain mill products, starches, and starch products	
14 Manufacture of wearing apparel	14.1 Manufacture of wearing apparel, except fur apparel	*100%*
16 Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	16.1 Sawmilling and planning of wood	*58%*
	16.2 Manufacture of products of wood, cork, straw, and plaiting materials	*42%*
23 Manufacture of other non-metallic mineral products	23.6 Manufacture of articles of concrete, cement, and plaster	*65%*
27 Manufacture of electrical equipment		
45 Wholesale and retail trade and repair of motor vehicles and motorcycles	45.3 Sale of motor vehicle parts and accessories	*88%*
	46.3 Wholesale of food, beverages, and tobacco	
47 Retail trade, except of motor vehicles and motorcycles	47.5 Retail sale of other household equipment in specialised stores	*21%*
55 Accommodation	55.1 Hotels and similar accommodation	*100%*
61 Telecommunications	61.2 Wireless telecommunications activities	*67%*

Figure 3 visualizes the selection process showing the share of PPMO innovators on the horizontal axis and the share of high-innovation intensive innovators on the vertical axis. The graph only shows the results for industries that passed the confidentiality and size criteria. For several industries, the share of high-innovation intensive innovators is 0 (all the blue dots on the horizontal axis), for other industries this share is 100.

All industries to the right of the vertical red line and above the horizontal green line pass the selection criteria for both the share of PPMO innovators and the share of high-innovation intensive innovators. The numbers next to the blue dots show the corresponding NACE Rev. 2 codes.

Figure 3 Visualisation of selection criteria for innovation potential

Green horizontal and red vertical lines show average shares for all industries in the region
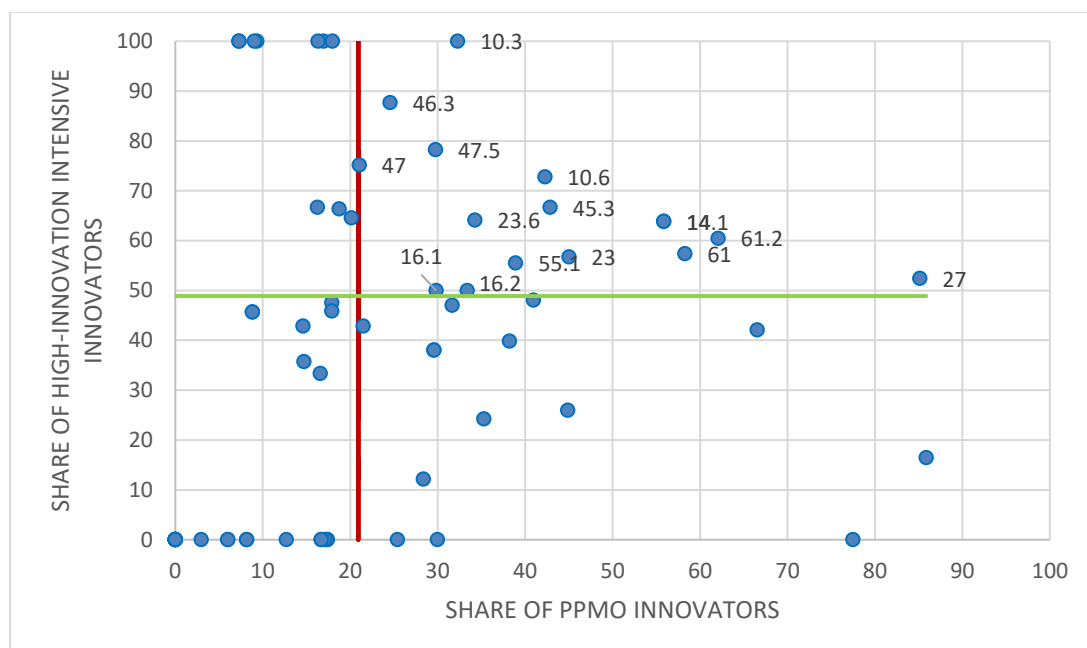
4 Economic and innovation potential

This section should combine the results of the economic mapping and innovation mapping. However, combining both results is difficult as the two mapping exercises use data from different NACE classifications.

NACE is a four-digit classification providing the framework for collecting and presenting a large range of statistical data according to economic activity in the fields of economic statistics (e.g. production, employment, and national accounts).[12] Various NACE versions have been developed since 1970. NACE Rev. 1 was the first revision of the original NACE (1970), followed by a minor revision in NACE Rev. 1.1. The NACE classification was significantly revised in 2006 when NACE Rev. 2 was adopted.

The NACE classification has a hierarchical structure, from the most aggregate Section level or NACE one-digit level to the most detailed Subclass or NACE five-digit level. The NACE classification has been revised over time to adapt to changes in economic activities with a higher level of detail in NACE Rev. 2 compared to NACE Rev 1.1. Changes between NACE Rev. 1.1 and NACE Rev. 2 are as follows (cf. Eurostat 2008: 47/48)[13]:

- In 195 cases, NACE Rev. 1.1 four-digit classes correspond to NACE Rev. 2 classes

- In 18 cases, one NACE Rev. 1.1 four-digit class corresponds to two or more NACE Rev. 2 four-digit classes

- In 86 cases, two or more NACE Rev. 1.1 four-digit classes correspond to one NACE Rev. 2 four-digit class

- In 215 cases, two or more NACE Rev. 1.1 four-digit classes correspond to two or more NACE Rev. 2 four-digit classes.

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[12] https://ec.europa.eu/eurostat/statistics-explained/index.php/Glossary:Statistical_classification_of_economic_activities_in_the_European_Community_(NACE)

[13] Eurostat (2008): NACE Rev. 2. Statistical classification of economic activities in the European Community. Eurostat Methodologies and Working papers. Luxembourg: European Commission.

A direct comparison of categories between the two NACE classification systems is therefore complex and difficult to realise at the four-digit level, and impossible at the NACE two-digit and three-digit level.[14] The results of the economic mapping and innovation mapping can thus not be directly combined as both NACE classifications cannot be linked at the two- and three-digit level.

Instead, a more basic approach will be used by matching the names of the industries selected in the economic mapping with the names of the industries selected in the innovation mapping. Results are shown in **Table 8**. *Using all criteria of the innovation mapping results <u>in only 3 industries having both an economic and innovation potential</u>:*

- NACE Rev. 1.1 20 Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials
- NACE Rev. 1.1 20.1 Sawmilling and planning of wood; impregnation of wood
- NACE Rev. 1.1 55.1 Hotels

Relaxing the criteria of the innovation mapping to passing either the PPMO or the high-innovation intensive innovator criterion, results *<u>in 6 additional industries with both an economic and innovation potential</u>:*

- NACE Rev. 1.1 13.2 Mining of non-ferrous metal ores, except uranium and thorium ores
- NACE Rev. 1.1 15.1 Production, processing and preserving of meat and meat products
- NACE Rev. 1.1 27.1 Manufacture of basic iron and steel and of ferro-alloys
- NACE Rev. 1.1 27.5 Casting of metals
- NACE Rev. 1.1 29 Manufacture of machinery and equipment n.e.c.
- NACE Rev. 1.1 51.5 Wholesale of non-agricultural intermediate products, waste, and scrap

For both NACE Rev. 1.1 27.5 Casting of metals and NACE Rev. 1.1 29 Manufacture of machinery and equipment n.e.c., results need to be interpreted with care as both industries did not pass the size threshold in the innovation mapping.

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[14] This paragraph is a summary of a more detailed discussion in: Esther Schnabl and Andrea Zenker, Statistical Classification of Knowledge-Intensive Business Services (KIBS) with NACE Rev. 2, Fraunhofer Institute for Systems and Innovation Research ISI, Karlsruhe, June 2013, evoREG Research Note #25 (http://www.evoreg.eu/docs/files/shno/ResearchNote_25_classificationKIBS_SCE_AZ_9_jb.pdf).

Table 8 Industries with an economic and innovation potential

NACE Rev. 1.1 code	Industry	Type of economic potential	*Priority status*	"Corresponding" NACE Rev. 2 industry	Confiden-tiality threshold	Size threshold	Share of PPMO innovators	Share of high-innovation intensive innovators	Innovation potential
01	Agriculture, hunting and related service activities	Dynamic	*Low*	Not covered in innovation survey	--	--	--	--	--
01.1	Growing of crops; market gardening; horticulture	Dynamic	*Low*	Not covered in innovation survey	--	--	--	--	--
13.2	Mining of non-ferrous metal ores, except uranium and thorium ores	Static	*High*	7.2 Mining of non-ferrous metal ores	**Passed**	**Passed**	Below average	**Above average**	No
14	Other mining and quarrying	Static	*Medium*	8 Other mining and quarrying	**Passed**	**Passed**	Below average	Below average	No
14.2	Quarrying of sand and clay	Static	*Medium*	8.1 Quarrying of stone, sand, and clay	**Passed**	**Passed**	Below average	Below average	No
15.1	Production, processing and preserving of meat and meat products	Static	*High*	10.1 Processing and preserving of meat and production of meat products	**Passed**	**Passed**	**Above average**	Below average	No
18.2	Manufacture of other wearing apparel and accessories	Dynamic	*High*	14.3 Manufacture of knitted and crocheted apparel	Not passed	Not passed	--	--	No
20	Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	Static	*Medium*	16 Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	**Passed**	**Passed**	**Above average**	**Above average**	**Yes**
20.1	Sawmilling and planning of wood; impregnation of wood	Static	*Medium*	16.1 Sawmilling and planning of wood	**Passed**	**Passed**	**Above average**	**Above average**	**Yes**
26.6	Manufacture of articles of concrete, plaster, and cement	dynamic	*High*	23.5 Manufacture of cement, lime, and plaster	Not passed	Not passed	--	--	No
27.1	Manufacture of basic iron and steel and of ferro-alloys	Static	*Medium*	24.1 Manufacture of basic iron and steel and of ferro-alloys	**Passed**	**Passed**	**Above average**	Below average	No

NACE Rev. 1.1 code	Industry	Type of economic potential	Priority status	"Corresponding" NACE Rev. 2 industry	Confiden-tiality threshold	Size threshold	Share of PPMO innovators	Share of high-innovation intensive innovators	Innovation potential
27.5	Casting of metals	Static	Low	24.5 Casting of metals	**Passed**	Not passed	**Above average**	Below average	No
29	Manufacture of machinery and equipment n.e.c.	Static	Low	28 Manufacture of machinery and equipment n.e.c.	**Passed**	Not passed	**Above average**	Below average	No
31	Manufacture of electrical machinery and apparatus n.e.c.	Static	Medium	27.9 Manufacture of other electrical equipment	Not passed	Not passed	--	--	No
45	Construction	Dynamic	High	41 Construction of buildings	**Passed**	**Passed**	Below average	Below average	No
50	Sale, maintenance and repair of motor vehicles and motorcycles; retail sale of automotive fuel	Dynamic	Medium	45.1 Sale of motor vehicles	Not passed	Not passed	--	--	No
				45.2 Maintenance and repair of motor vehicles	Not passed	Not passed	--	--	No
51.5	Wholesale of non-agricultural intermediate products, waste, and scrap	Dynamic	Medium	46.7 Other specialised wholesale	**Passed**	**Passed**	**Above average**	Below average	No
55.1	Hotels	Dynamic	Low	55.1 Hotels and similar accommodation	**Passed**	**Passed**	**Above average**	**Above average**	**Yes**
80	Education	Dynamic	Low	85 Education	Not passed	Not passed	--	--	No
85.1	Human health activities	Static	High	86 Human health activities	Not passed	Not passed	--	--	No
92.6	Sporting activities	Static	High	Not covered in innovation survey	--	--	--	--	--

5   Summary and recommendations

Summary

The current study provides a mapping of the economic and innovation potential of Imereti, one of 12 regions in Georgia.[15] A methodology has been developed which could be applied to all regions. The mapping of the economic potential uses NACE Rev. 1.1 three-digit data from the *Statistical Survey of Enterprises* made available by *Geostat*. The analysis shows that 12 industries have a static economic potential and that 9 industries have a dynamic or emerging economic potential. The mapping of the innovation potential uses NACE Rev. 2 three-digit data from the survey on the *Innovative activity of enterprises* made available by *Geostat*. The analysis shows that 15 industries have an innovation potential. Combining both results by matching industry names, shows that applying all criteria strictly results in only **3** industries having both an economic and an innovation potential. Relaxing the criteria for the mapping of the innovation potential would increase the number of industries with both an economic and innovation potential to **7**:

- NACE Rev. 1.1 13.2 Mining of non-ferrous metal ores, except uranium and thorium ores
- NACE Rev. 1.1 15.1 Production, processing and preserving of meat and meat products
- NACE Rev. 1.1 20 Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials
- NACE Rev. 1.1 20.1 Sawmilling and planning of wood; impregnation of wood
- NACE Rev. 1.1 55.1 Hotels
- NACE Rev. 1.1 27.1 Manufacture of basic iron and steel and of ferro-alloys
- NACE Rev. 1.1 51.5 Wholesale of non-agricultural intermediate products, waste, and scrap

Recommendations

The current study has revealed several lessons for applying the methodology to other regions or for updating the results for Imereti resulting in the following recommendations.

Access to detailed industry-level data for both Georgia and its regions is crucial for being able to apply the mapping methodology. The support of *Geostat* is a necessary precondition and on the work for Imereti several interactions were needed to gain access to NACE three-digit data. For the economic mapping, firm-level data were shared for six years (2013-2018) of which aggregate NACE three-digit industry data were used for the mapping of the static economic potential. For the mapping of the dynamic economic potential 5 two-year averages at the NACE three-digit level were used. For future mapping exercises it would be beneficial to have access to **longer time series for the economic data**, in particular for the mapping of the dynamic economic potential. These data do not necessarily have to be firm-level data, it would be sufficient to gain access to data already aggregated at the NACE three-digit level.

For the innovation mapping *Geostat* made available firm-level data for several variables for three years (2016-2018). Given smaller sample sizes, aggregate data have been used in the analysis instead of data for the individual years. Results for more years will become available when data from future versions of the survey on the *Innovative activity of enterprises* will be collected. The data shared by *Geostat* have been sufficient for the

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[15] The city of Tbilisi, Abkhazeti AR, Adjara AR, Guria, Imereti, Kakheti, Mtskheta-Mtianeti, Racha-Lechkhumi and Kvemo Svaneti, Samegrelo-Zemo Svaneti, Samtskhe-Javakheti, Kvemo Kartli, and Shida Kartli.

mapping of the innovation potential. The only limitation is that not all industries are included in this survey and for several industries data are thus not available, but this is a direct result of the objective of the survey as it focuses on innovation in the business sector, thereby excluding non-business industries.

With both economic and innovation data being available at the NACE three-digit level, in theory the results of the two mapping exercises could be combined. However, the data shared by *Geostat* uses the NACE Rev. 1.1. classification for the economic data and the NACE Rev. 2 classification for the innovation data. These two industrial classifications are not directly comparable at the three-digit industry level, and results for the economic and innovation potential cannot be linked for individual industries. Instead a matching of industry names had to be used which results in less reliable and less relevant results. It is strongly recommended that **official economic data** are also made available using the **NACE Rev. 2 classification**.

Annex A Detailed results for the economic mapping

				Static						Dynamic								
				Con-fiden-tiality	Criti-cal mass	Spe-ciali-sation	Wages - region	Wages – indus-try	ALL	Employment	Wages	Criti-cal mass	Spe-ciali-sation	Wages - region	Wages – indus-try	11 + 12	13 + 14 + 15 +16	11 + 12 + 14
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*	*14*	*15*	*16*	*17*	*18*	*19*
	Number of industries that passed selection			**86**	**82**	**24**	**37**	**25**	**15**	**27**	**39**	**13**	**14**	**10**	**11**	**10**	**1**	**6**
A	**Agriculture, hunting and forestry**																	
01	Agriculture, hunting and related service activities		dynamic	1	1	0	0	0	0	1	1	1	1	1	1	1	1	1
01.1	Growing of crops; market gardening; horticulture		dynamic	1	1	0	0	0	0	1	1	1	1	0	0	1	0	1
01.2	Farming of animals			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01.3	Growing of crops combined with farming of animals (mixed farming)			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01.4	Agricultural and animal husbandry service activities, except veterinary activities; landscape gardening			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01.5	Hunting, trapping and game propagation, including related service activities			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02	Forestry, logging, and related service activities			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
B	**Fishing**																	
05	Fishing, fish farming and related service activities			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C	**Mining and quarrying**																	
10	Mining of coal and lignite; extraction of peat			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10.1	Mining and agglomeration of hard coal			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10.2*	Mining and agglomeration of lignite			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10.3	Extraction and agglomeration of peat			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	Extraction of crude petroleum and natural gas; service activities incidental to oil and gas extraction, excluding surveying			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11.1	Extraction of crude petroleum and natural gas			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11.2	Service activities incidental to oil and gas extraction, excluding surveying			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12*	Mining of uranium and thorium ores			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Mining of metal ores	static		1	1	1	1	1	1	0	1	0	0	1	0	0	0	0
13.1*	Mining of iron ores			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13.2	Mining of non-ferrous metal ores, except uranium and thorium ores	static		1	1	1	1	1	1	0	1	0	0	1	0	0	0	0
14	Other mining and quarrying	static		1	1	1	1	1	1	0	1	0	0	0	0	0	0	0
14.1	Quarrying of stone			1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
14.2	Quarrying of sand and clay	static		1	1	1	1	1	1	0	1	0	0	0	0	0	0	0
14.3	Mining of chemical and fertilizer minerals			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14.4*	Production of salt			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14.5	Other mining and quarrying n.e.c.			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D	**Manufacturing**																	
15	Manufacture of food products and beverages			1	1	0	0	0	0	0	0	0	0	0	0	0	0	0

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				Static						Dynamic								
				Con-fiden-tiality	Criti-cal mass	Spe-ciali-sation	Wages - region	Wages – indus-try	ALL	Emplo yment	Wage s	Criti-cal mass	Spe-ciali-sation	Wages - region	Wages – indus-try	11 + 12	13 + 14 + 15 +16	11 + 12 + 14
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
	Number of industries that passed selection			**86**	**82**	**24**	**37**	**25**	**15**	**27**	**39**	**13**	**14**	**10**	**11**	**10**	**1**	**6**
15.1	Production, processing and preserving of meat and meat products	static		1	1	1	1	1	1	1	0	1	1	0	0	0	0	0
15.2	Processing and preserving of fish and fish products			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15.3	Processing and preserving of fruit and vegetables			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15.4	Manufacture of vegetable and animal oils and fats			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15.5	Manufacture of dairy products			1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
15.6	Manufacture of grain mill products, starches, and starch products			1	1	0	1	1	0	0	0	0	0	0	0	0	0	0
15.7	Manufacture of prepared animal feeds			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15.8	Manufacture of other food products			1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
15.9	Manufacture of beverages			1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
16	Manufacture of tobacco products			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	Manufacture of textiles			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17.1	Preparation and spinning of textile fibres			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17.2*	Textile weaving			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17.3	Finishing of textiles			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17.4	Manufacture of made-up textile articles, except apparel			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17.5	Manufacture of other textiles			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17.6*	Manufacture of knitted and crocheted fabrics			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17.7	Manufacture of knitted and crocheted articles			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	Manufacture of wearing apparel; dressing and dyeing of fur		dynamic	1	1	1	0	1	0	1	1	1	1	0	0	1	0	1
18.1*	Manufacture of leather clothes			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18.2	Manufacture of other wearing apparel and accessories		dynamic	1	1	1	0	1	0	1	1	1	1	0	0	1	0	1
18.3*	Dressing and dyeing of fur; manufacture of articles of fur			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	Tanning and dressing of leather; manufacture of luggage, handbags, saddlery, harness, and footwear			1	1	1	0	0	0	0	1	0	0	0	1	0	0	0
19.1	Tanning and dressing of leather			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19.2	Manufacture of luggage, handbags and the like, saddlery, and harness			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19.3	Manufacture of footwear			1	1	1	0	1	0	0	1	0	0	0	0	0	0	0
20	Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	static		1	1	1	1	1	1	0	1	0	0	0	0	0	0	0
20.1	Sawmilling and planing of wood; impregnation of wood	static		1	1	1	1	1	1	0	0	0	0	0	0	0	0	0
20.2	Manufacture of veneer sheets; manufacture of plywood, laminboard, particle board, fibre board and other panels and boards			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20.3	Manufacture of builders' carpentry and joinery			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20.4	Manufacture of wooden containers			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20.5	Manufacture of other products of wood; manufacture of articles of cork, straw, and plaiting materials			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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1	2	3	4	Static						Dynamic								
				Confidentiality	Critical mass	Specialisation	Wages - region	Wages – industry	ALL	Employment	Wages	Critical mass	Specialisation	Wages - region	Wages – industry	11 + 12	13 + 14 + 15 +16	11 + 12 + 14
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
	Number of industries that passed selection			**86**	**82**	**24**	**37**	**25**	**15**	**27**	**39**	**13**	**14**	**10**	**11**	**10**	**1**	**6**
21	Manufacture of pulp, paper, and paper products			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21.1*	Manufacture of pulp, paper, and paperboard			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21.2	Manufacture of articles of paper and paperboard			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	Publishing, printing, and reproduction of recorded media			1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
22.1	Publishing			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22.2	Printing and service activities related to printing			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22.3	Reproduction of recorded media			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	Manufacture of coke, refined petroleum products and nuclear fuel			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23.1*	Manufacture of coke oven products			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23.2	Manufacture of refined petroleum products			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23.3	Processing of nuclear fuel			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Manufacture of chemicals and chemical products			1	1	0	1	0	0	0	1	0	0	1	1	0	0	0
24.1	Manufacture of basic chemicals			1	1	0	1	0	0	0	1	0	0	0	0	0	0	0
24.2	Manufacture of pesticides and other agro-chemical products			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24.3	Manufacture of paints, varnishes and similar coatings, printing ink and mastics			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24.4	Manufacture of pharmaceuticals, medicinal chemicals, and botanical products			0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
24.5	Manufacture of soap and detergents, cleaning and polishing preparations, perfumes, and toilet preparations			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24.6	Manufacture of other chemical products			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24.7*	Manufacture of man-made fibres			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Manufacture of rubber and plastic products			1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
25.1	Manufacture of rubber products			0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
25.2	Manufacture of plastic products			1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Manufacture of other non-metallic mineral products			1	1	1	1	0	0	0	0	0	0	0	0	0	0	0
26.1	Manufacture of glass and glass products			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26.2	Manufacture of non-refractory ceramic goods other than for construction purposes; manufacture of refractory ceramic products			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26.3	Manufacture of ceramic tiles and flags			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26.4	Manufacture of bricks, tiles, and construction products, in baked clay			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26.5	Manufacture of cement, lime, and plaster			1	1	0	0	0	0	1	0	0	1	0	0	0	0	0
26.6	Manufacture of articles of concrete, plaster, and cement		dynamic	1	1	1	1	0	0	1	1	0	1	0	0	1	0	1
26.7	Cutting, shaping, and finishing of ornamental and building stone			1	1	1	0	1	0	0	0	0	0	0	0	0	0	0
26.8	Manufacture of other non-metallic mineral products			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Manufacture of basic metals	static		1	1	1	1	1	1	0	0	0	0	0	0	0	0	0
27.1	Manufacture of basic iron and steel and of ferro-alloys	static		1	1	1	1	1	1	1	0	0	1	0	0	0	0	0

1	2	3	4	Static Con-fiden-tiality	Criti-cal mass	Spe-ciali-sation	Wages - region	Wages – indus-try	ALL	Dynamic Emplo yment	Wages	Criti-cal mass	Spe-ciali-sation	Wages - region	Wages – indus-try	11 + 12	13 + 14 + 15 +16	11 + 12 + 14
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
	Number of industries that passed selection			**86**	**82**	**24**	**37**	**25**	**15**	**27**	**39**	**13**	**14**	**10**	**11**	**10**	**1**	**6**
27.2	Manufacture of tubes			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27.3	Other first processing of iron and steel			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27.4	Manufacture of basic precious and non-ferrous metals			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27.5	Casting of metals	static		1	1	1	1	1	1	1	0	1	1	0	0	0	0	0
28	Manufacture of fabricated metal products, except machinery and equipment			1	1	0	1	1	0	0	0	0	0	0	0	0	0	0
28.1	Manufacture of structural metal products			1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
28.2	Manufacture of tanks, reservoirs, and containers of metal; manufacture of central heating radiators and boilers			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28.3*	Manufacture of steam generators, except central heating hot water boilers			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28.4	Forging, pressing, stamping and roll forming of metal; powder metallurgy			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28.5	Treatment and coating of metals; general mechanical engineering			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28.6*	Manufacture of cutlery, tools, and general hardware			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28.7	Manufacture of other fabricated metal products			1	1	0	1	1	0	0	1	0	0	0	0	0	0	0
29	Manufacture of machinery and equipment n.e.c.	static		1	1	1	1	1	1	0	0	0	0	0	0	0	0	0
29.1	Manufacture of machinery for the production and use of mechanical power, except aircraft, vehicle, and cycle engines			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29.2	Manufacture of other general-purpose machinery			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29.3*	Manufacture of agricultural and forestry machinery			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29.4	Manufacture of machine tools			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29.5	Manufacture of other special purpose machinery			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29.6*	Manufacture of weapons and ammunition			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29.7	Manufacture of domestic appliances n.e.c.			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	Manufacture of office machinery and computers			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	Manufacture of electrical machinery and apparatus n.e.c.	static		1	1	1	1	1	1	0	1	0	0	0	0	0	0	0
31.1	Manufacture of electric motors, generators, and transformers			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31.2	Manufacture of electricity distribution and control apparatus			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31.3	Manufacture of insulated wire and cable			0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
31.4	Manufacture of accumulators, primary cells, and primary batteries			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31.5	Manufacture of lighting equipment and electric lamps			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31.6	Manufacture of electrical equipment n.e.c.			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	Manufacture of radio, television and communication equipment and apparatus			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32.1*	Manufacture of electronic valves and tubes and other electronic components			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

				Static						Dynamic								
				Confiden-tiality	Criti-cal mass	Spe-ciali-sation	Wages - region	Wages – indus-try	ALL	Emplo yment	Wage s	Criti-cal mass	Spe-ciali-sation	Wage s - region	Wage s – indus-try	11 + 12	13 + 14 + 15 +16	11 + 12 + 14
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*	*14*	*15*	*16*	*17*	*18*	*19*
	Number of industries that passed selection			**86**	**82**	**24**	**37**	**25**	**15**	**27**	**39**	**13**	**14**	**10**	**11**	**10**	**1**	**6**
32.2	Manufacture of television and radio transmitters and apparatus for line telephony and line telegraphy			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32.3*	Manufacture of television and radio receivers, sound or video recording or reproducing apparatus and associated goods			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33	Manufacture of medical, precision, and optical instruments, watches and clocks			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33.1	Manufacture of medical and surgical equipment and orthopaedic appliances			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33.2	Manufacture of instruments and appliances for measuring, checking, testing, navigating and other purposes, except industrial process control equipment			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33.3*	Manufacture of industrial process control equipment			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33.4*	Manufacture of optical instruments and photographic equipment			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33.5	Manufacture of watches and clocks			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34	Manufacture of motor vehicles, trailers, and semi-trailers			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34.1*	Manufacture of motor vehicles			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34.2*	Manufacture of bodies (coachwork) for motor vehicles; manufacture of trailers and semi-trailers			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34.3	Manufacture of parts and accessories for motor vehicles and their engines			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	Manufacture of other transport equipment			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35.1	Building and repairing of ships and boats			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35.2	Manufacture of railway and tramway locomotives and rolling stock			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35.3	Manufacture of aircraft and spacecraft			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35.4*	Manufacture of motorcycles and bicycles			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35.5*	Manufacture of other transport equipment n.e.c.			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36	Manufacture of furniture; manufacturing n.e.c.			1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
36.1	Manufacture of furniture			1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
36.2	Manufacture of jewellery and related articles			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36.3*	Manufacture of musical instruments			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36.4*	Manufacture of sports goods			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36.5*	Manufacture of games and toys			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36.6	Miscellaneous manufacturing n.e.c.			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37	Recycling			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37.1	Recycling of metal waste and scrap			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37.2	Recycling of non-metal waste and scrap			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
E	**Electricity, gas, and water supply**																	
40	Electricity, gas, steam, and hot water supply			1	1	0	1	1	0	0	1	0	0	1	1	0	0	0
40.1	Production and distribution of electricity			0	0	0	0	0	0	1	1	0	0	0	0	0	0	0

				Static						Dynamic								
				Con-fiden-tiality	Criti-cal mass	Spe-ciali-sation	Wages -region	Wages – indus-try	ALL	Emplo yment	Wage s	Criti-cal mass	Spe-ciali-sation	Wage s - region	Wage s – indus-try	11 + 12	13 + 14 + 15 +16	11 + 12 + 14
1	*2*		*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*	*14*	*15*	*16*	*17*	*18*	*19*
	Number of industries that passed selection			**86**	**82**	**24**	**37**	**25**	**15**	**27**	**39**	**13**	**14**	**10**	**11**	**10**	**1**	**6**
40.2	Manufacture of gas; distribution of gaseous fuels through mains			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40.3	Steam and hot water supply			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	Collection, purification, and distribution of water			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
F	**Construction**																	
45	Construction		dynamic	1	1	0	1	0	0	1	1	0	1	0	0	1	0	1
45.1	Site preparation			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45.2	Building of complete constructions or parts thereof; civil engineering			1	1	0	1	0	0	1	0	0	0	0	0	0	0	0
45.3	Building installation			1	1	0	1	0	0	0	1	0	0	1	1	0	0	0
45.4	Building completion			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45.5	Renting of construction or demolition equipment with operator			1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
G	**Wholesale and retail trade; repair of motor vehicles, motorcycles, and personal and household goods**																	
50	Sale, maintenance and repair of motor vehicles and motorcycles; retail sale of automotive fuel		dynamic	1	1	0	0	0	0	1	1	1	0	0	0	1	0	0
50.1	Sale of motor vehicles			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50.2	Maintenance and repair of motor vehicles			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50.3	Sale of motor vehicle parts and accessories			1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
50.4	Sale, maintenance and repair of motorcycles and related parts and accessories			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50.5	Retail sale of automotive fuel			1	1	0	0	0	0	1	0	1	1	0	0	0	0	0
51	Wholesale trade and commission trade, except of motor vehicles and motorcycles			1	1	0	1	0	0	1	0	1	0	0	0	0	0	0
51.1	Wholesale on a fee or contract basis			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
51.2	Wholesale of agricultural raw materials and live animals			1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
51.3	Wholesale of food, beverages, and tobacco			1	1	0	1	0	0	1	0	1	0	0	0	0	0	0
51.4	Wholesale of household goods			1	1	0	0	0	0	1	0	1	1	0	0	0	0	0
51.5	Wholesale of non-agricultural intermediate products, waste, and scrap		dynamic	1	1	0	1	1	0	1	1	0	0	0	0	1	0	0
51.8	Wholesale of machinery, equipment, and supplies			1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
51.9	Other wholesale			1	1	0	1	1	0	0	0	0	0	0	0	0	0	0
52	Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods			1	1	0	0	0	0	0	1	0	0	0	0	0	0	0
52.1	Retail sale in non-specialized stores			1	1	0	0	0	0	0	1	0	0	0	0	0	0	0
52.2	Retail sale of food, beverages, and tobacco in specialized stores			1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
52.3	Retail sale of pharmaceutical and medical goods, cosmetic and toilet articles			1	1	0	0	0	0	0	1	0	0	1	1	0	0	0
52.4	Other retail sale of new goods in specialized stores			1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
52.5	Retail sale of second-hand goods in stores			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
52.6	Retail sale not in stores			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

				Static						Dynamic								
				Con-fiden-tiality	Criti-cal mass	Spe-ciali-sation	Wages - region	Wages – indus-try	ALL	Employment	Wages	Criti-cal mass	Spe-ciali-sation	Wages - region	Wages – indus-try	11 + 12	13 + 14 + 15 +16	11 + 12 + 14
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
	Number of industries that passed selection			**86**	**82**	**24**	**37**	**25**	**15**	**27**	**39**	**13**	**14**	**10**	**11**	**10**	**1**	**6**
52.7	Repair of personal and household goods			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H	**Hotels and restaurants**																	
55	Hotels and restaurants			1	1	0	0	0	0	1	0	0	0	0	0	0	0	0
55.1	Hotels		dynamic	1	1	0	0	0	0	1	1	0	0	1	1	1	0	0
55.2	Camping sites and other provision of short-stay accommodation			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55.3	Restaurants			1	1	0	0	0	0	1	0	0	0	0	0	0	0	0
55.4	Bars			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55.5	Canteens and catering			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
I	**Transport, storage, and communication**																	
60	Land transport; transport via pipelines			1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
60.1	Transport via railways			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
60.2	Other land transport			1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
60.3	Transport via pipelines			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
61	Water transport			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
61.1	Sea and coastal water transport			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
61.2	Inland water transport			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
62	Air transport			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
62.1	Scheduled air transport			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
62.2	Non-scheduled air transport			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
62.3	Space transport			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
63	Supporting and auxiliary transport activities; activities of travel agencies			1	1	0	0	0	0	0	1	0	0	1	1	0	0	0
63.1	Cargo handling and storage			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
63.2	Other supporting transport activities			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
63.3	Activities of travel agencies and tour operators; tourist assistance activities n.e.c.			1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
63.4	Activities of other transport agencies			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
64	Post and telecommunications			1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
64.1	Post and courier activities			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
64.2	Telecommunications			1	1	0	1	0	0	0	0	0	0	0	0	0	0	0
J*	**Financial intermediation**																	
65*	Financial intermediation, except insurance and pension funding			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65.1*	Monetary intermediation			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65.2*	Other financial intermediation			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
66*	Insurance and pension funding, except compulsory social security			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
67*	Activities auxiliary to financial intermediation			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
67.1*	Activities auxiliary to financial intermediation, except insurance and pension funding			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
67.2*	Activities auxiliary to insurance and pension funding			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

				Static						Dynamic								
				Con-fiden-tiality	Criti-cal mass	Spe-ciali-sation	Wages - region	Wages – indus-try	ALL	Emplo yment	Wage s	Criti-cal mass	Spe-ciali-sation	Wage s - region	Wage s – indus-try	11 + 12	13 + 14 + 15 +16	11 + 12 + 14
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
	Number of industries that passed selection			**86**	**82**	**24**	**37**	**25**	**15**	**27**	**39**	**13**	**14**	**10**	**11**	**10**	**1**	**6**
K	**Real estate, renting and business activities**																	
70	Real estate activities			1	1	0	0	0	0	1	0	1	1	0	0	0	0	0
70.1	Real estate activities with own property			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70.2	Letting of own property			1	1	0	0	0	0	1	0	0	1	0	0	0	0	0
70.3	Real estate activities on a fee or contract basis			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
71	Renting of machinery and equipment without operator and of personal and household goods			1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
71.1	Renting of automobiles			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
71.2	Renting of other transport equipment			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
71.3	Renting of other machinery and equipment			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
71.4	Renting of personal and household goods n.e.c.			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
72	Computer and related activities			1	1	0	1	0	0	0	0	0	0	0	0	0	0	0
72.1	Hardware consultancy			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
72.2	Software consultancy and supply			1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
72.3	Data processing			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
72.4	Database activities			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
72.5	Maintenance and repair of office, accounting, and computing machinery			1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
72.6	Other computer related activities			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
73	Research and development			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
73.1	Research and experimental development on natural sciences and engineering			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
73.2	Research and experimental development on social sciences and humanities			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
74	Other business activities			1	1	0	1	0	0	0	0	0	0	0	0	0	0	0
74.1	Legal, accounting, book-keeping, and auditing activities; tax consultancy; market research and public opinion polling; business and management consultancy; holdings			1	1	0	1	0	0	0	0	0	0	0	0	0	0	0
74.2	Architectural and engineering activities and related technical consultancy			1	1	0	0	0	0	0	1	0	0	0	0	0	0	0
74.3	Technical testing and analysis			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
74.4	Advertising			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
74.5	Labour recruitment and provision of personnel			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
74.6	Investigation and security activities			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
74.7	Industrial cleaning			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
74.8	Miscellaneous business activities n.e.c.			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L*	**Public administration and defence; compulsory social security**																	
75*	Public administration and defence; compulsory social security			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

				Static						Dynamic								
				Confiden-tiality	Critical mass	Speciali-sation	Wages - region	Wages – industry	ALL	Employment	Wages	Critical mass	Speciali-sation	Wages - region	Wages – industry	11 + 12	13 + 14 + 15 +16	11 + 12 + 14
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*	*14*	*15*	*16*	*17*	*18*	*19*
	Number of industries that passed selection			**86**	**82**	**24**	**37**	**25**	**15**	**27**	**39**	**13**	**14**	**10**	**11**	**10**	**1**	**6**
75.1*	Administration of the State and the economic and social policy of the community			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75.2*	Provision of services to the community as a whole			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75.3*	Compulsory social security activities			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M	**Education**																	
80	Education		dynamic	1	1	0	0	0	0	1	1	0	0	0	1	1	0	0
80.1	Primary education			0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
80.2	Secondary education			1	1	1	0	0	0	0	1	0	0	0	0	0	0	0
80.3	Higher education			0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
80.4	Adult and other education			1	1	0	0	0	0	0	1	0	0	1	0	0	0	0
N	**Health and social work**																	
85	Health and social work	static		1	1	1	1	1	1	0	1	0	0	0	0	0	0	0
85.1	Human health activities	static		1	1	1	1	1	1	0	1	0	0	0	0	0	0	0
85.2	Veterinary activities			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85.3	Social work activities			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
O	**Other community, social and personal service activities**																	
90	Sewage and refuse disposal, sanitation, and similar activities			1	1	0	0	0	0	0	0	0	0	0	0	0	0	90
91*	Activities of membership organizations n.e.c.			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
91.1*	Activities of business, employers', and professional organizations			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
91.2*	Activities of trade unions			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
91.3*	Activities of other membership organizations			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
92	Recreational, cultural, and sporting activities			1	1	0	1	0	0	0	1	0	0	0	1	0	0	0
92.1	Motion picture and video activities			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
92.2	Radio and television activities			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
92.3	Other entertainment activities			0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
92.4	News agency activities			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
92.5	Library, archives, museums, and other cultural activities			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
92.6	Sporting activities	static		1	1	1	1	1	1	0	1	0	0	0	1	0	0	0
92.7	Other recreational activities			1	1	0	1	0	0	1	0	1	0	0	0	0	0	0
93	Other service activities			1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
P*	**Activities of households**			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95*	Activities of households as employers of domestic staff																	
96*	Undifferentiated goods producing activities of private households for own use			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
97*	Undifferentiated services producing activities of private households for own use			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Q*	**Extra-territorial organizations and bodies**																	
99*	Extra-territorial organizations and bodies			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

* Industry not covered in *Statistical Survey of Enterprises*

Annex B Detailed results for the innovation mapping

		Confiden-tiality threshold	Size threshold	Above average share of PPMO innovators	Above average share of high-innovation intensive innovators	Innovation potential
	Number of industries that passed selection	**94**	**68**	**62**	**45**	**19**
A	**AGRICULTURE, FORESTRY AND FISHING**					
1	Crop and animal production, hunting and related service activities	0	0	0	0	0
1.1	Growing of non-perennial crops	0	0	0	0	0
1.2	Growing of perennial crops	0	0	0	0	0
1.3	Plant propagation	0	0	0	0	0
1.4	Animal production	0	0	0	0	0
1.5*	Mixed farming	0	0	0	0	0
1.6	Support activities to agriculture and post-harvest crop activities	0	0	0	0	0
1.7*	Hunting, trapping and related service activities	0	0	0	0	0
2*	Forestry and logging	0	0	0	0	0
2.1*	Silviculture and other forestry activities	0	0	0	0	0
2.2*	Logging	0	0	0	0	0
2.3*	Gathering of wild growing non-wood products	0	0	0	0	0
2.4*	Support services to forestry	0	0	0	0	0
3*	Fishing and aquaculture	0	0	0	0	0
3.1*	Fishing	0	0	0	0	0
3.2*	Aquaculture	0	0	0	0	0
B	**MINING AND QUARRYING**					
5	Mining of coal and lignite	1	0	0	0	0
5.1	Mining of hard coal	1	0	0	0	0
5.2*	Mining of lignite	0	0	0	0	0
6	Extraction of crude petroleum and natural gas	0	0	0	0	0
6.1	Extraction of crude petroleum	0	0	0	0	0
6.2*	Extraction of natural gas	0	0	0	0	0
7	Mining of metal ores	1	1	0	1	0
7.1*	Mining of iron ores	0	0	0	0	0
7.2	Mining of non-ferrous metal ores	1	1	0	1	0
8	Other mining and quarrying	1	1	0	0	0
8.1	Quarrying of stone, sand and clay	1	1	0	0	0
8.9	Mining and quarrying n.e.c.	0	0	0	0	0
9*	Mining support service activities	0	0	0	0	0
9.1*	Support activities for petroleum and natural gas extraction	0	0	0	0	0
9.9*	Support activities for other mining and quarrying	0	0	0	0	0
C	**MANUFACTURING**					
10	Manufacture of food products	1	1	1	0	0
10.1	Processing and preserving of meat and production of meat products	1	1	1	0	0

		Confiden-tiality threshold	Size threshold	Above average share of PPMO innovators	Above average share of high-innovation intensive innovators	Innovation potential
	Number of industries that passed selection	94	68	62	45	19
10.2	Processing and preserving of fish, crustaceans, and molluscs	0	0	0	0	0
10.3	Processing and preserving of fruit and vegetables	1	1	1	1	1
10.4	Manufacture of vegetable and animal oils and fats	0	0	0	0	0
10.5	Manufacture of dairy products	1	0	0	0	0
10.6	Manufacture of grain mill products, starches, and starch products	1	1	1	1	1
10.7	Manufacture of bakery and farinaceous products	1	1	1	0	0
10.8	Manufacture of other food products	0	0	1	1	0
10.9	Manufacture of prepared animal feeds	0	0	0	0	0
11	Manufacture of beverages	1	0	1	0	0
12	Manufacture of tobacco products	0	0	0	0	0
13	Manufacture of textiles	0	0	0	0	0
13.1	Preparation and spinning of textile fibres	0	0	0	0	0
13.2*	Weaving of textiles	0	0	0	0	0
13.3	Finishing of textiles	0	0	0	0	0
13.9	Manufacture of other textiles	0	0	0	0	0
14	Manufacture of wearing apparel	1	1	1	1	1
14.1	Manufacture of wearing apparel, except fur apparel	1	1	1	1	1
14.2*	Manufacture of articles of fur	0	0	0	0	0
14.3	Manufacture of knitted and crocheted apparel	0	0	0	0	0
15	Manufacture of leather and related products	0	0	1	1	0
15.1	Tanning and dressing of leather; manufacture of luggage, handbags, saddlery and harness; dressing and dyeing of fur	0	0	0	0	0
15.2	Manufacture of footwear	0	0	1	1	0
16	Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	1	1	1	1	1
16.1	Sawmilling and planning of wood	1	1	1	1	1
16.2	Manufacture of products of wood, cork, straw, and plaiting materials	1	1	1	1	1
17	Manufacture of paper and paper products	0	0	0	0	0
17.1	Manufacture of pulp, paper, and paperboard	0	0	0	0	0
17.2	Manufacture of articles of paper and paperboard	0	0	0	0	0
18	Printing and reproduction of recorded media	0	0	0	0	0
18.1	Printing and service activities related to printing	0	0	0	0	0
18.2	Reproduction of recorded media	0	0	0	0	0
19	Manufacture of coke and refined petroleum products	0	0	0	0	0
19.1*	Manufacture of coke oven products	0	0	0	0	0
19.2	Manufacture of refined petroleum products	0	0	0	0	0
20	Manufacture of chemicals and chemical products	0	0	0	0	0
20.1	Manufacture of basic chemicals, fertilisers and nitrogen compounds, plastics, and synthetic rubber in primary forms	0	0	0	0	0

		Confiden-tiality threshold	Size threshold	Above average share of PPMO innovators	Above average share of high-innovation intensive innovators	Innovation potential
	Number of industries that passed selection	**94**	**68**	**62**	**45**	**19**
20.2*	Manufacture of pesticides and other agrochemical products	0	0	0	0	0
20.3	Manufacture of paints, varnishes and similar coatings, printing ink and mastics	0	0	0	0	0
20.4	Manufacture of soap and detergents, cleaning and polishing preparations, perfumes, and toilet preparations	0	0	0	0	0
20.5*	Manufacture of other chemical products	0	0	0	0	0
20.6*	Manufacture of man-made fibres	0	0	0	0	0
21	Manufacture of basic pharmaceutical products and pharmaceutical preparations	0	0	1	1	0
21.1	Manufacture of basic pharmaceutical products	0	0	0	0	0
21.2	Manufacture of pharmaceutical preparations	0	0	1	1	0
22	Manufacture of rubber and plastic products	1	1	0	1	0
22.1	Manufacture of rubber products	0	0	1	1	0
22.2	Manufacture of plastic products	1	1	0	0	0
23	Manufacture of other non-metallic mineral products	1	1	1	1	1
23.1	Manufacture of glass and glass products	0	0	0	0	0
23.2	Manufacture of refractory products	1	0	1	1	0
23.3	Manufacture of clay building materials	0	0	1	0	0
23.4	Manufacture of other porcelain and ceramic products	0	0	0	0	0
23.5	Manufacture of cement, lime, and plaster	0	0	0	0	0
23.6	Manufacture of articles of concrete, cement, and plaster	1	1	1	1	1
23.7	Cutting, shaping, and finishing of stone	1	0	1	0	0
23.9*	Manufacture of abrasive products and non-metallic mineral products n.e.c.	0	0	0	0	0
24	Manufacture of basic metals	1	1	1	0	0
24.1	Manufacture of basic iron and steel and of ferro-alloys	1	1	1	0	0
24.2	Manufacture of tubes, pipes, hollow profiles, and related fittings, of steel	0	0	0	0	0
24.3	Manufacture of other products of first processing of steel	0	0	0	0	0
24.4*	Manufacture of basic precious and other non-ferrous metals	0	0	0	0	0
24.5	Casting of metals	1	0	1	0	0
25	Manufacture of fabricated metal products, except machinery and equipment	1	1	1	0	0
25.1	Manufacture of structural metal products	1	1	1	0	0
25.2	Manufacture of tanks, reservoirs, and containers of metal	0	0	0	0	0
25.3*	Manufacture of steam generators, except central heating hot water boilers	0	0	0	0	0
25.4*	Manufacture of weapons and ammunition	0	0	0	0	0
25.5	Forging, pressing, stamping, and roll-forming of metal; powder metallurgy	0	0	1	1	0
25.6	Treatment and coating of metals; machining	0	0	0	0	0
25.7	Manufacture of cutlery, tools, and general hardware	0	0	0	0	0
25.9	Manufacture of other fabricated metal products	0	0	1	0	0
26	Manufacture of computer, electronic and optical products	0	0	0	0	0
26.1*	Manufacture of electronic components and boards	0	0	0	0	0
26.2*	Manufacture of computers and peripheral equipment	0	0	0	0	0

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	Number of industries that passed selection	**94**	**68**	**62**	**45**	**19**
26.3	Manufacture of communication equipment	0	0	0	0	0
26.4*	Manufacture of consumer electronics	0	0	0	0	0
26.5*	Manufacture of instruments and appliances for measuring, testing and navigation; watches and clocks	0	0	0	0	0
26.6*	Manufacture of irradiation, electromedical and electrotherapeutic equipment	0	0	0	0	0
26.7*	Manufacture of optical instruments and photographic equipment	0	0	0	0	0
26.8*	Manufacture of magnetic and optical media	0	0	0	0	0
27	Manufacture of electrical equipment	1	1	1	1	1
27.1	Manufacture of electric motors, generators, transformers and electricity distribution and control apparatus	0	0	0	0	0
27.2*	Manufacture of batteries and accumulators	0	0	0	0	0
27.3	Manufacture of wiring and wiring devices	1	0	1	1	0
27.4*	Manufacture of electric lighting equipment	0	0	0	0	0
27.5	Manufacture of domestic appliances	1	0	1	0	0
27.9	Manufacture of other electrical equipment	0	0	0	0	0
28	Manufacture of machinery and equipment n.e.c.	1	0	1	0	0
28.1	Manufacture of general-purpose machinery	0	0	0	0	0
28.2	Manufacture of other general-purpose machinery	0	0	0	0	0
28.3*	Manufacture of agricultural and forestry machinery	0	0	0	0	0
28.4*	Manufacture of metal forming machinery and machine tools	0	0	0	0	0
28.9	Manufacture of other special-purpose machinery	1	0	1	0	0
29	Manufacture of motor vehicles, trailers, and semi-trailers	0	0	0	0	0
29.1*	Manufacture of motor vehicles	0	0	0	0	0
29.2*	Manufacture of bodies (coachwork) for motor vehicles; manufacture of trailers and semi-trailers	0	0	0	0	0
29.3	Manufacture of parts and accessories for motor vehicles	0	0	0	0	0
30	Manufacture of other transport equipment	0	0	0	0	0
30.1*	Building of ships and boats	0	0	0	0	0
30.2	Manufacture of railway locomotives and rolling stock	0	0	0	0	0
30.3	Manufacture of air and spacecraft and related machinery	0	0	0	0	0
30.4*	Manufacture of military fighting vehicles	0	0	0	0	0
30.9*	Manufacture of transport equipment n.e.c.	0	0	0	0	0
31	Manufacture of furniture	1	1	1	0	0
32	Other manufacturing	0	0	0	0	0
32.1	Manufacture of jewellery, bijouterie, and related articles	0	0	0	0	0
32.2*	Manufacture of musical instruments	0	0	0	0	0
32.3*	Manufacture of sports goods	0	0	0	0	0
32.4*	Manufacture of games and toys	0	0	0	0	0
32.5	Manufacture of medical and dental instruments and supplies	0	0	0	0	0
32.9	Manufacturing n.e.c.	0	0	0	0	0

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	Number of industries that passed selection	**94**	**68**	**62**	**45**	**19**
33	Repair and installation of machinery and equipment	0	0	0	0	0
33.1	Repair of fabricated metal products, machinery, and equipment	0	0	0	0	0
33.2	Installation of industrial machinery and equipment	0	0	0	0	0
D	**ELECTRICITY, GAS, STEAM AND AIR CONDITIONING SUPPLY**					
35	Electricity, gas, steam, and air conditioning supply	1	1	1	0	0
35.1	Electric power generation, transmission, and distribution	1	0	1	0	0
35.2	Manufacture of gas; distribution of gaseous fuels through mains	1	0	1	1	0
35.3	Steam and air conditioning supply	0	0	0	0	0
E	**WATER SUPPLY; SEWERAGE, WASTE MANAGEMENT AND REMEDIATION ACTIVITIES**					
36	Water collection, treatment, and supply	1	0	0	0	0
37	Sewerage	0	0	0	0	0
38	Waste collection, treatment, and disposal activities; materials recovery	1	0	1	0	0
38.1	Waste collection	0	0	1	0	0
38.2	Waste treatment and disposal	0	0	0	0	0
38.3	Materials recovery	0	0	0	0	0
39	Remediation activities and other waste management services	0	0	0	0	0
F	**CONSTRUCTION**					
41	Construction of buildings	1	1	0	0	0
41.1	Development of building projects	0	0	0	0	0
41.2	Construction of residential and non-residential buildings	1	1	0	0	0
42	Civil engineering	1	1	0	0	0
42.1	Construction of roads and railways	1	1	0	0	0
42.2	Construction of utility projects	1	1	0	1	0
42.9	Construction of other civil engineering projects	0	0	0	0	0
43	Specialised construction activities	1	1	0	0	0
43.1	Demolition and site preparation	0	0	0	0	0
43.2	Electrical, plumbing, and other construction installation activities	1	1	1	0	0
43.3	Building completion and finishing	0	0	0	0	0
43.9	Other specialised construction activities	1	0	0	0	0
G	**WHOLESALE AND RETAIL TRADE; REPAIR OF MOTOR VEHICLES AND MOTORCYCLES**					
45	Wholesale and retail trade and repair of motor vehicles and motorcycles	1	1	1	1	1
45.1	Sale of motor vehicles	0	0	0	0	0
45.2	Maintenance and repair of motor vehicles	0	0	1	1	0
45.3	Sale of motor vehicle parts and accessories	1	1	1	1	1
45.4	Sale, maintenance and repair of motorcycles and related parts and accessories	0	0	0	0	0
46	Wholesale trade, except of motor vehicles and motorcycles	1	1	0	1	0
46.1	Wholesale on a fee or contract basis	0	0	0	0	0
46.2	Wholesale of agricultural raw materials and live animals	0	0	0	0	0
46.3	Wholesale of food, beverages and tobacco	1	1	1	1	1

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	Number of industries that passed selection	**94**	**68**	**62**	**45**	**19**
46.4	Wholesale of household goods	1	0	0	0	0
46.5	Wholesale of information and communication equipment	0	0	0	0	0
46.6	Wholesale of other machinery, equipment, and supplies	0	0	0	0	0
46.7	Other specialised wholesale	1	1	1	0	0
46.9	Non-specialised wholesale trade	1	1	0	1	0
47	Retail trade, except of motor vehicles and motorcycles	1	1	1	1	1
47.1	Retail sale in non-specialised stores	1	1	0	1	0
47.2	Retail sale of food, beverages, and tobacco in specialised stores	0	0	0	0	0
47.3	Retail sale of automotive fuel in specialised stores	1	1	0	0	0
47.4	Retail sale of information and communication equipment in specialised stores	0	0	1	1	0
47.5	Retail sale of other household equipment in specialised stores	1	1	1	1	1
47.6	Retail sale of cultural and recreation goods in specialised stores	1	1	1	0	0
47.7	Retail sale of other goods in specialised stores	1	1	0	1	0
47.8	Retail sale via stalls and markets	0	0	0	0	0
47.9	Retail trade not in stores, stalls, or markets	0	0	0	0	0
H	**TRANSPORTATION AND STORAGE**					
49	Land transport and transport via pipelines	1	1	0	0	0
49.1	Passenger rail transport, interurban	0	0	0	0	0
49.2	Freight rail transport	0	0	0	0	0
49.3	Other passenger land transport	1	1	0	0	0
49.4	Freight transport by road and removal services	1	1	0	0	0
49.5	Transport via pipeline	0	0	0	0	0
50*	Water transport	0	0	0	0	0
50.1*	Sea and coastal passenger water transport	0	0	0	0	0
50.2*	Sea and coastal freight water transport	0	0	0	0	0
50.3*	Inland passenger water transport	0	0	0	0	0
50.4*	Inland freight water transport	0	0	0	0	0
51	Air transport	0	0	0	0	0
51.1	Passenger air transport	0	0	0	0	0
51.2	Freight air transport and space transport	0	0	0	0	0
52	Warehousing and support activities for transportation	1	1	0	0	0
52.1	Warehousing and storage	0	0	0	0	0
52.2	Support activities for transportation	1	1	0	0	0
53	Postal and courier activities	0	0	0	0	0
53.1	Postal activities under universal service obligation	0	0	0	0	0
53.2	Other postal and courier activities	0	0	0	0	0
I	**ACCOMMODATION AND FOOD SERVICE ACTIVITIES**					
55	Accommodation	1	1	1	1	1
55.1	Hotels and similar accommodation	1	1	1	1	1

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	Number of industries that passed selection	**94**	**68**	**62**	**45**	**19**
55.2	Holiday and other short-stay accommodation	0	0	0	0	0
55.3*	Camping grounds, recreational vehicle parks and trailer parks	0	0	0	0	0
55.9*	Other accommodation	0	0	0	0	0
56	Food and beverage service activities	1	1	0	0	0
56.1	Restaurants and mobile food service activities	1	1	0	0	0
56.2	Event catering and other food service activities	0	0	0	0	0
56.3	Beverage serving activities	1	1	0	1	0
J	**INFORMATION AND COMMUNICATION**					
58	Publishing activities	0	0	0	0	0
58.1	Publishing of books, periodicals, and other publishing activities	0	0	0	0	0
58.2	Software publishing	0	0	0	0	0
59	Motion picture, video and television programme production, sound recording and music publishing activities	0	0	0	0	0
59.1	Motion picture, video, and television programme activities	0	0	0	0	0
59.2	Sound recording and music publishing activities	0	0	0	0	0
60	Programming and broadcasting activities	1	1	1	0	0
60.1	Radio broadcasting	0	0	0	0	0
60.2	Television programming and broadcasting activities	1	1	1	0	0
61	Telecommunications	1	1	1	1	1
61.1	Wired telecommunications activities	1	0	1	1	0
61.2	Wireless telecommunications activities	1	1	1	1	1
61.3*	Satellite telecommunications activities	0	0	0	0	0
61.9	Other telecommunications activities	0	0	0	0	0
62	Computer programming, consultancy, and related activities	0	0	0	0	0
63	Information service activities	0	0	0	0	0
63.1	Data processing, hosting and related activities; web portals	0	0	0	0	0
63.9	Other information service activities	0	0	0	0	0
K*	**FINANCIAL AND INSURANCE ACTIVITIES**					
64*	Financial service activities, except insurance and pension funding	0	0	0	0	0
64.1*	Monetary intermediation	0	0	0	0	0
64.2*	Activities of holding companies	0	0	0	0	0
64.3*	Trusts, funds, and similar financial entities	0	0	0	0	0
64.9*	Other financial service activities, except insurance and pension funding	0	0	0	0	0
65*	Insurance, reinsurance, and pension funding, except compulsory social security	0	0	0	0	0
65.1*	Insurance	0	0	0	0	0
65.2*	Reinsurance	0	0	0	0	0
65.3*	Pension funding	0	0	0	0	0
66*	Activities auxiliary to financial services and insurance activities	0	0	0	0	0
66.1*	Activities auxiliary to financial services, except insurance and pension funding	0	0	0	0	0

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	Number of industries that passed selection	**94**	**68**	**62**	**45**	**19**
66.2*	Activities auxiliary to insurance and pension funding	0	0	0	0	0
66.3*	Fund management activities	0	0	0	0	0
L	**REAL ESTATE ACTIVITIES**					
68	Real estate activities	1	1	0	0	0
68.1	Buying and selling of own real estate	0	0	0	0	0
68.2	Rental and operating of own or leased real estate	1	1	0	0	0
68.3	Real estate activities on a fee or contract basis	0	0	0	0	0
M	**PROFESSIONAL, SCIENTIFIC, AND TECHNICAL ACTIVITIES**					
69	Legal and accounting activities	1	1	0	0	0
69.1	Legal activities	1	0	0	0	0
69.2	Accounting, bookkeeping, and auditing activities; tax consultancy	1	0	0	0	0
70	Activities of head offices; management consultancy activities	0	0	0	0	0
70.1	Activities of head offices	0	0	0	0	0
70.2	Management consultancy activities	0	0	0	0	0
71	Architectural and engineering activities; technical testing and analysis	1	1	0	1	0
71.1	Architectural and engineering activities and related technical consultancy	1	1	0	0	0
71.2	Technical testing and analysis	1	0	1	1	0
72	Scientific research and development	0	0	0	0	0
72.1	Research and experimental development on natural sciences and engineering	0	0	0	0	0
72.2	Research and experimental development on social sciences and humanities	0	0	0	0	0
73	Advertising and market research	0	0	0	0	0
73.1	Advertising	0	0	0	0	0
73.2	Market research and public opinion polling	0	0	0	0	0
74	Other professional, scientific, and technical activities	0	0	1	0	0
74.1	Specialised design activities	0	0	0	0	0
74.2	Photographic activities	0	0	0	0	0
74.3	Translation and interpretation activities	0	0	1	0	0
74.9	Other professional, scientific, and technical activities n.e.c.	0	0	0	0	0
75	Veterinary activities	0	0	0	0	0
N	**ADMINISTRATIVE AND SUPPORT SERVICE ACTIVITIES**					
77	Rental and leasing activities	1	1	0	0	0
77.1	Rental and leasing of motor vehicles	0	0	0	0	0
77.2	Rental and leasing of personal and household goods	0	0	0	0	0
77.3	Rental and leasing of other machinery, equipment, and tangible goods	1	0	0	0	0
77.4	Leasing of intellectual property and similar products, except copyrighted works	0	0	0	0	0
78	Employment activities	0	0	0	0	0
78.1	Activities of employment placement agencies	0	0	0	0	0
78.2*	Temporary employment agency activities	0	0	0	0	0
78.3	Other human resources provision	0	0	0	0	0

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	Number of industries that passed selection	**94**	**68**	**62**	**45**	**19**
79	Travel agency, tour operator and other reservation service and related activities	1	1	0	0	0
79.1	Travel agency and tour operator activities	1	1	0	0	0
79.9	Other reservation service and related activities	0	0	0	0	0
80	Security and investigation activities	1	0	0	0	0
80.1	Private security activities	1	0	0	0	0
80.2	Security systems service activities	0	0	0	0	0
80.3*	Investigation activities	0	0	0	0	0
81	Services to buildings and landscape activities	1	1	0	0	0
81.1	Combined facilities support activities	0	0	0	0	0
81.2	Cleaning activities	1	1	0	0	0
81.3	Landscape service activities	0	0	0	0	0
82	Office administrative, office support and other business support activities	1	0	0	0	0
82.1	Office administrative and support activities	0	0	0	0	0
82.2	Activities of call centres	0	0	0	0	0
82.3	Organisation of conventions and trade shows	0	0	0	0	0
82.9	Business support service activities n.e.c.	1	0	0	0	0
O	**PUBLIC ADMINISTRATION AND DEFENCE; COMPULSORY SOCIAL SECURITY**					
84	Public administration and defence; compulsory social security	0	0	0	0	0
84.1*	Administration of the State and the economic and social policy of the community	0	0	0	0	0
84.2	Provision of services to the community as a whole	0	0	0	0	0
84.3*	Compulsory social security activities	0	0	0	0	0
P	**EDUCATION**					
85	Education	0	0	0	0	0
85.1	Pre-primary education	0	0	0	0	0
85.2*	Primary education	0	0	0	0	0
85.3	Secondary education	0	0	0	0	0
85.4	Higher education	0	0	0	0	0
85.5	Other education	0	0	0	0	0
85.6*	Educational support activities	0	0	0	0	0
Q	**HUMAN HEALTH AND SOCIAL WORK ACTIVITIES**					
86	Human health activities	0	0	1	1	0
86.1	Hospital activities	0	0	0	0	0
86.2	Medical and dental practice activities	0	0	0	0	0
86.9	Other human health activities	0	0	1	1	0
87	Residential care activities	0	0	0	0	0
87.1*	Residential nursing care activities	0	0	0	0	0
87.2	Residential care activities for mental retardation, mental health and substance abuse	0	0	0	0	0
87.3*	Residential care activities for the elderly and disabled	0	0	0	0	0
87.9*	Other residential care activities	0	0	0	0	0

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	Number of industries that passed selection	**94**	**68**	**62**	**45**	**19**
88*	Social work activities without accommodation	0	0	0	0	0
88.1*	Social work activities without accommodation for the elderly and disabled	0	0	0	0	0
88.9*	Other social work activities without accommodation	0	0	0	0	0
R	**ARTS, ENTERTAINMENT AND RECREATION**					
90*	Creative, arts and entertainment activities	0	0	0	0	0
91*	Libraries, archives, museums, and other cultural activities	0	0	0	0	0
92	Gambling and betting activities	0	0	0	0	0
93	Sports activities and amusement and recreation activities	0	0	0	0	0
93.1*	Sports activities	0	0	0	0	0
93.2	Amusement and recreation activities	0	0	0	0	0
S	**OTHER SERVICE ACTIVITIES**					
94*	Activities of membership organisations	0	0	0	0	0
94.1*	Activities of business, employers, and professional membership organisations	0	0	0	0	0
94.2*	Activities of trade unions	0	0	0	0	0
94.9*	Activities of other membership organisations	0	0	0	0	0
95	Repair of computers and personal and household goods	0	0	0	0	0
95.1	Repair of computers and communication equipment	0	0	0	0	0
95.2*	Repair of personal and household goods	0	0	0	0	0
96	Other personal service activities	0	0	0	0	0
T*	**ACTIVITIES OF HOUSEHOLDS AS EMPLOYERS; UNDIFFERENTIATED GOODS- AND SERVICES-PRODUCING ACTIVITIES OF HOUSEHOLDS FOR OWN USE**					
97*	Activities of households as employers of domestic personnel	0	0	0	0	0
98*	Undifferentiated goods- and services-producing activities of private households for own use	0	0	0	0	0
98.1*	Undifferentiated goods-producing activities of private households for own use	0	0	0	0	0
98.2*	Undifferentiated service-producing activities of private households for own use	0	0	0	0	0
U*	**ACTIVITIES OF EXTRATERRITORIAL ORGANISATIONS AND BODIES**					
99*	Activities of extraterritorial organisations and bodies	0	0	0	0	0

* Industry not covered in the survey on *Innovative activity of enterprises*

Annex C Visualisation of economic mapping for individual industries (NACE Rev. 1.1)

1 Agriculture, hunting and related service activities
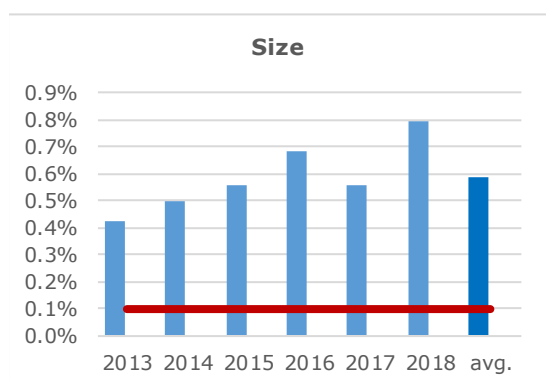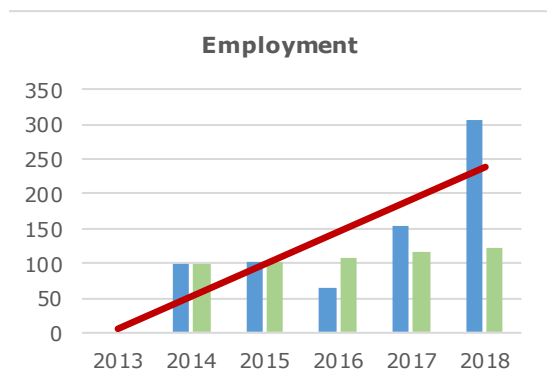

Red line: size threshold
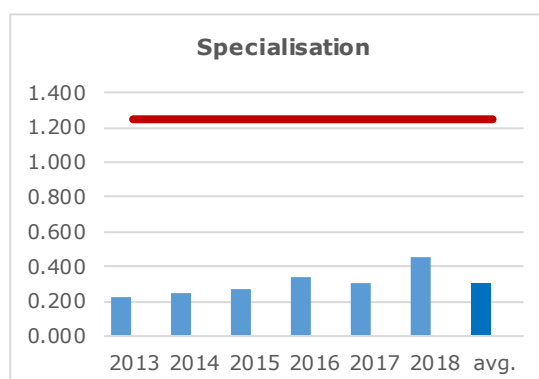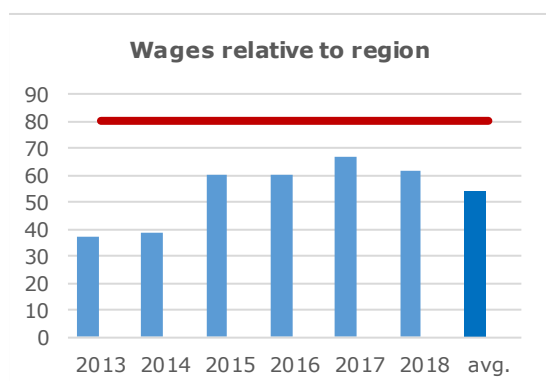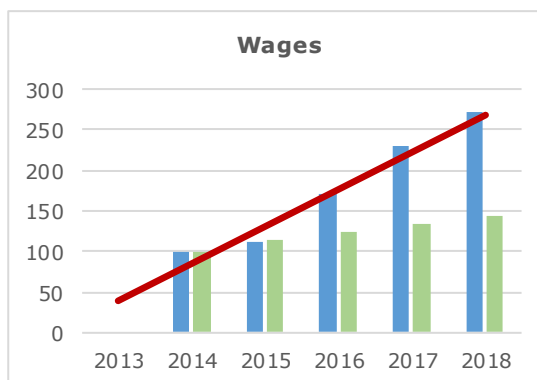

Red line: specialisation threshold

Red line: relative to region threshold
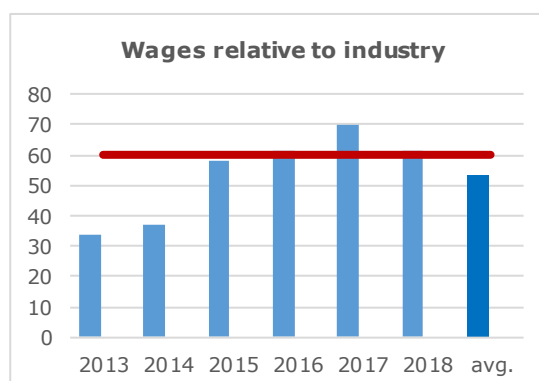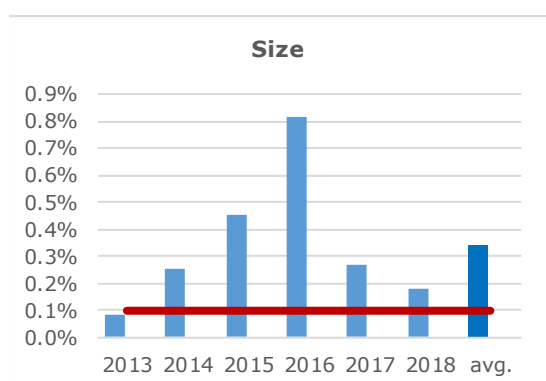

Red line: relative to industry threshold
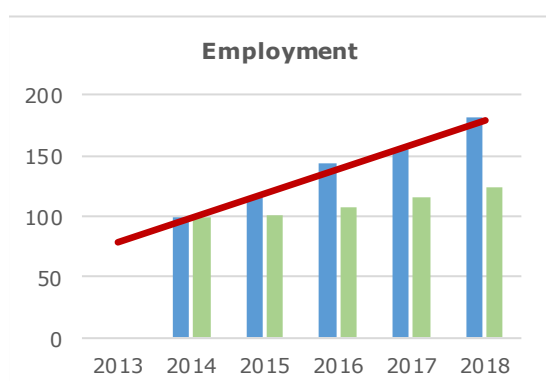
Two-year averages. Index values relative to 2014
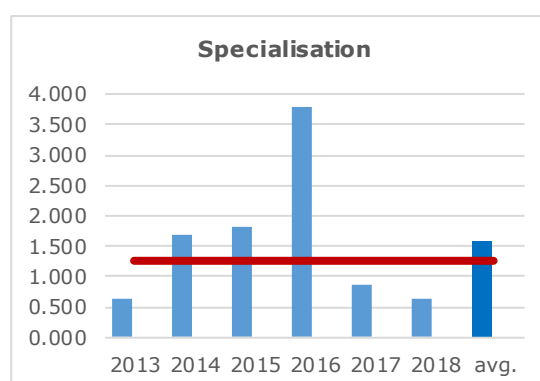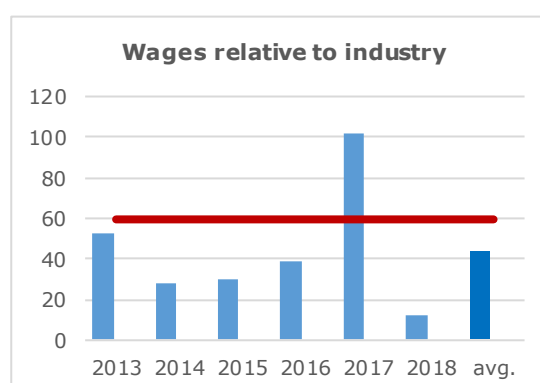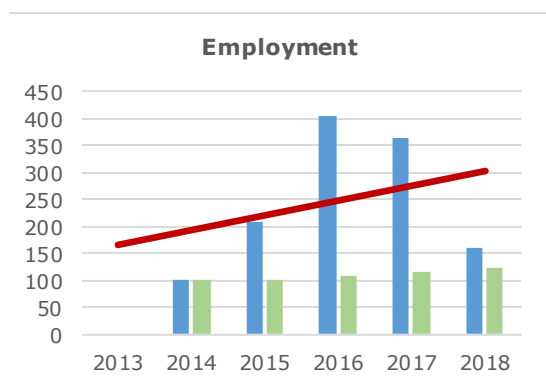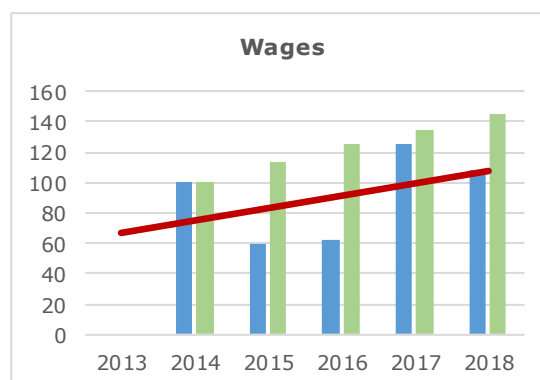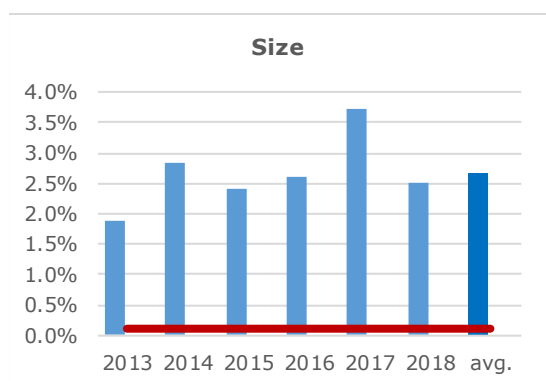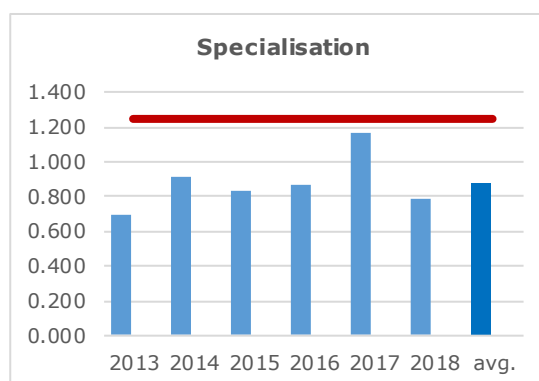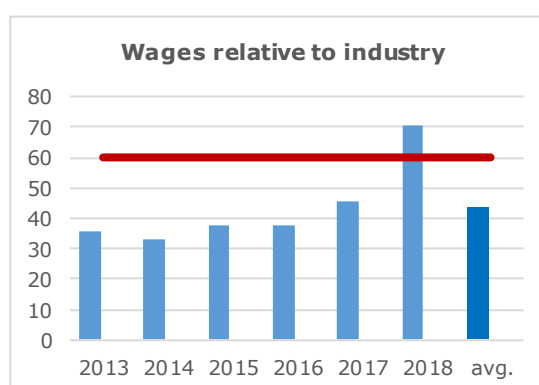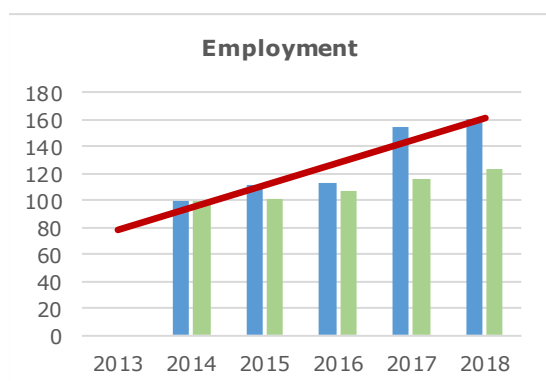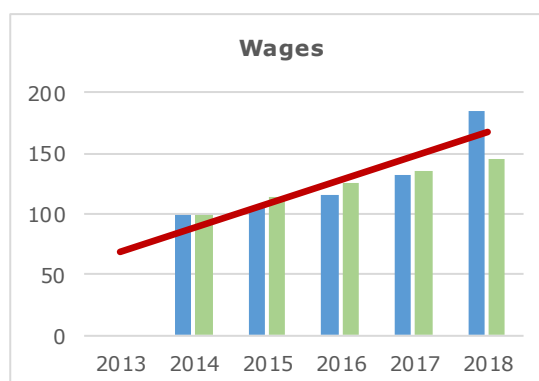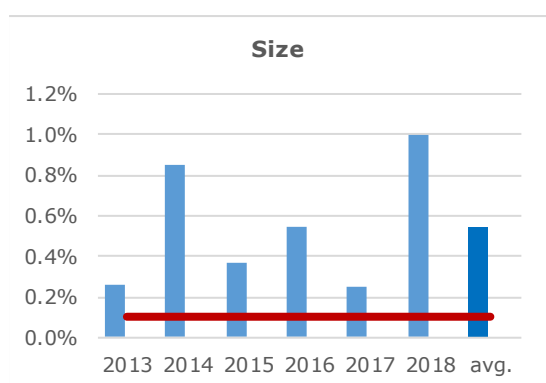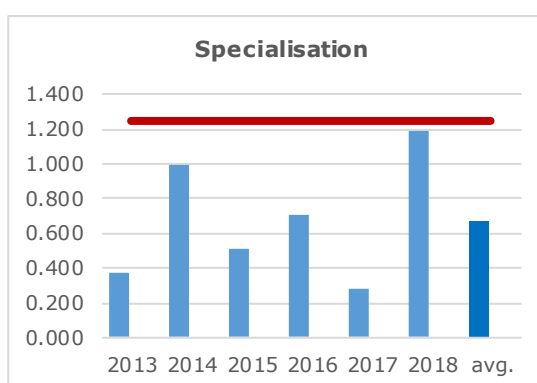Red line: regression line
Green columns: Imereti
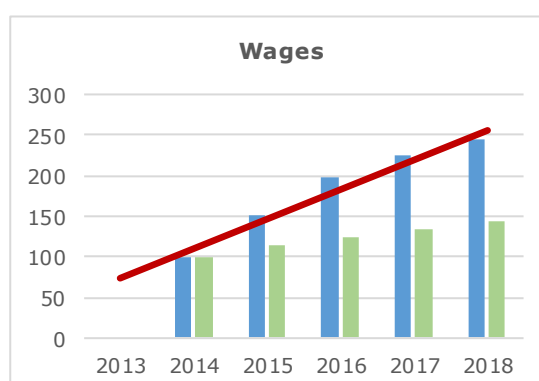
Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

NACE 01 has a dynamic economic potential.

1.1 Growing of crops; market gardening; horticulture
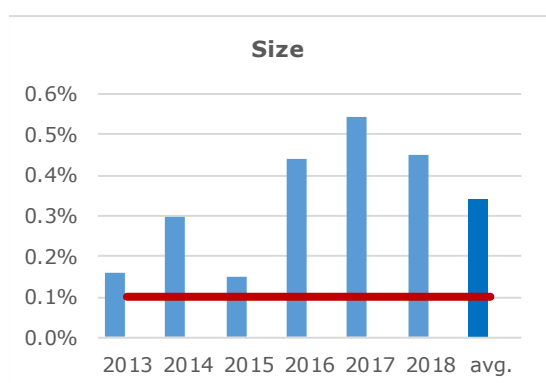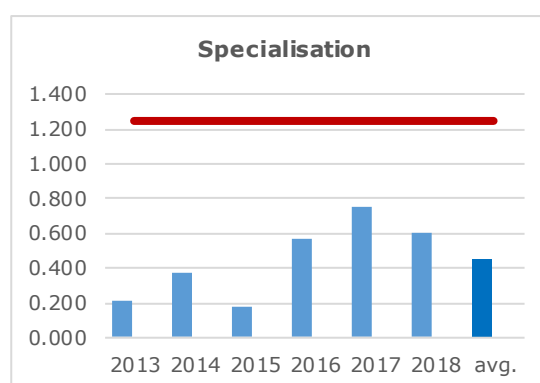
Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

Red line: relative to region threshold

Wages relative to industry

Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

Wages
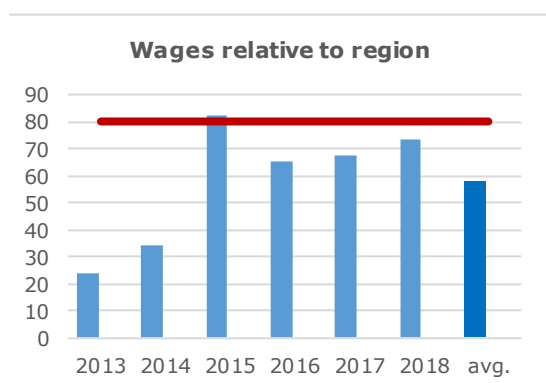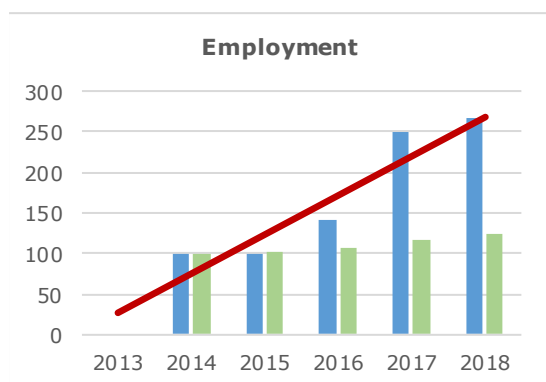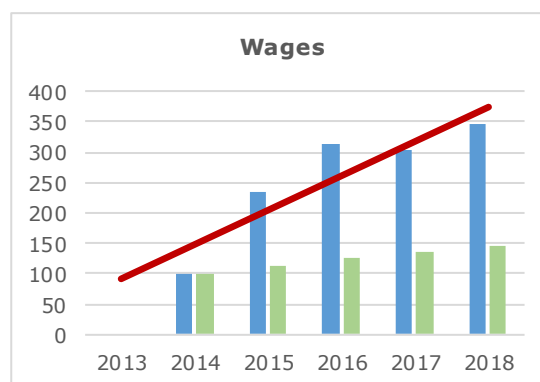
Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

NACE 01.1 has a dynamic economic potential.

13 Mining of metal ores
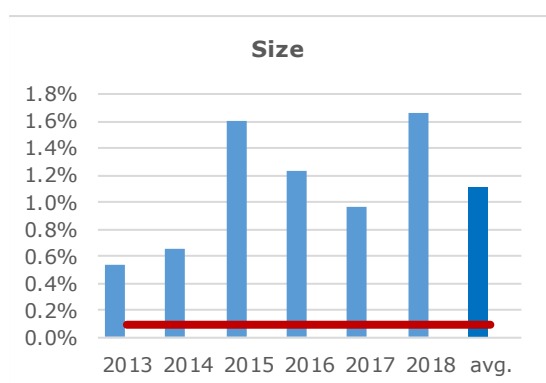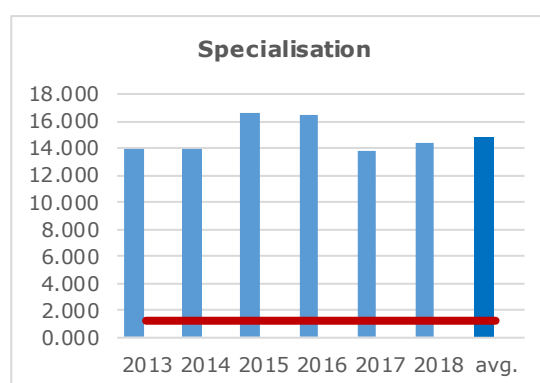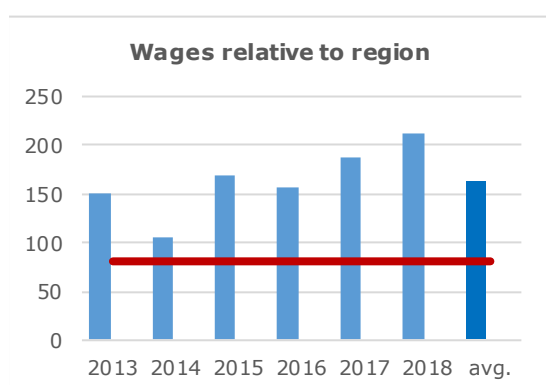
Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

Red line: relative to region threshold

Wages relative to industry

Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

Wages
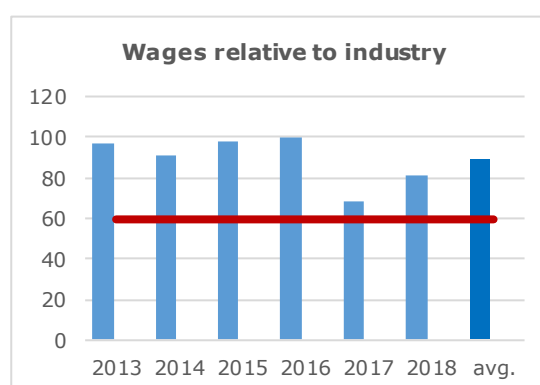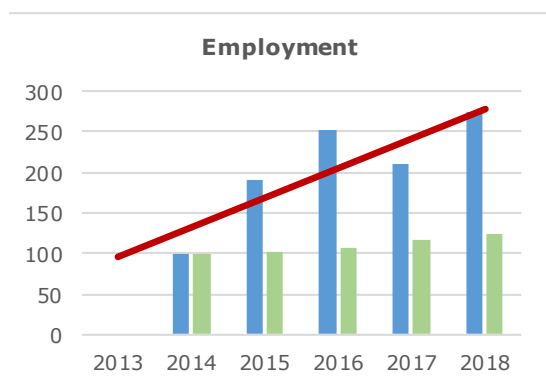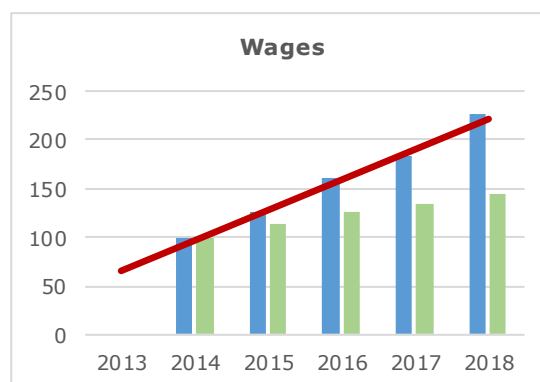
Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

13.2 Mining of non-ferrous metal ores, except uranium and thorium ores
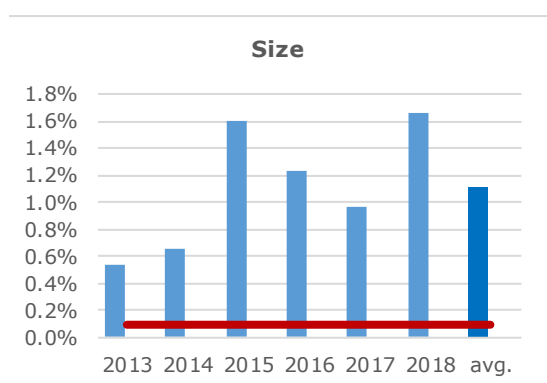
Red line: size threshold
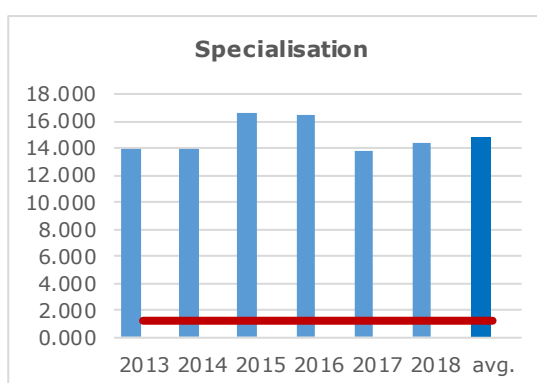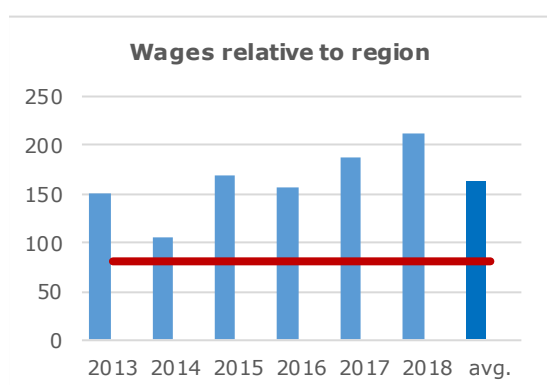
Red line: specialisation threshold

Red line: relative to region threshold
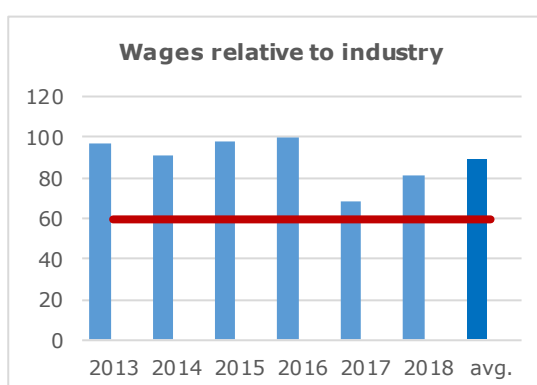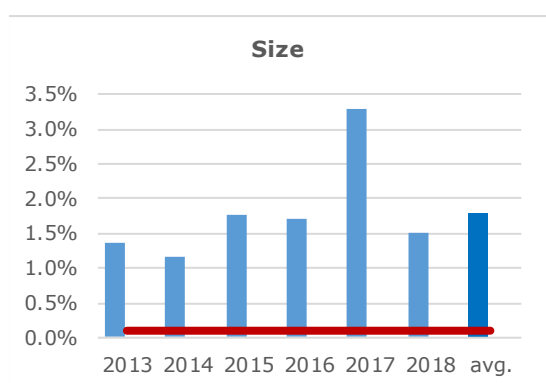

Red line: relative to industry threshold
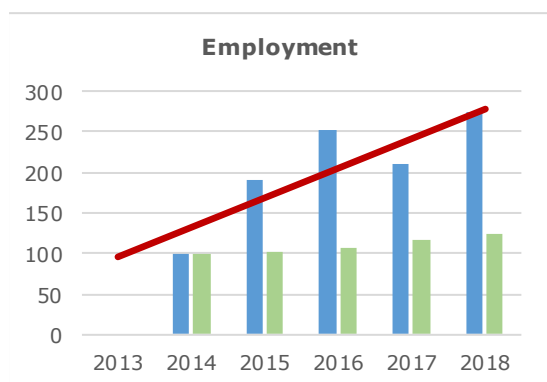
Two-year averages. Index values relative to 2014
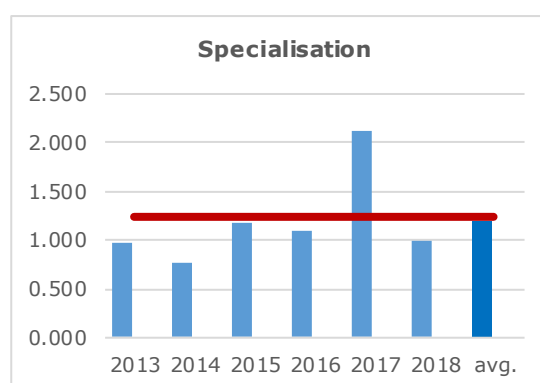Red line: regression line
Green columns: Imereti
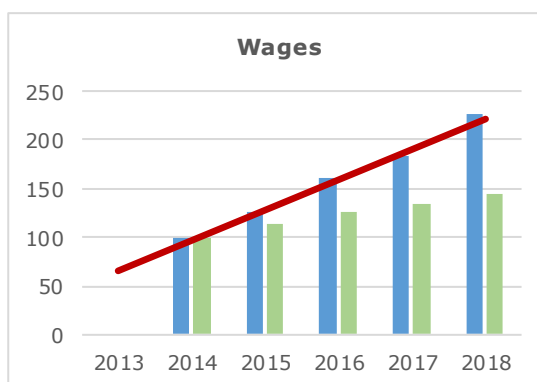
Two-year averages. Index values relative to 2014
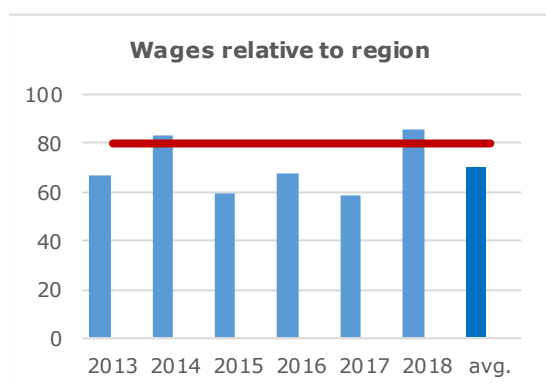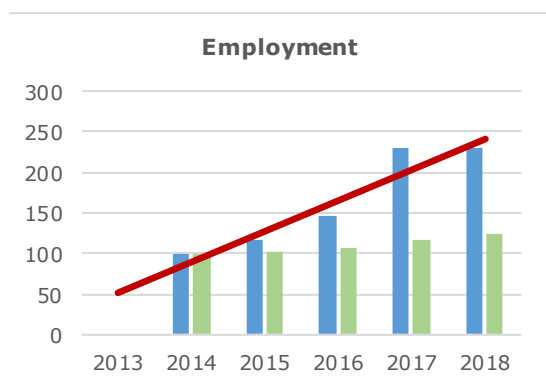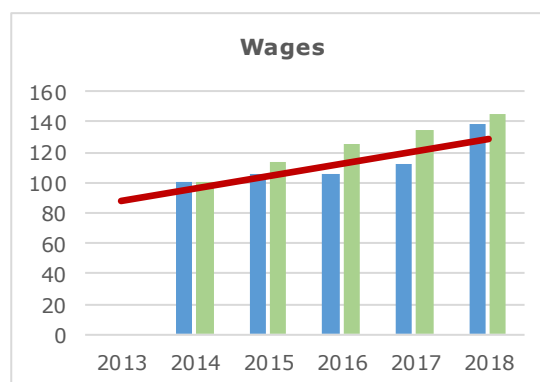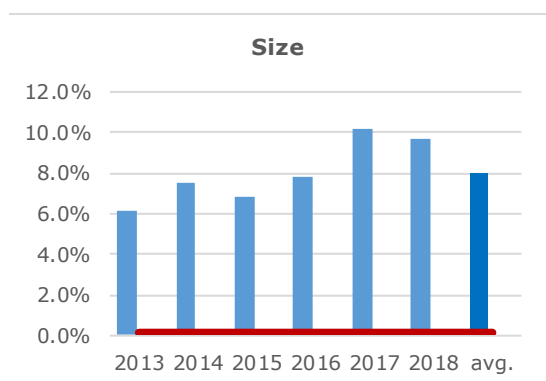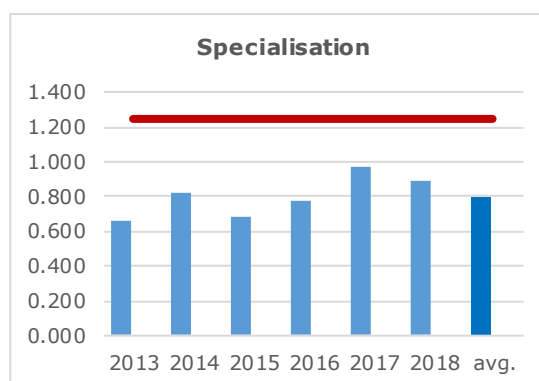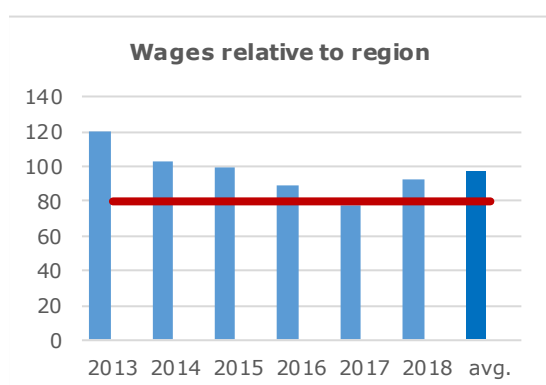Red line: regression line
Green columns: Imereti

NACE 13.2 has a static economic potential.

14 Other mining and quarrying
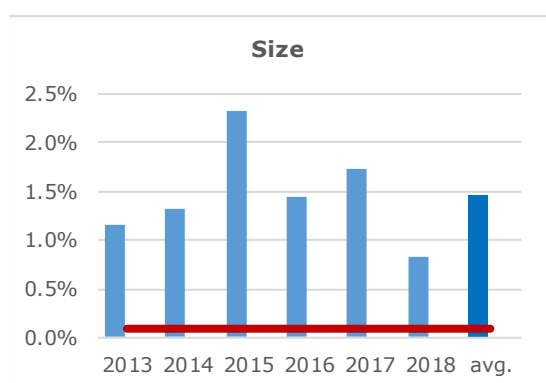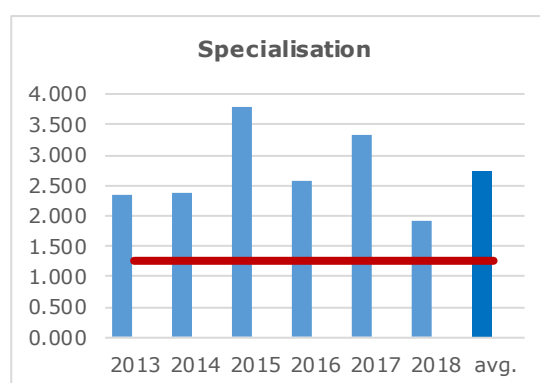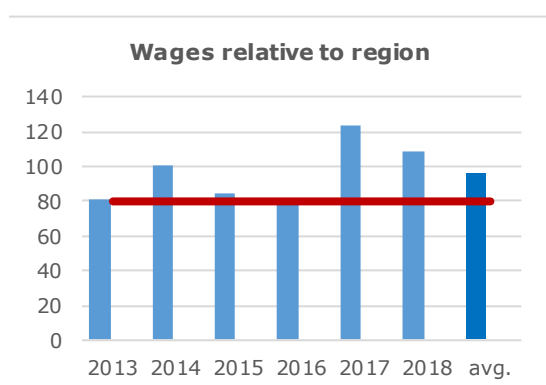
Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

Red line: relative to region threshold

Wages relative to industry

Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

Wages
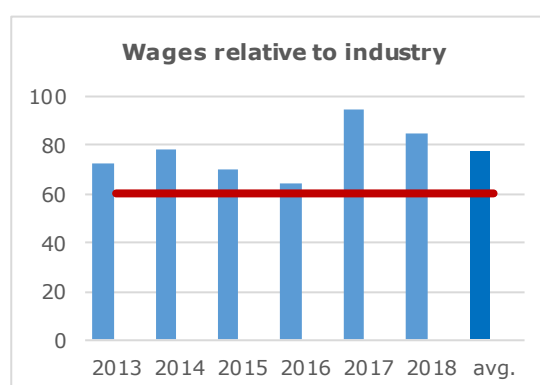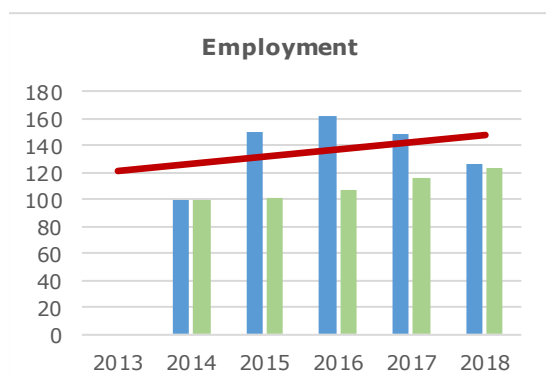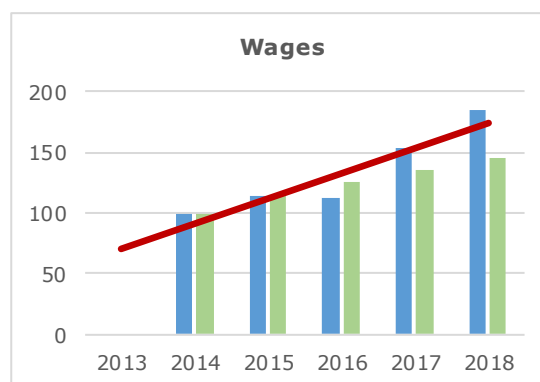
Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

NACE 14 has a static economic potential.

14.1 Quarrying of stone
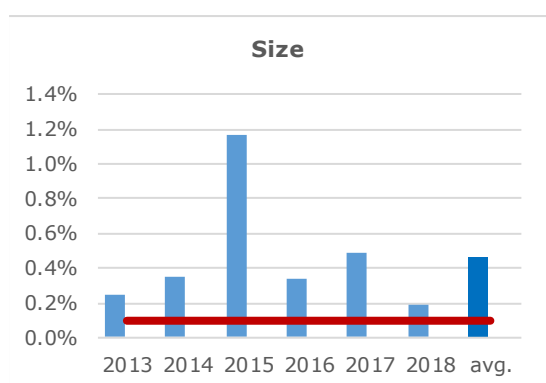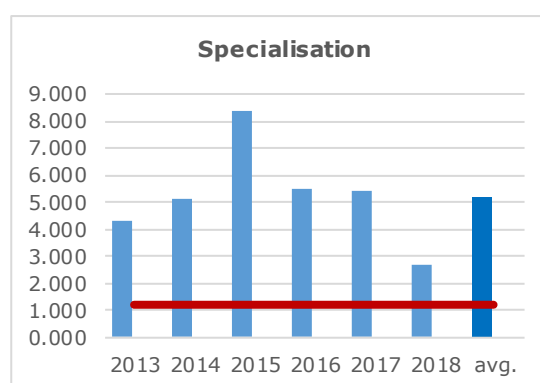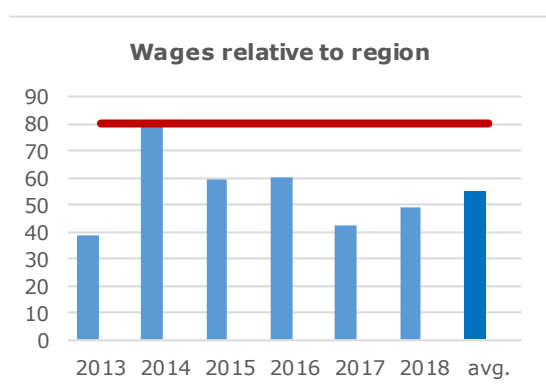
Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region
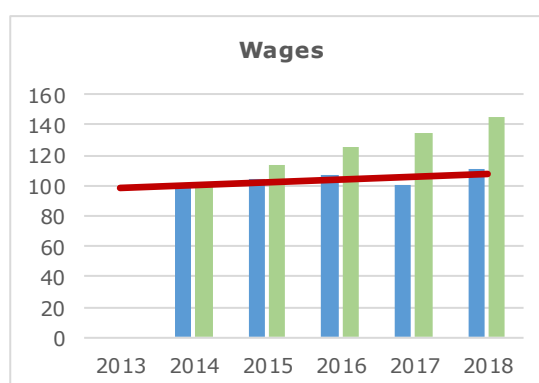
Red line: relative to region threshold

Wages relative to industry

Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

Wages
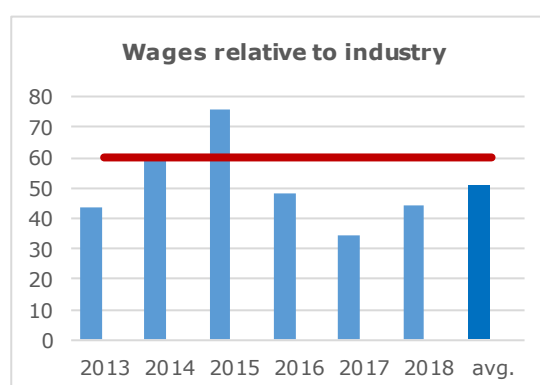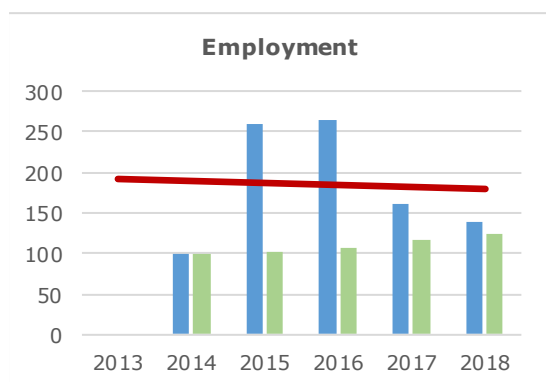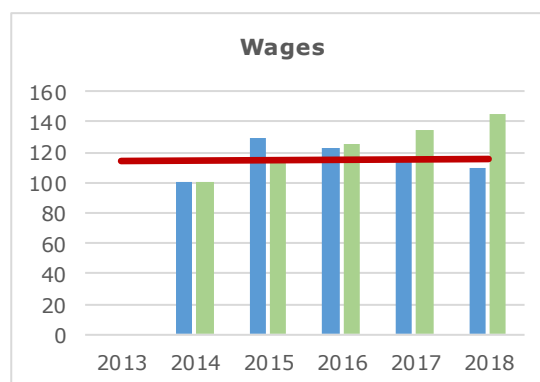
Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

14.2 Quarrying of sand and clay
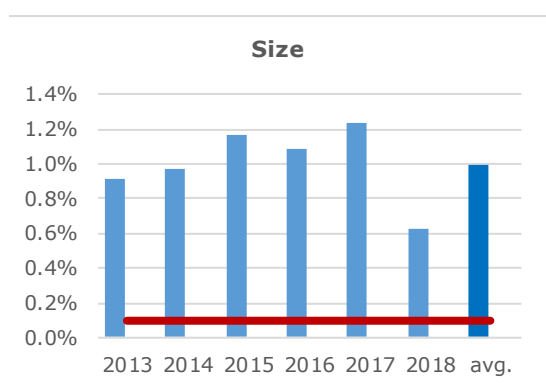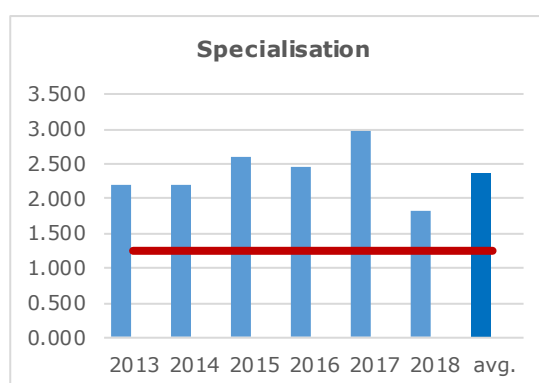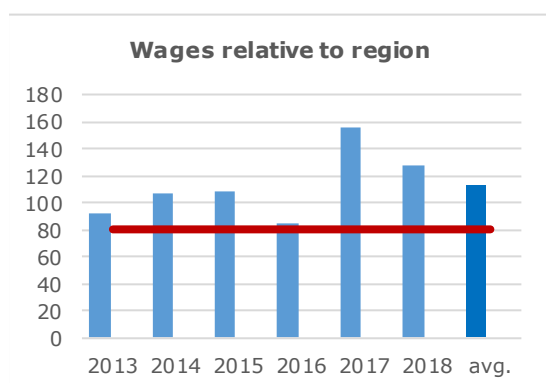
Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

Red line: relative to region threshold

Wages relative to industry

Red line: relative to industry threshold
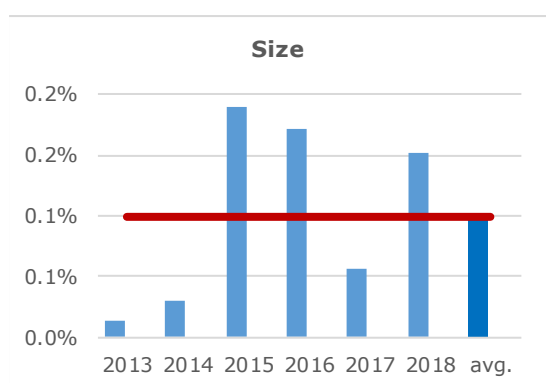
Employment

Two-year averages. Index values relative to 2014
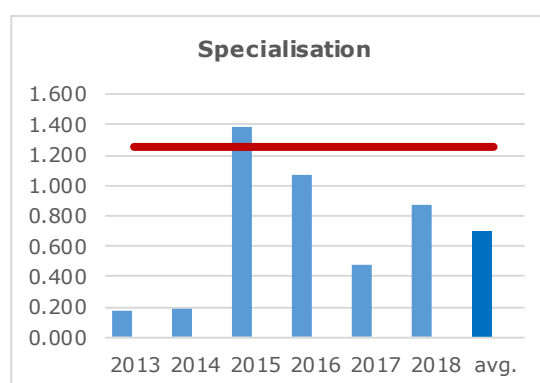Red line: regression line
Green columns: Imereti

Wages
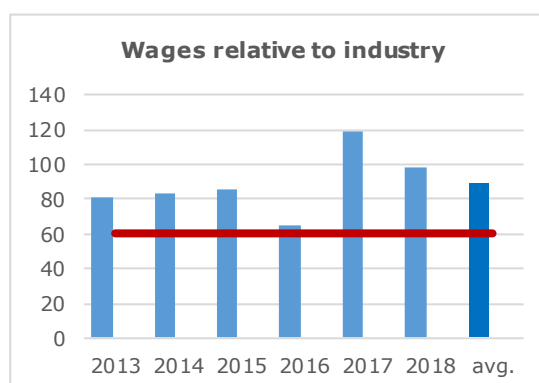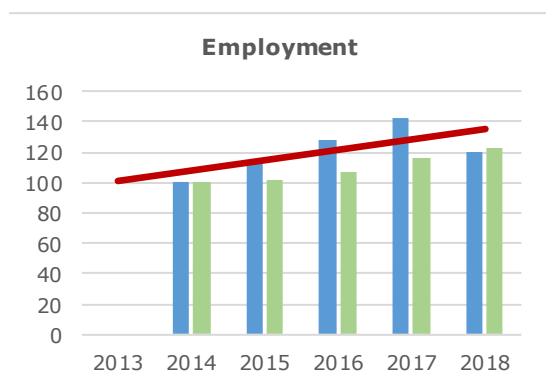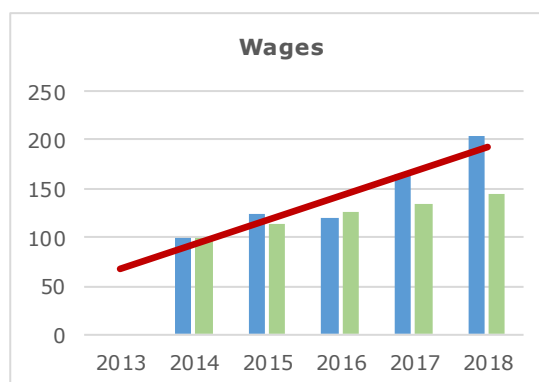
Two-year averages. Index values relative to 2014
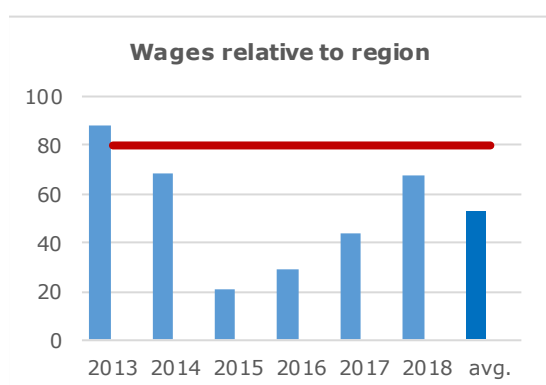Red line: regression line
Green columns: Imereti

NACE 14.2 has a static economic potential.

15 Manufacture of food products and beverages
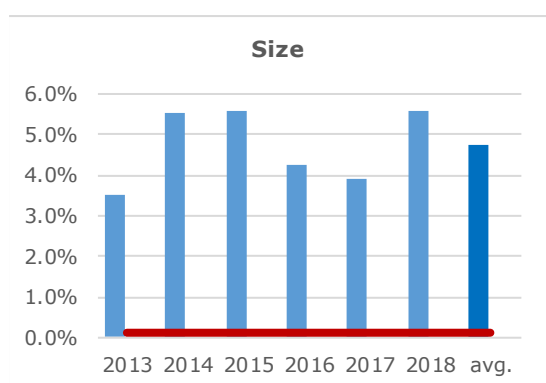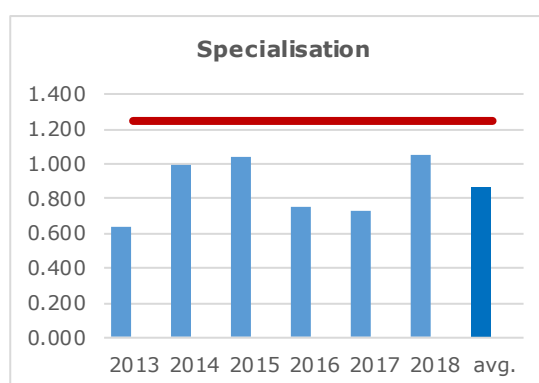
Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

Red line: relative to region threshold

Wages relative to industry

Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

Wages
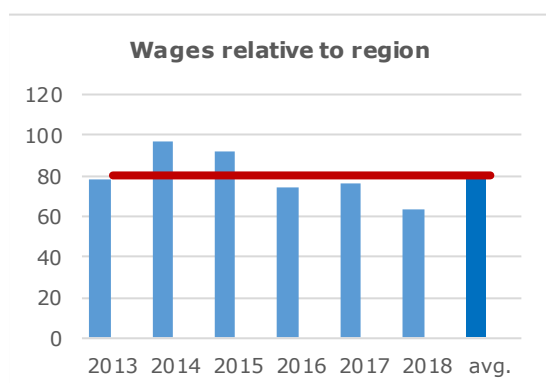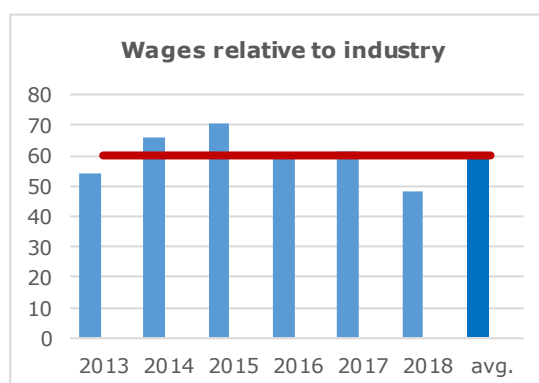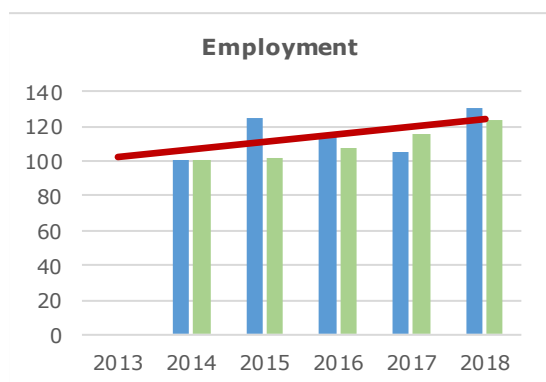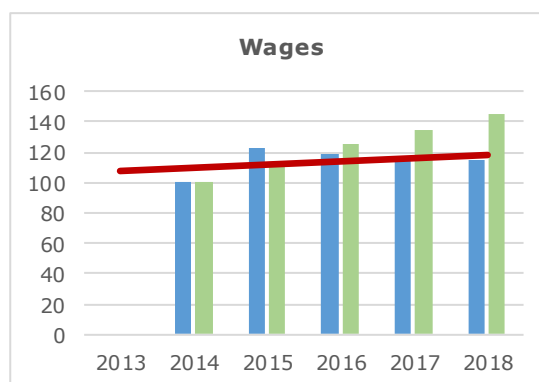
Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

15.1 Production, processing and preserving of meat and meat products
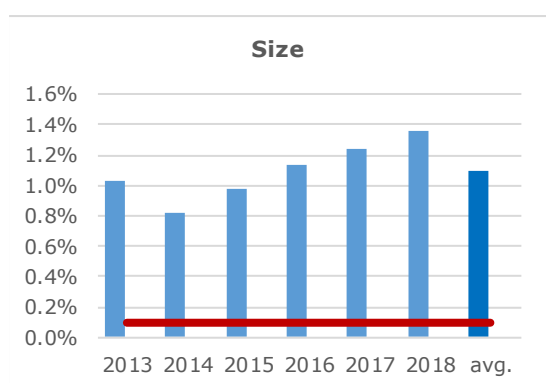
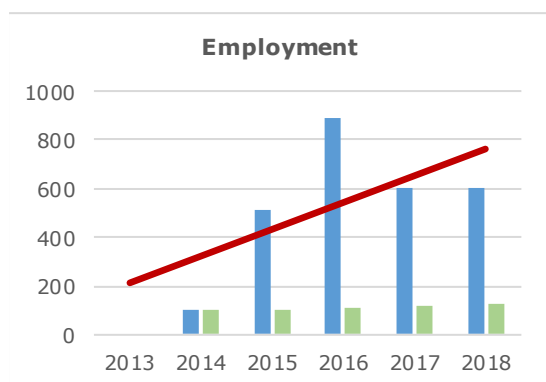Red line: size threshold
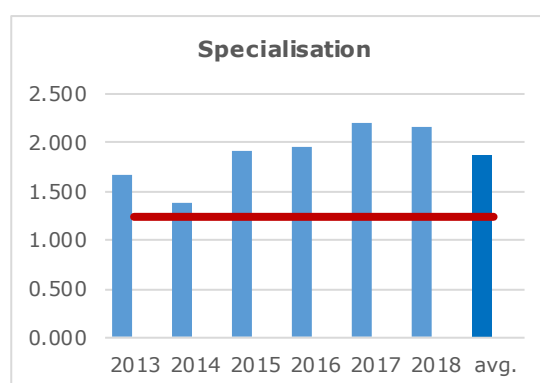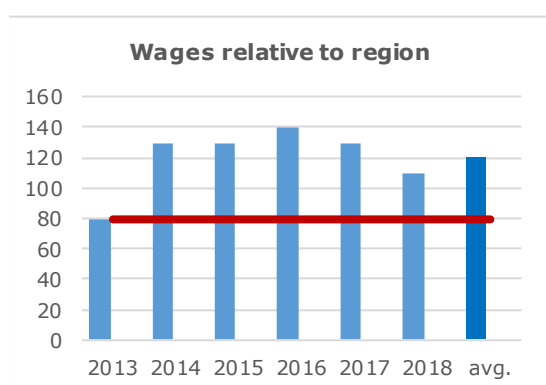
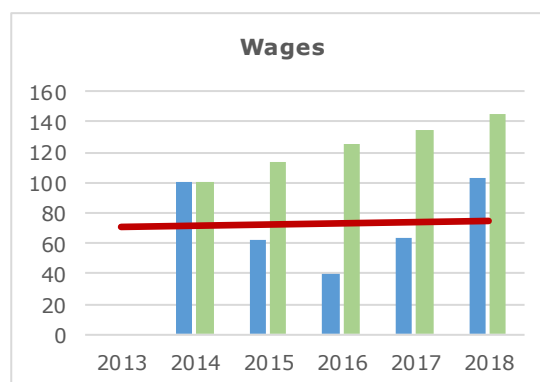Red line: specialisation threshold

Red line: relative to region threshold
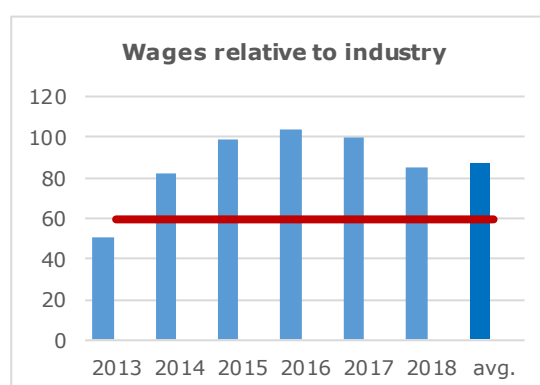
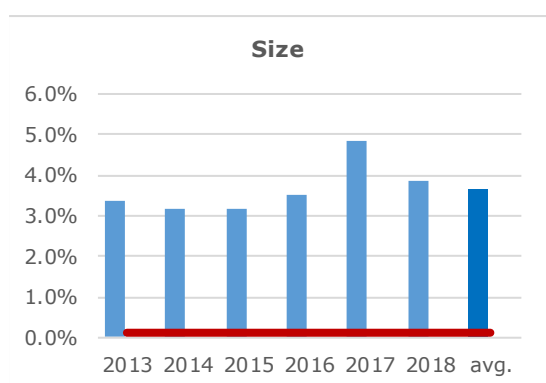Red line: relative to industry threshold
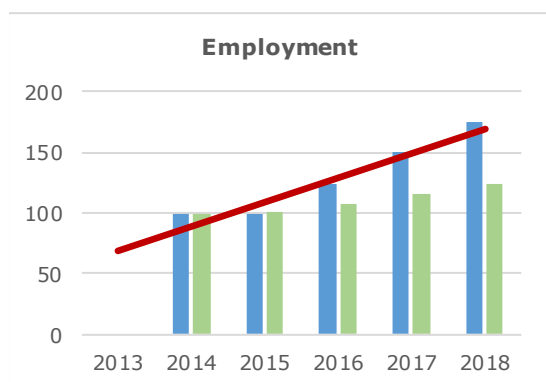
Two-year averages. Index values relative to 2014
Red line: regression line
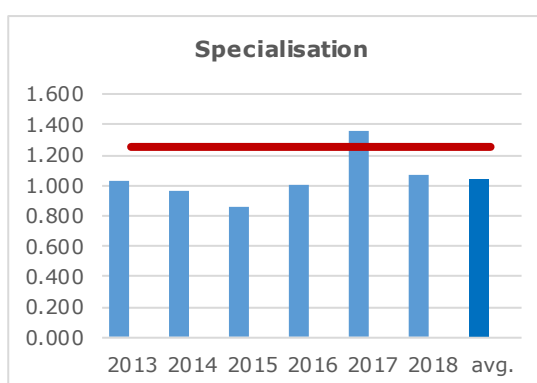Green columns: Imereti
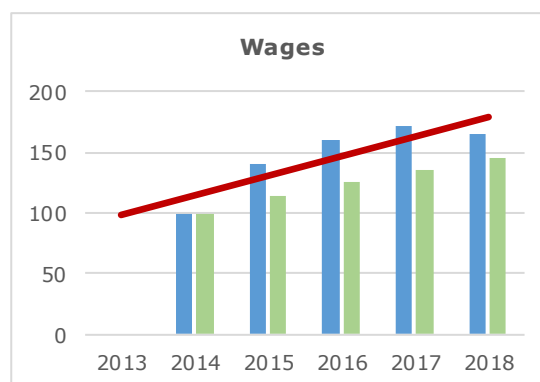
Two-year averages. Index values relative to 2014
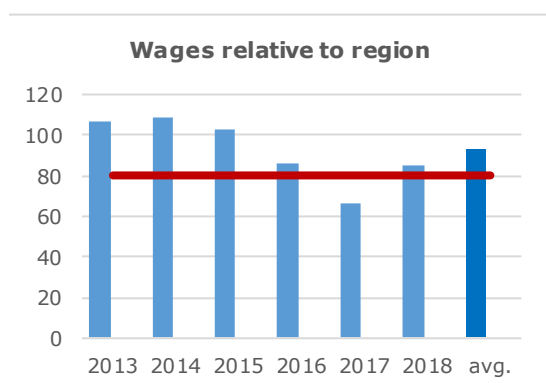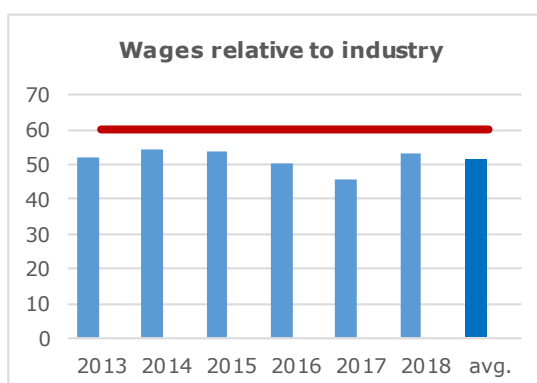Red line: regression line
Green columns: Imereti

NACE 15.1 has a static economic potential and almost a dynamic economic potential (the significance level of the slope for wage growth is just above 5%).

15.5 Manufacture of dairy products
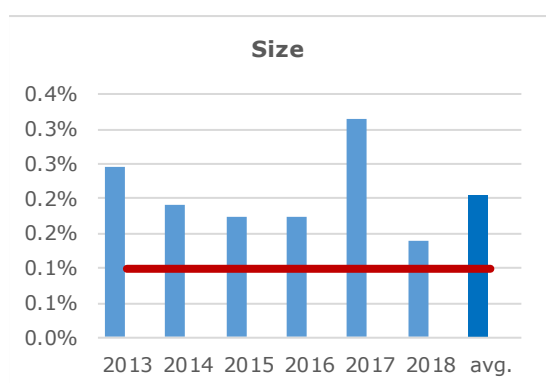
Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

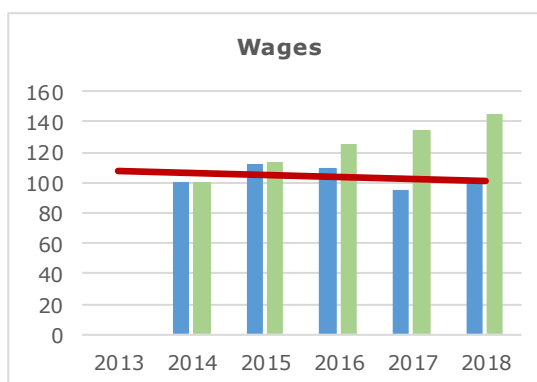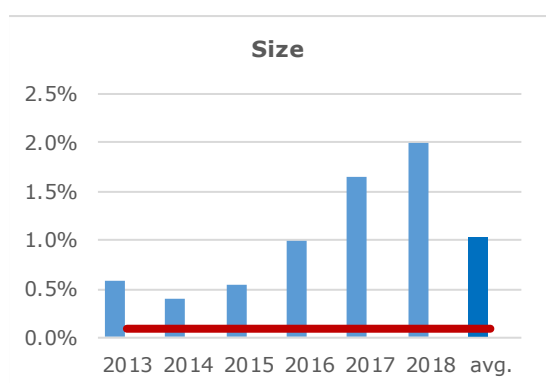Red line: relative to region threshold

Wages relative to industry

Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

Wages
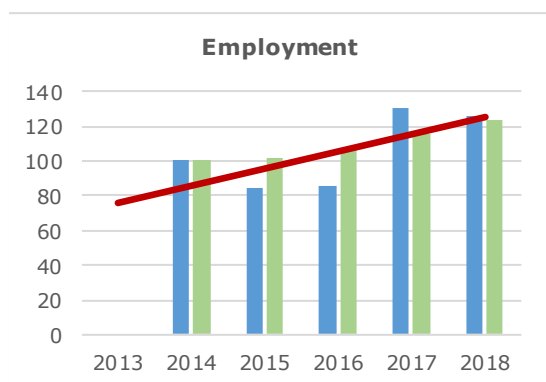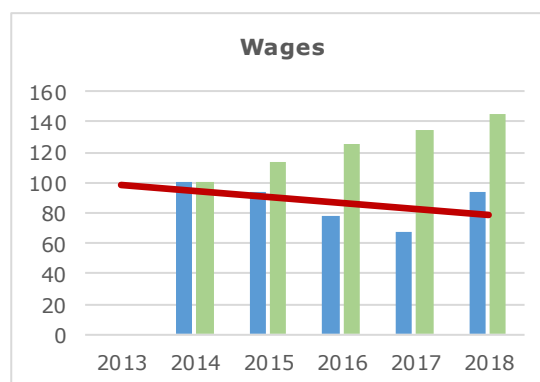
Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

15.6 Manufacture of grain mill products, starches and starch products
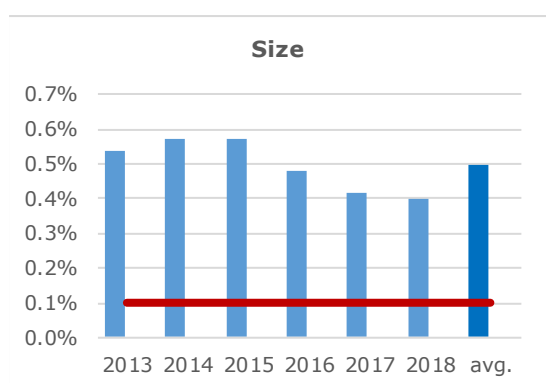
Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

Red line: relative to region threshold

Wages relative to industry

Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
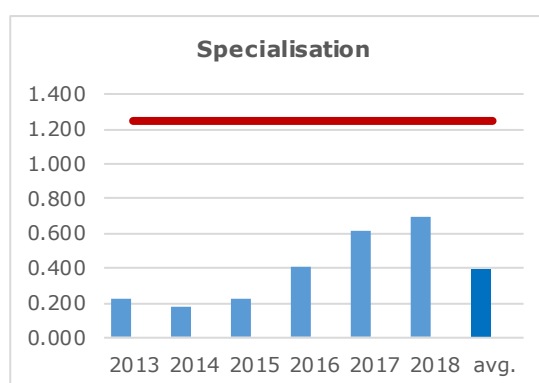Red line: regression line
Green columns: Imereti

Wages

Two-year averages. Index values relative to 2014
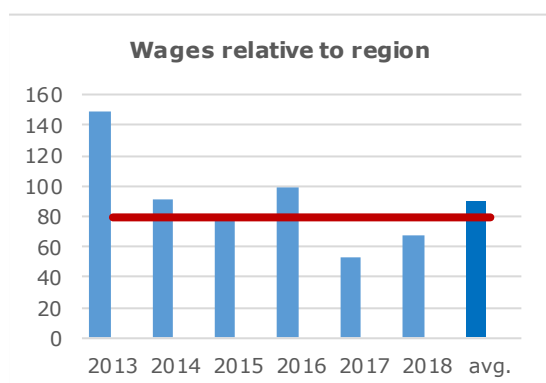Red line: regression line
Green columns: Imereti

15.8 Manufacture of other food products
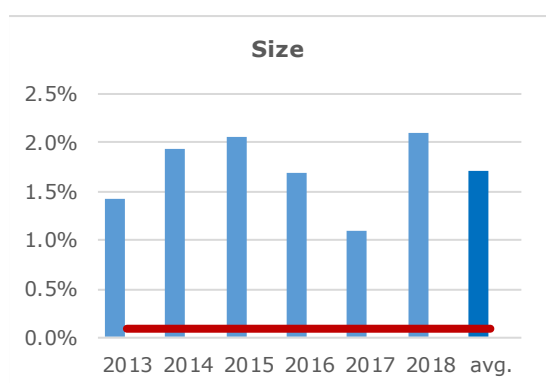
Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

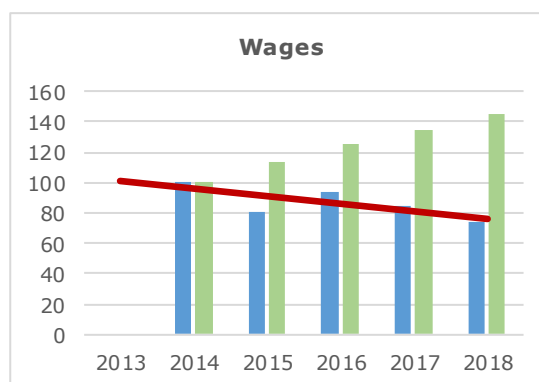
Red line: relative to region threshold

Wages relative to industry

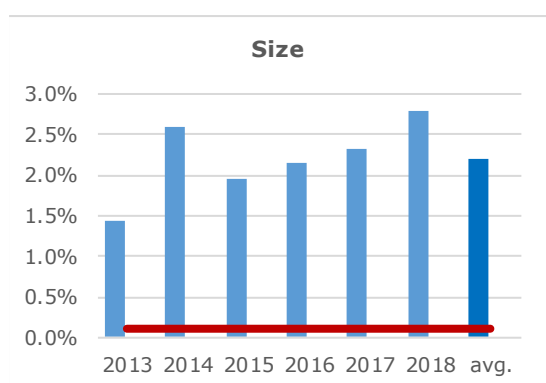Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

Wages

Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

15.9 Manufacture of beverages
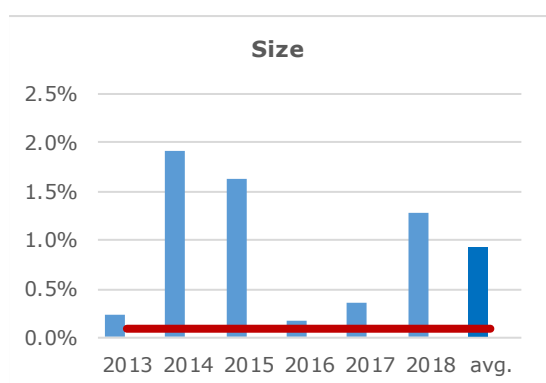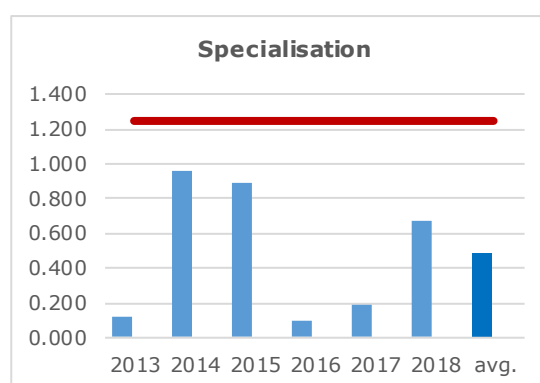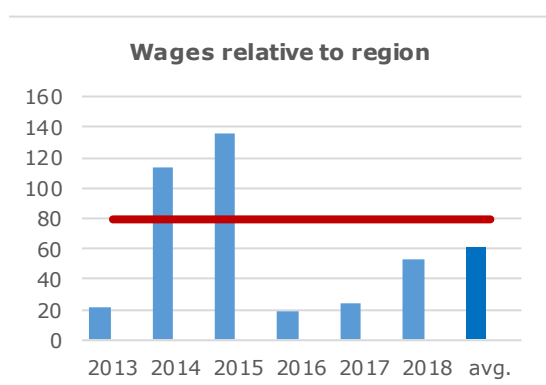
Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

Red line: relative to region threshold

Wages relative to industry

Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
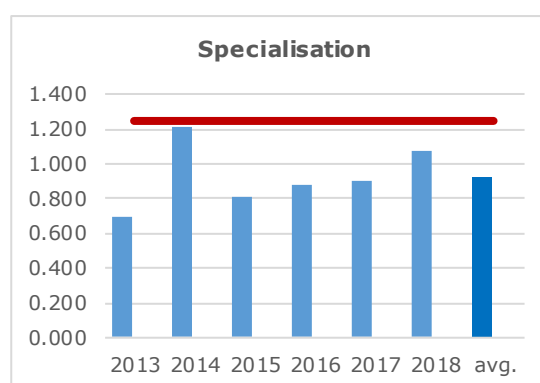Red line: regression line
Green columns: Imereti

Wages
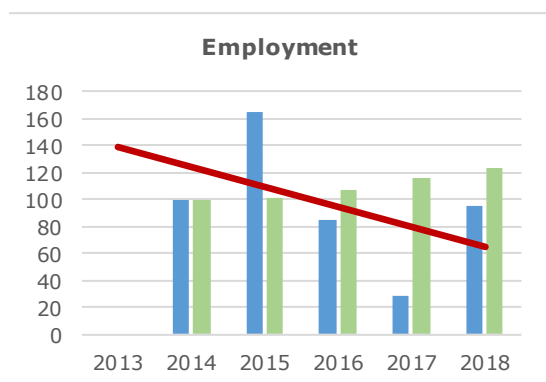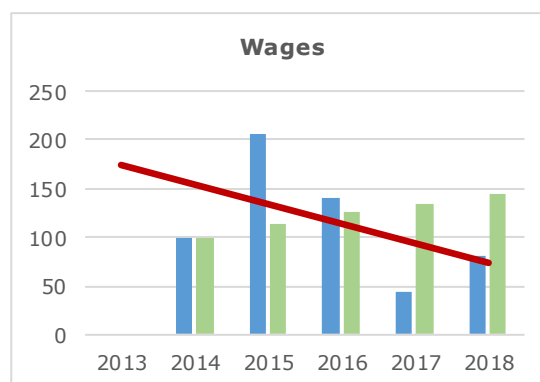
Two-year averages. Index values relative to 2014
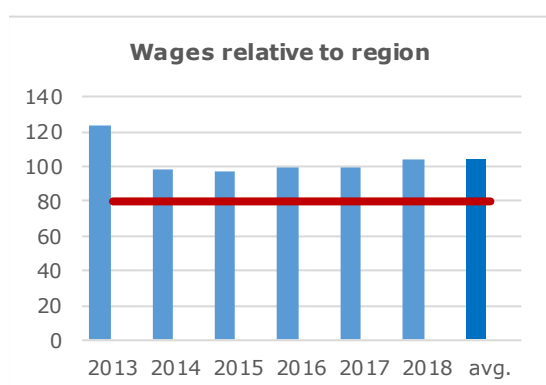Red line: regression line
Green columns: Imereti

18 Manufacture of wearing apparel; dressing and dyeing of fur
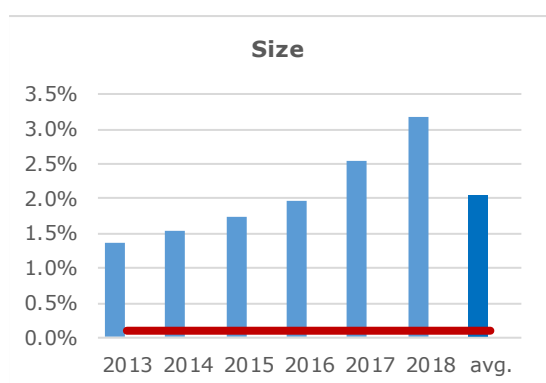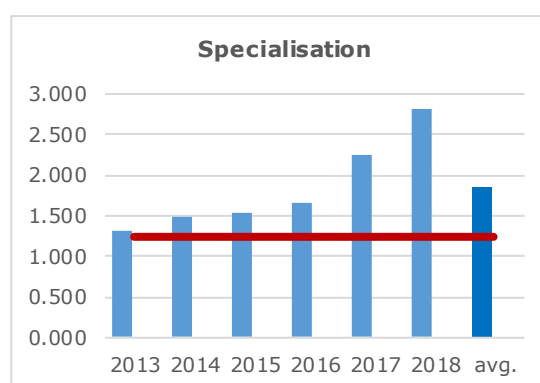
Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

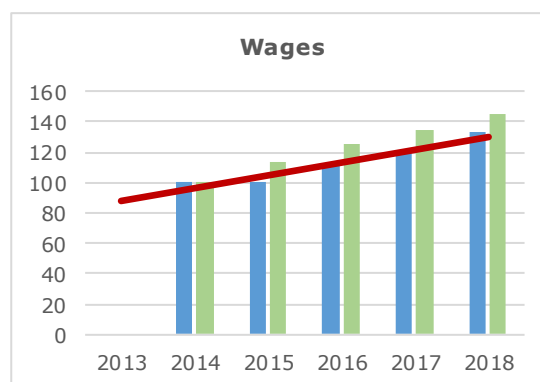Red line: relative to region threshold

Wages relative to industry

Red line: relative to industry threshold
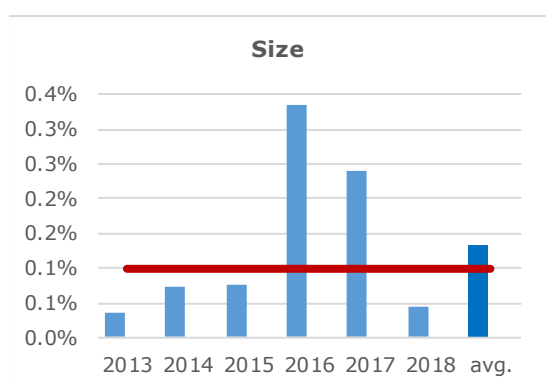
Employment

Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

Wages
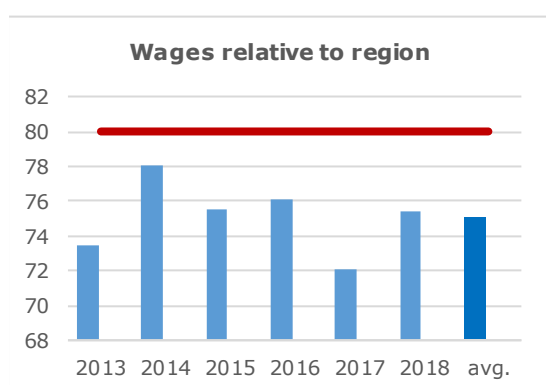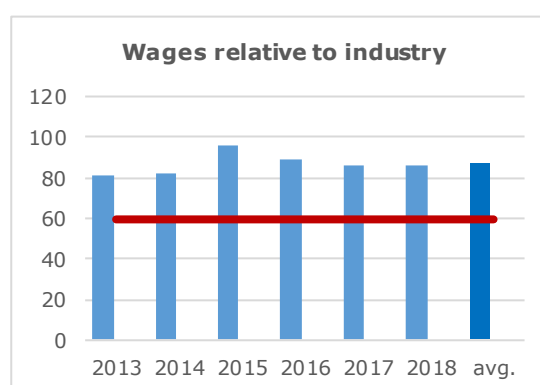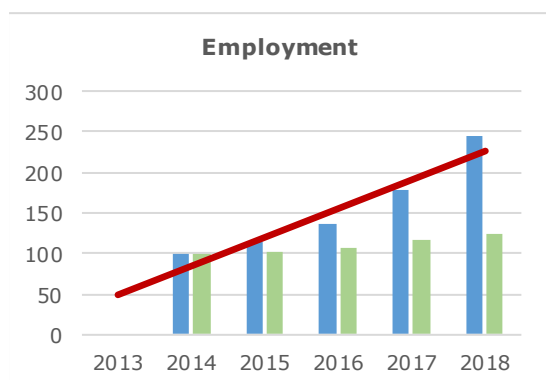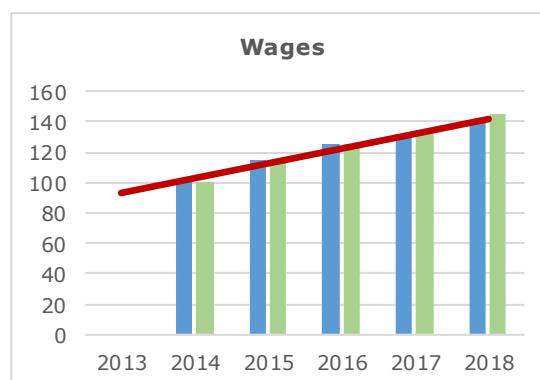
Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

18.2 Manufacture of other wearing apparel and accessories
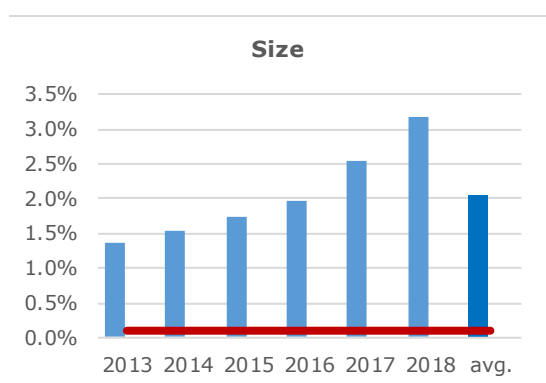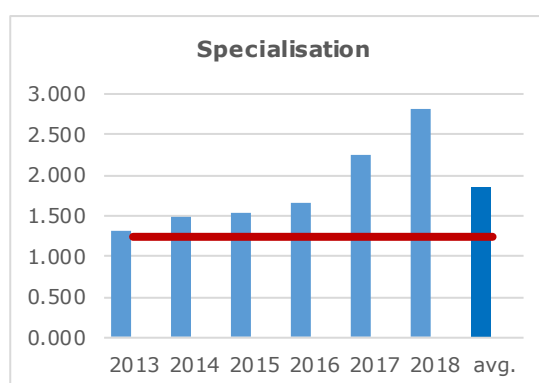
Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

Red line: relative to region threshold

Wages relative to industry

Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

Wages
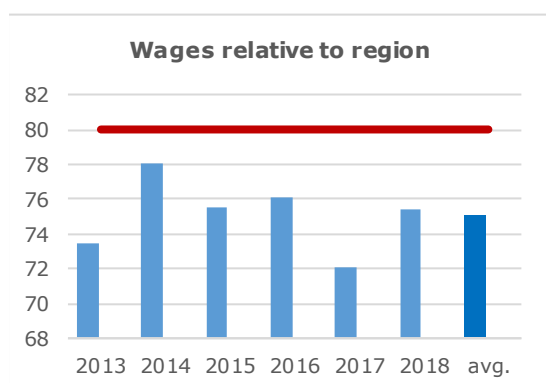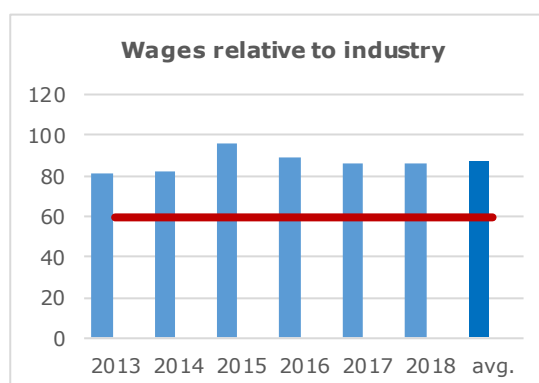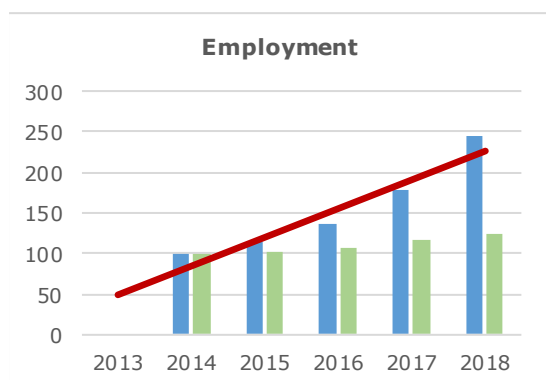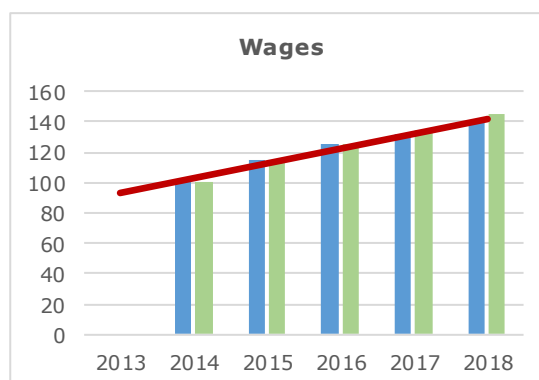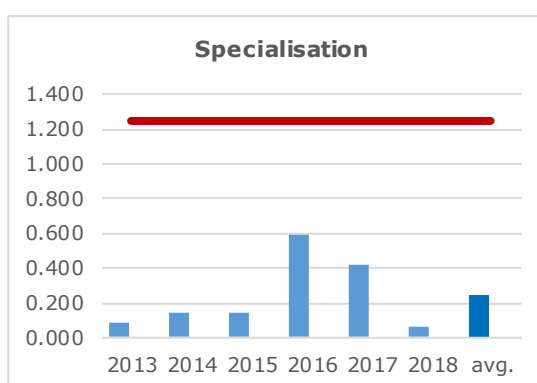

Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

NACE 18.2 has a dynamic economic potential.

## 19 Tanning and dressing of leather; manufacture of luggage, handbags, saddlery, harness and footwear

Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

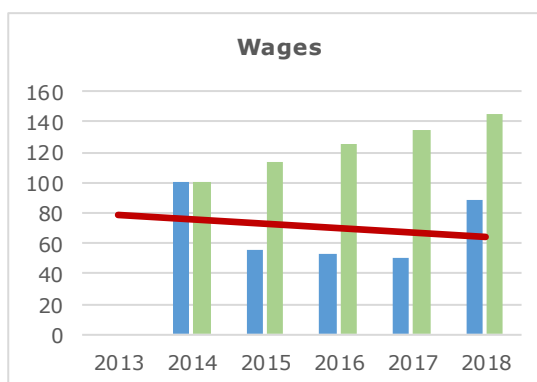

Red line: relative to region threshold

Wages relative to industry

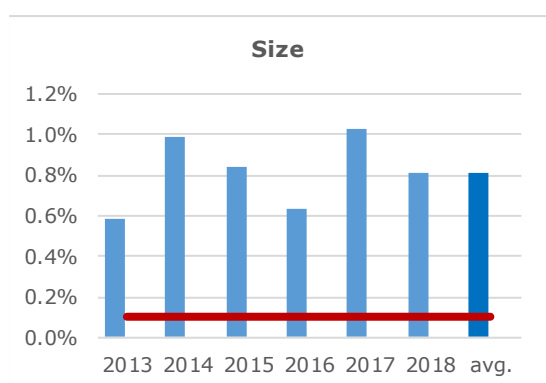Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

Wages
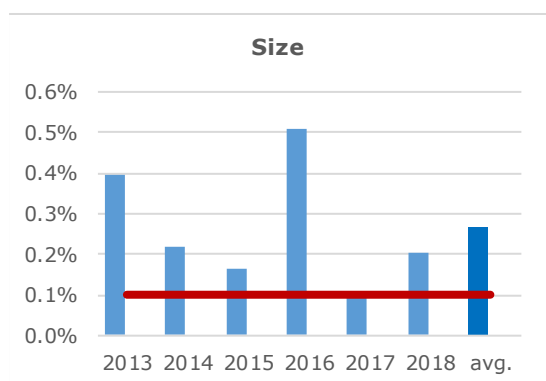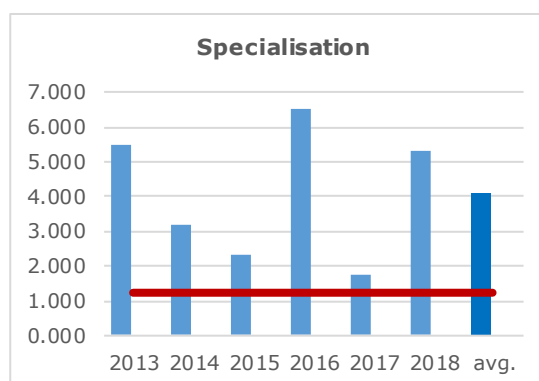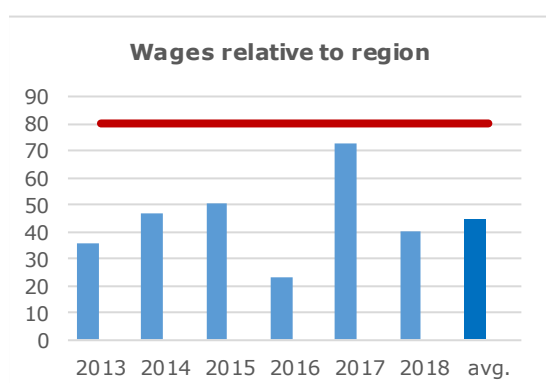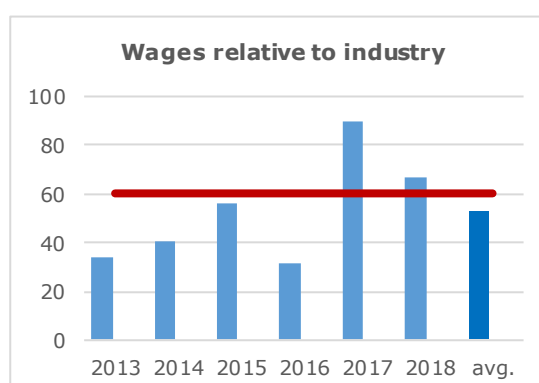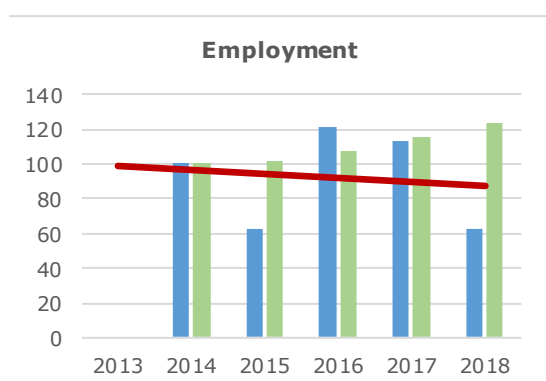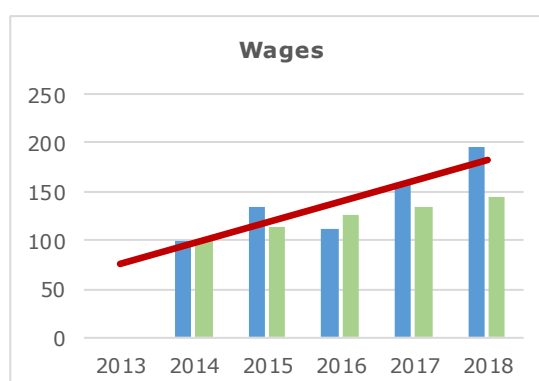
Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

19.3 Manufacture of footwear
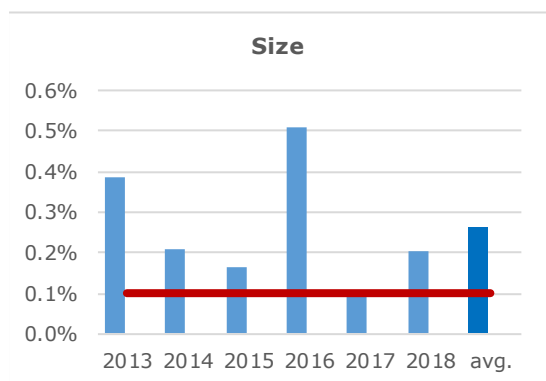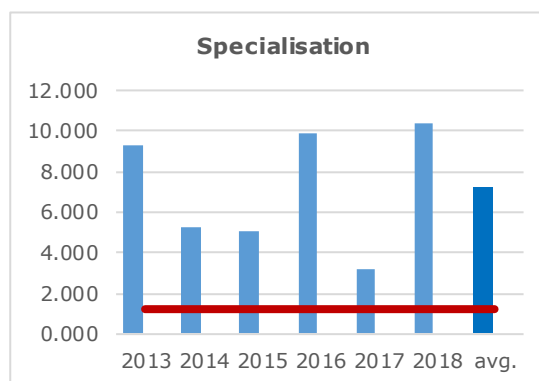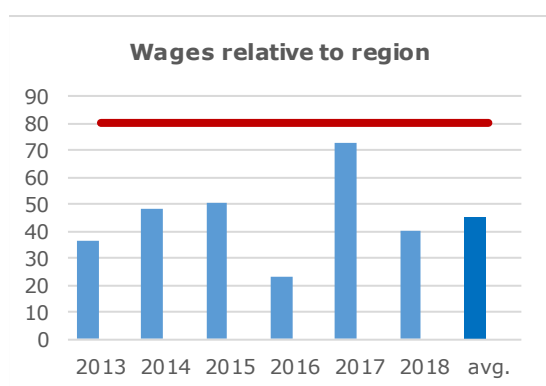
Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

Red line: relative to region threshold

Wages relative to industry

Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
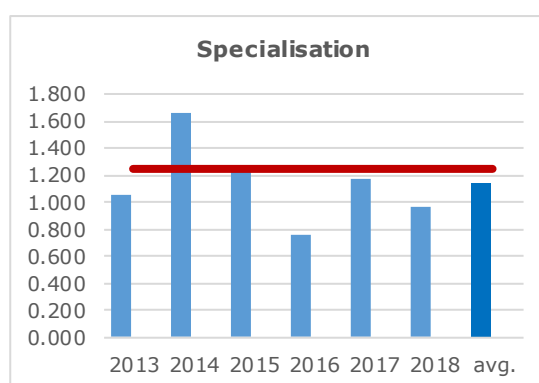Red line: regression line
Green columns: Imereti

Wages
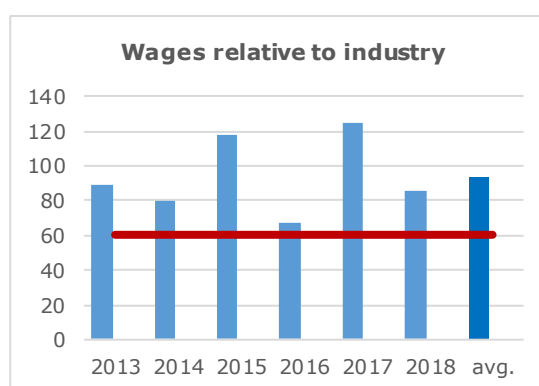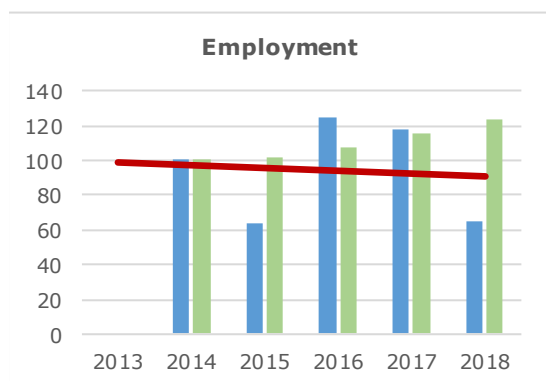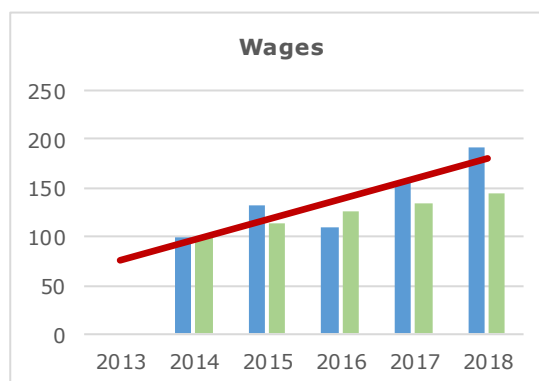
Two-year averages. Index values relative to 2014
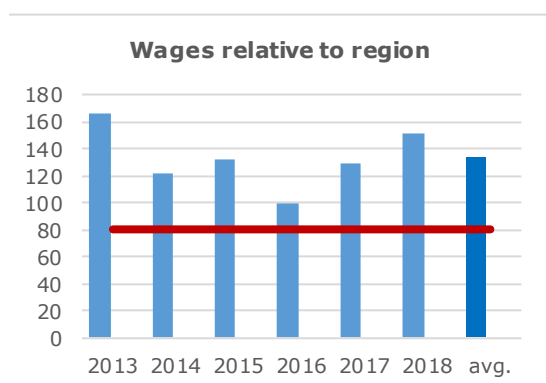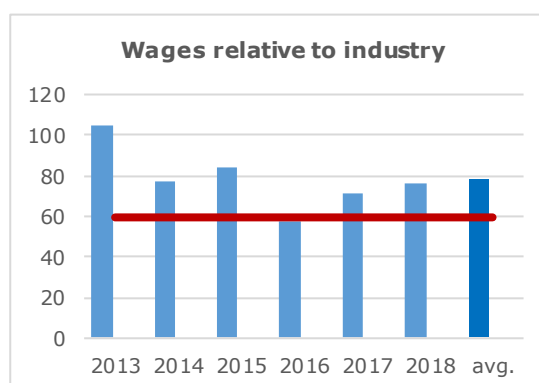Red line: regression line
Green columns: Imereti

20 Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials

Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

Red line: relative to region threshold

Wages relative to industry

Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

Wages
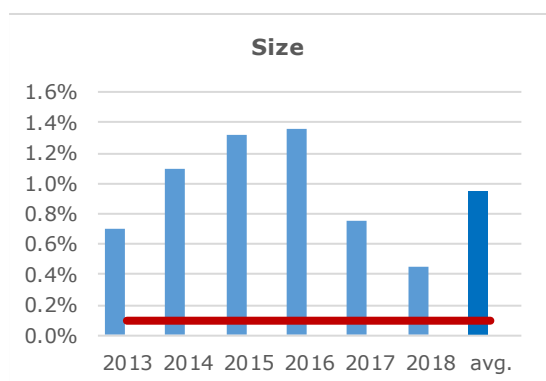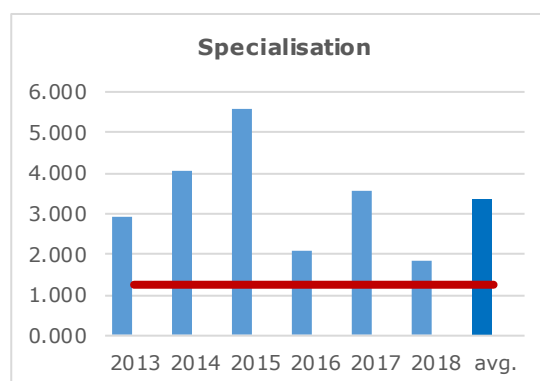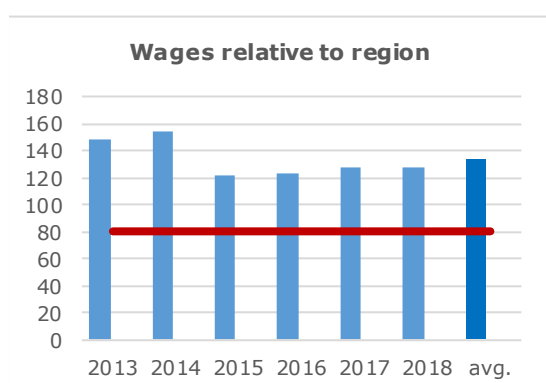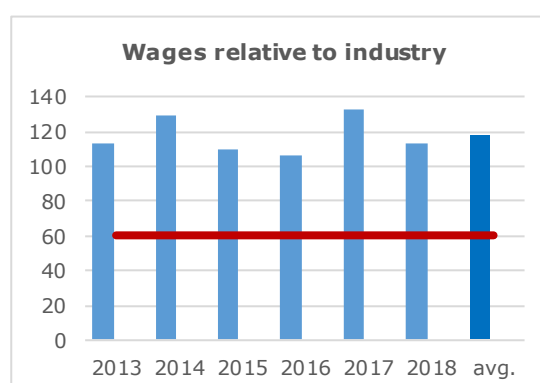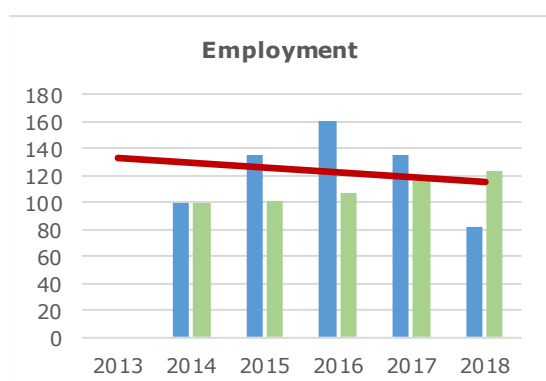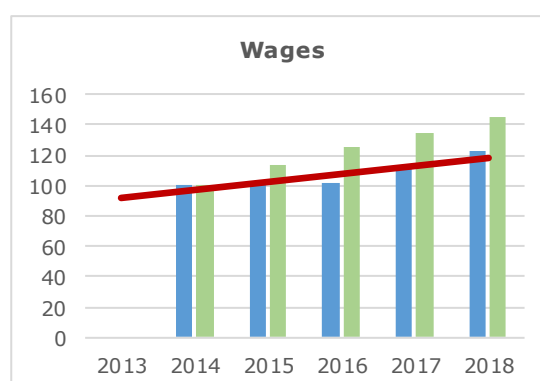
Two-year averages. Index values relative to 2014
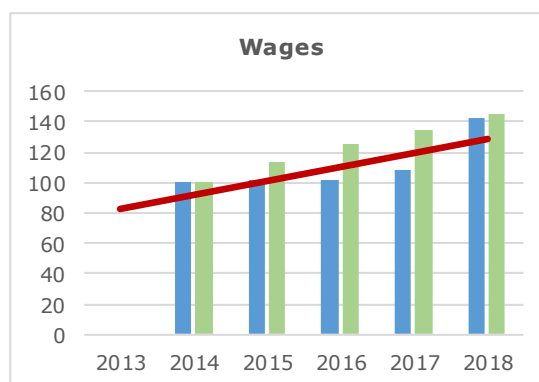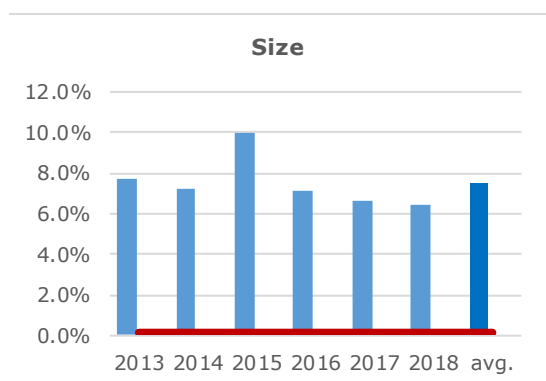Red line: regression line
Green columns: Imereti

NACE 20 has a static economic potential.

20.1 Sawmilling and planing of wood; impregnation of wood
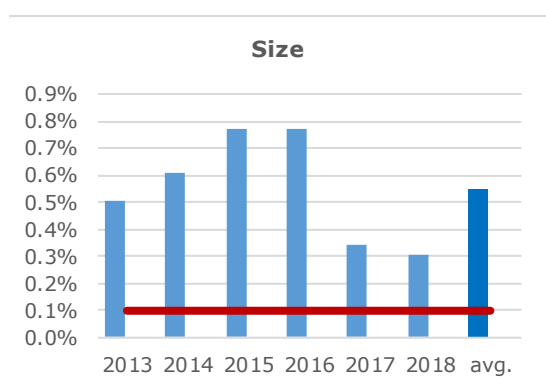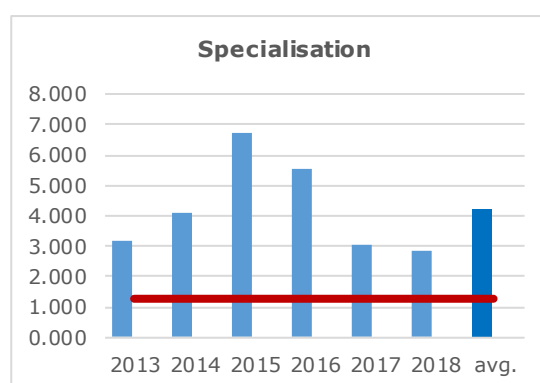
Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

Red line: relative to region threshold

Wages relative to industry

Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
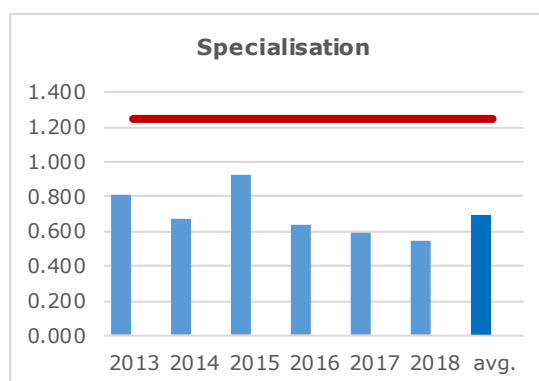Red line: regression line
Green columns: Imereti

Wages
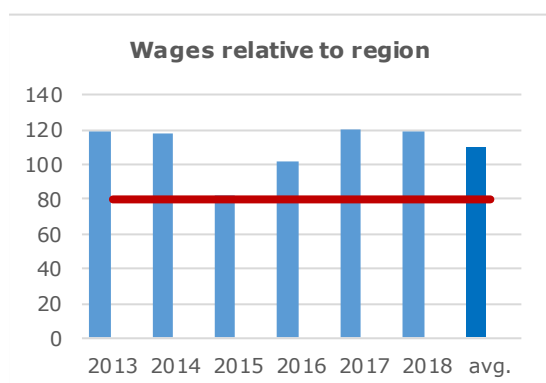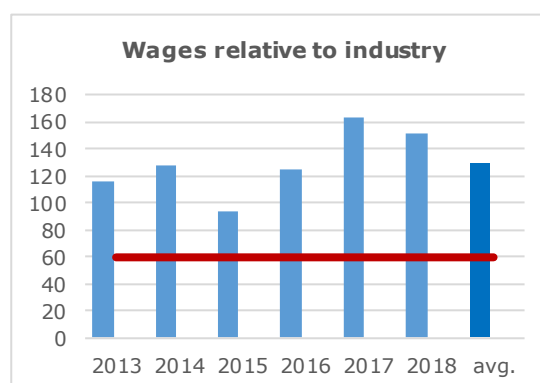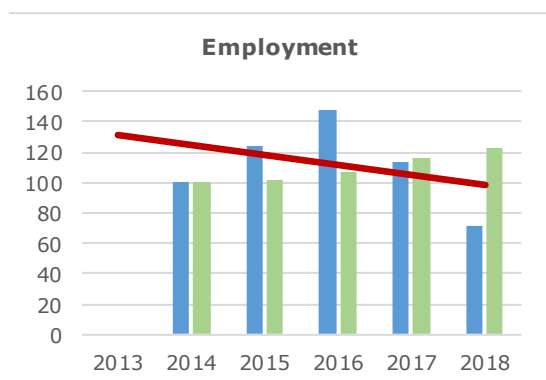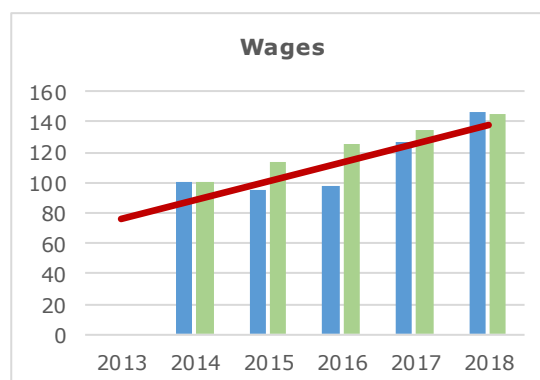
Two-year averages. Index values relative to 2014
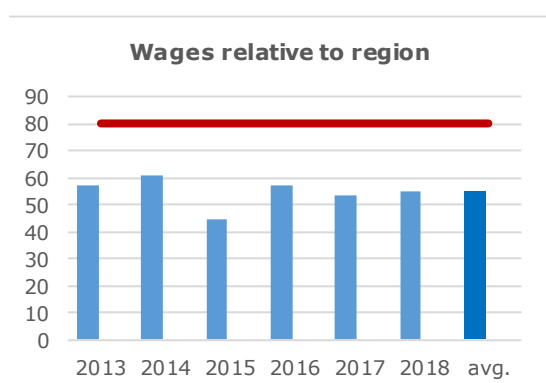Red line: regression line
Green columns: Imereti

NACE 20.1 has a static economic potential.

22 Publishing, printing and reproduction of recorded media
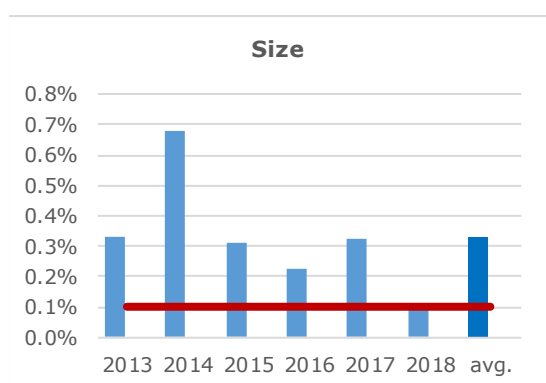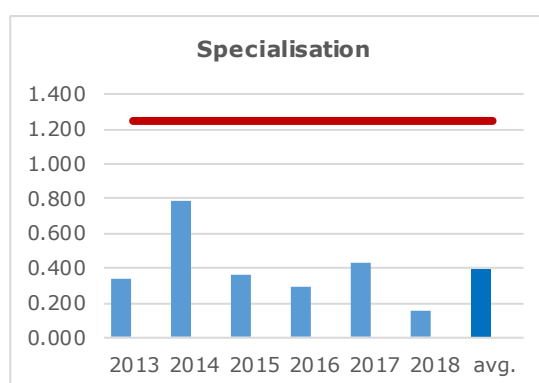
Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

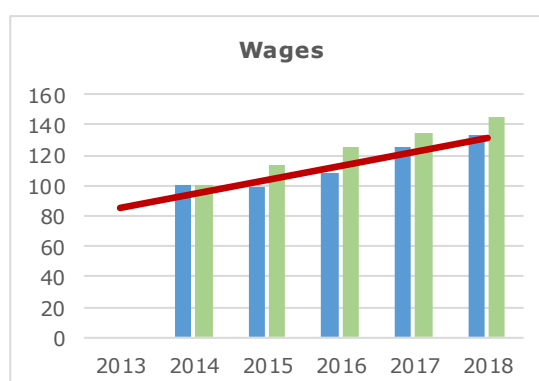Red line: relative to region threshold

Wages relative to industry

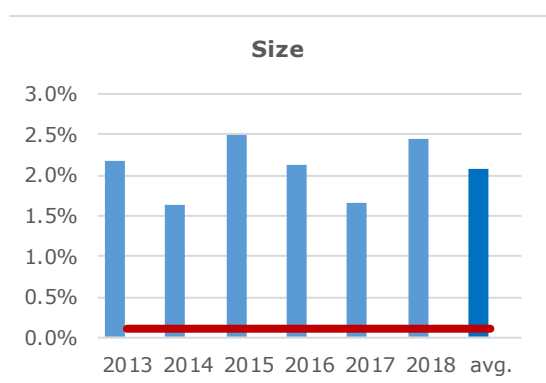Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
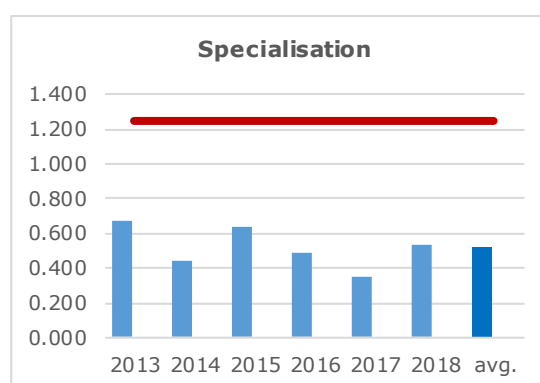Red line: regression line
Green columns: Imereti

Wages
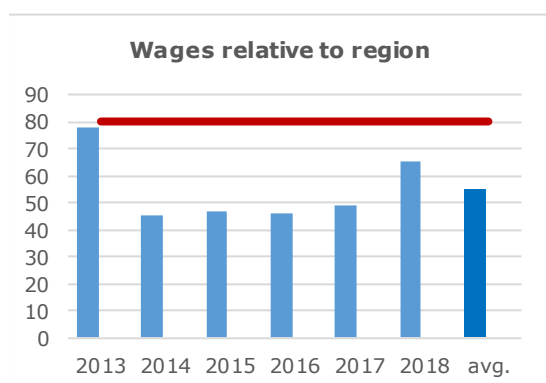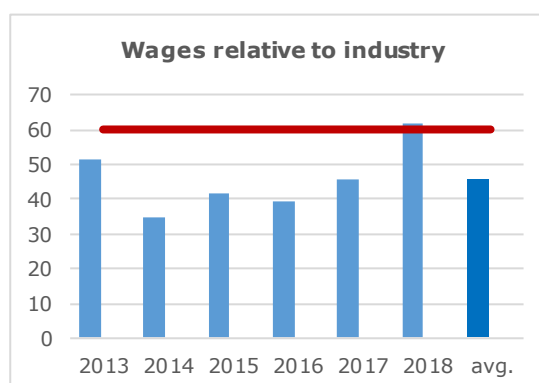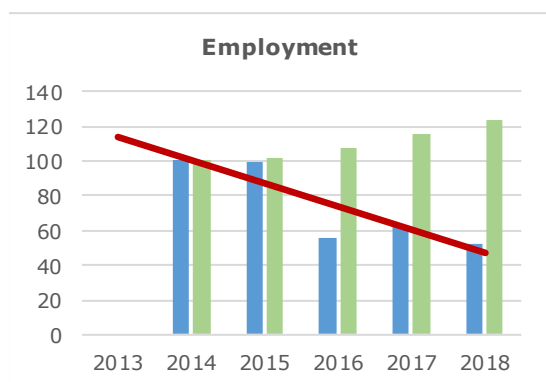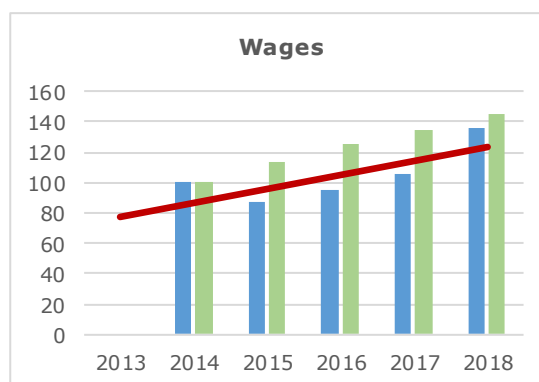
Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

24 Manufacture of chemicals and chemical products
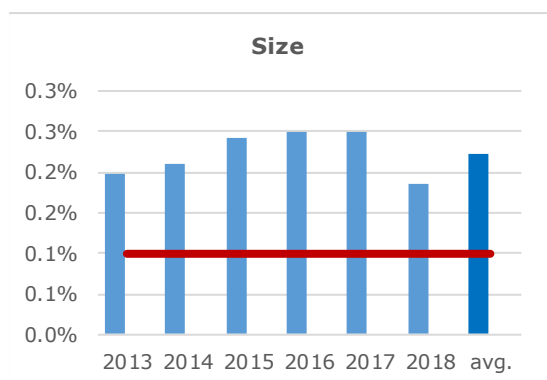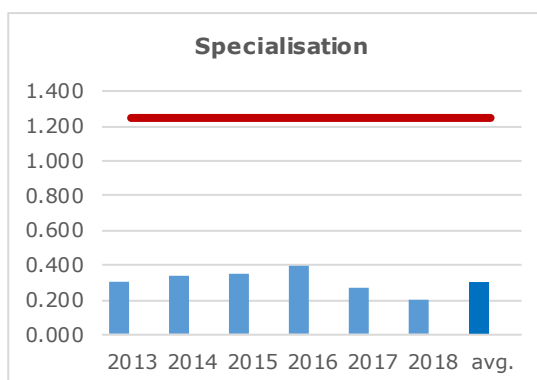
Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

Red line: relative to region threshold

Wages relative to industry

Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

Wages
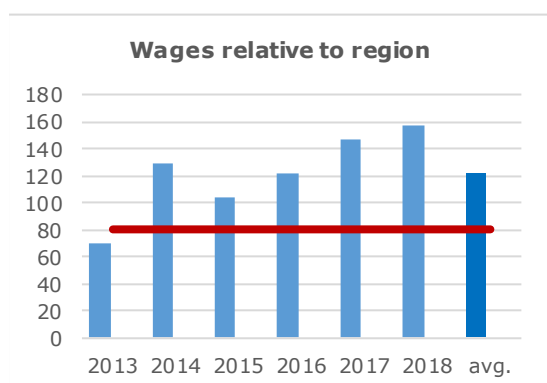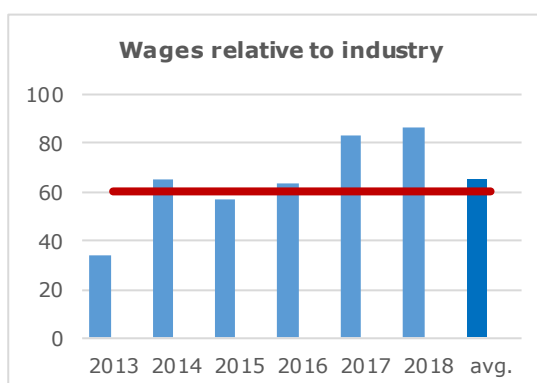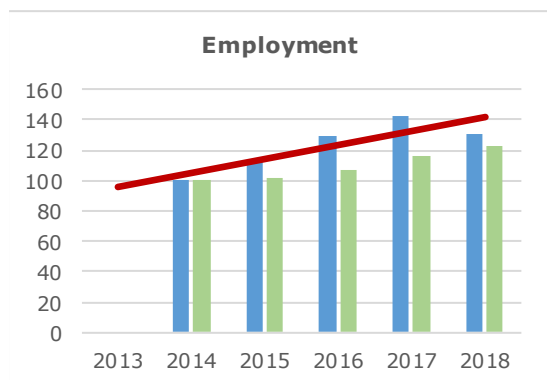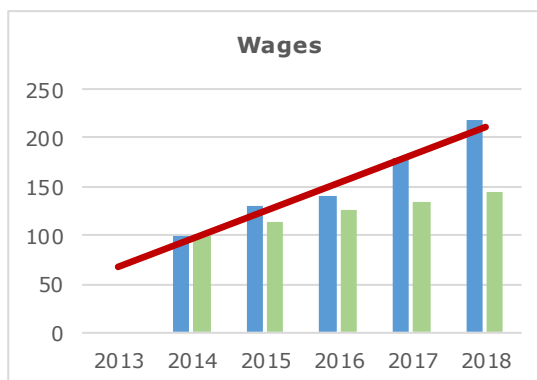
Two-year averages. Index values relative to 2014
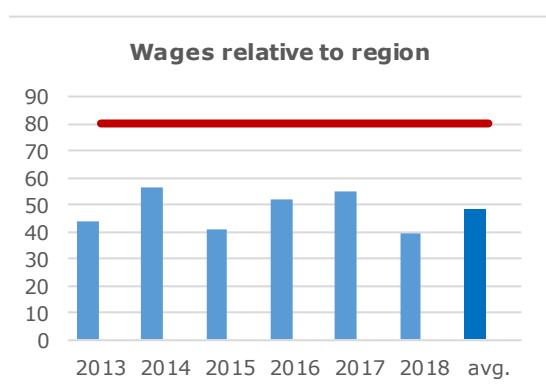Red line: regression line
Green columns: Imereti

24.1 Manufacture of basic chemicals
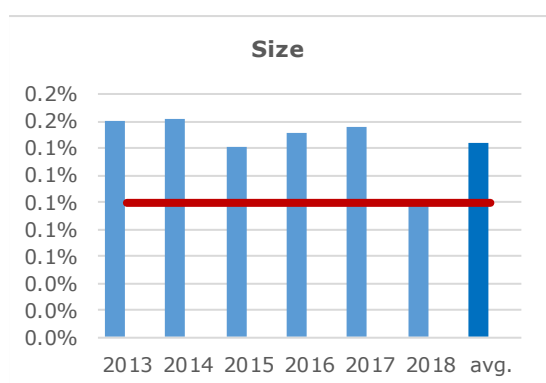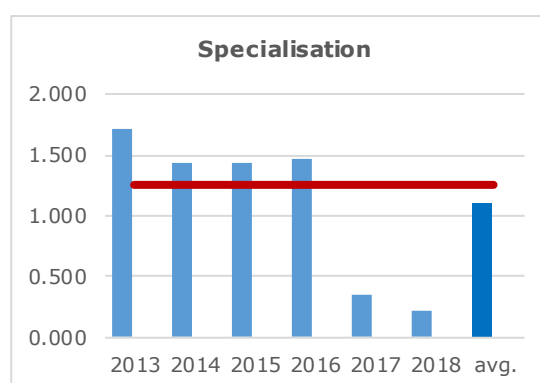
Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

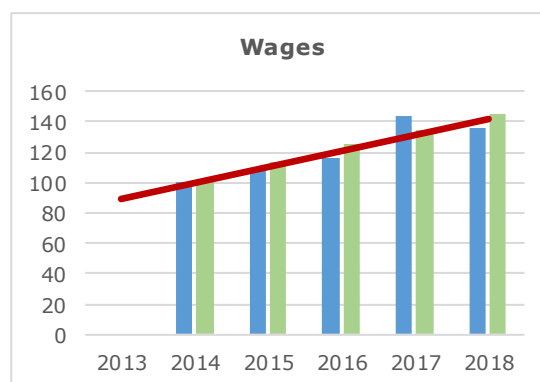Red line: relative to region threshold

Wages relative to industry

Red line: relative to industry threshold
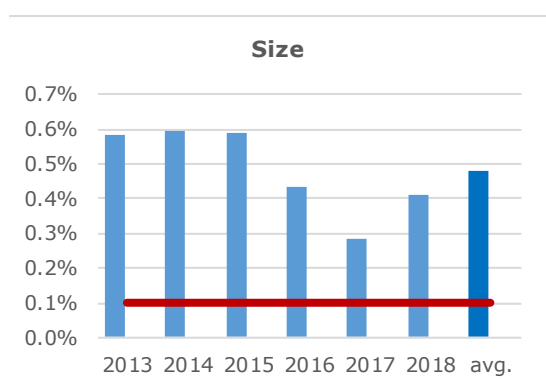
Employment

Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

Wages
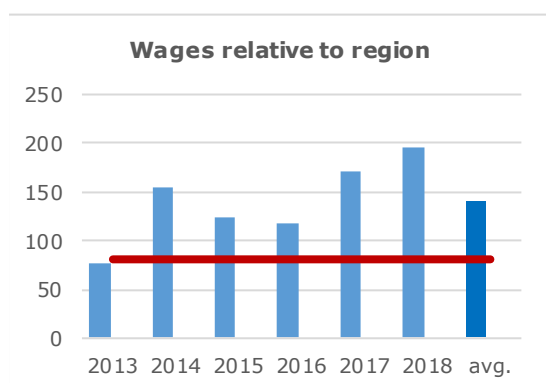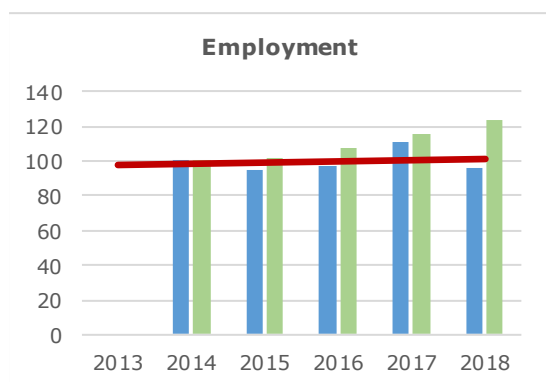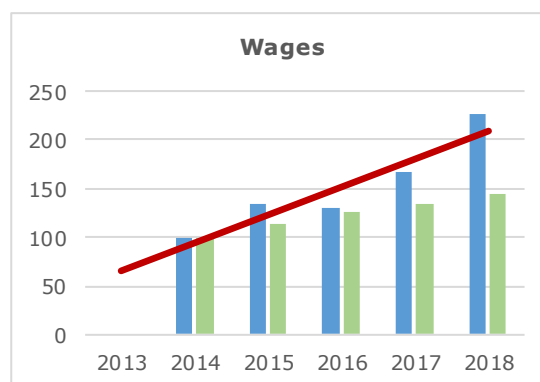
Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

25 Manufacture of rubber and plastic products
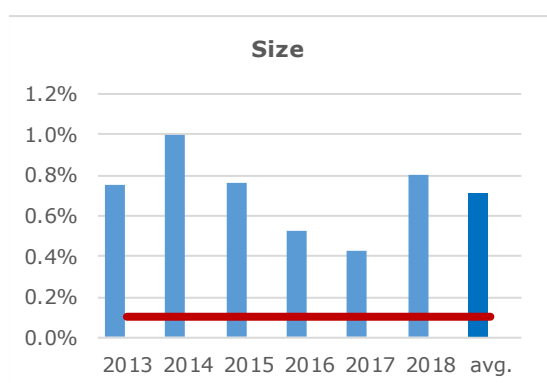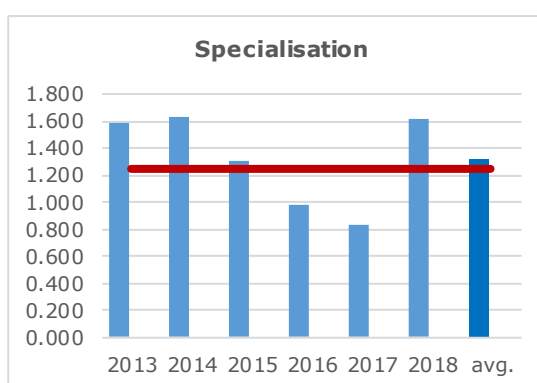
Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

Red line: relative to region threshold

Wages relative to industry

Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
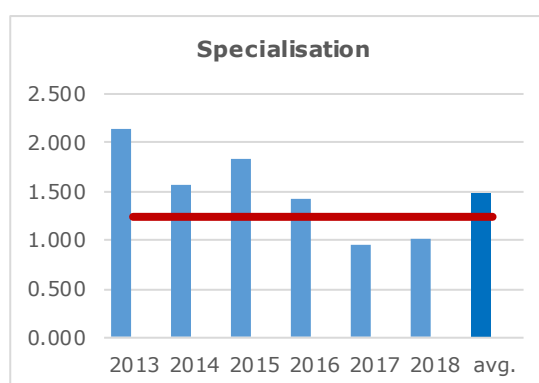Red line: regression line
Green columns: Imereti

Wages
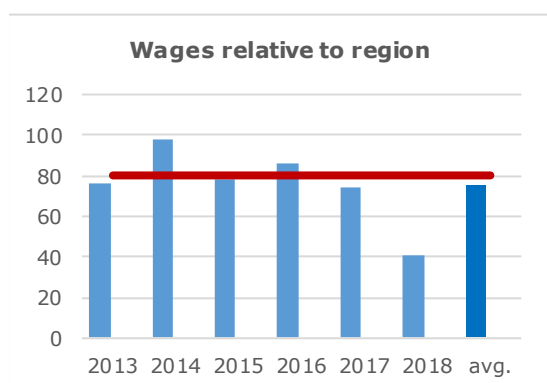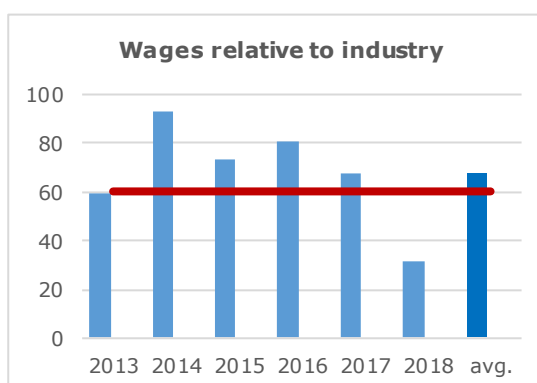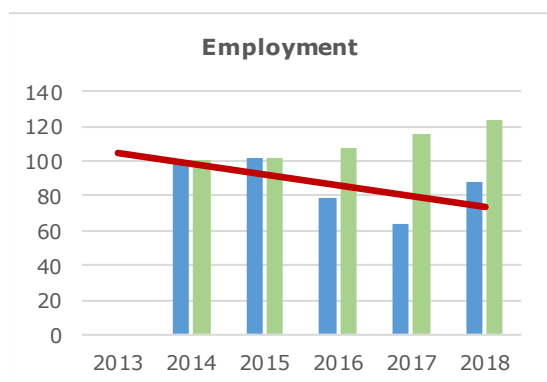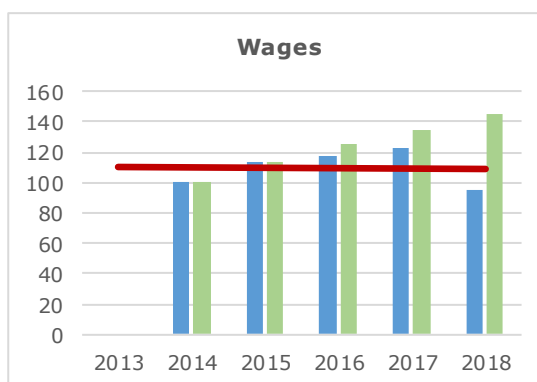
Two-year averages. Index values relative to 2014
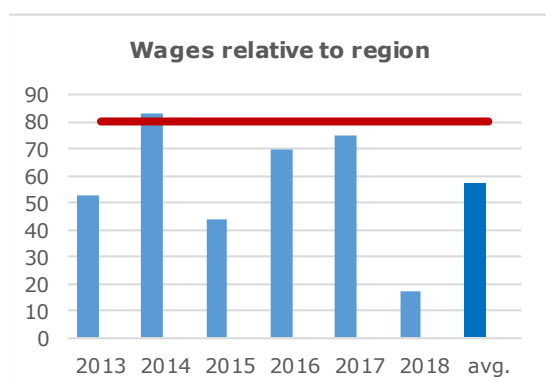Red line: regression line
Green columns: Imereti

25.2 Manufacture of plastic products
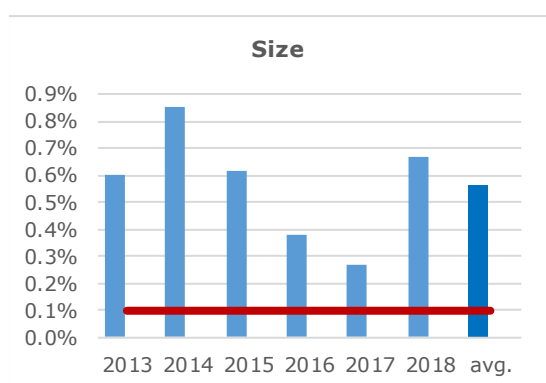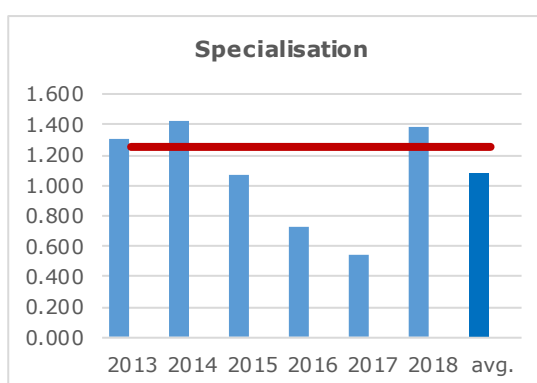
Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

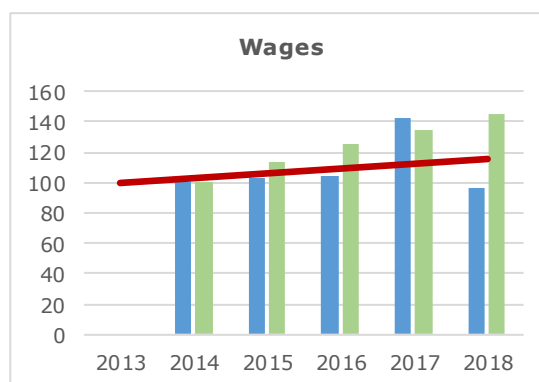Red line: relative to region threshold

Wages relative to industry

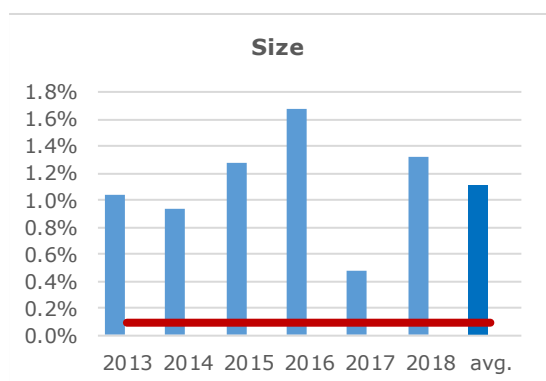Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

Wages
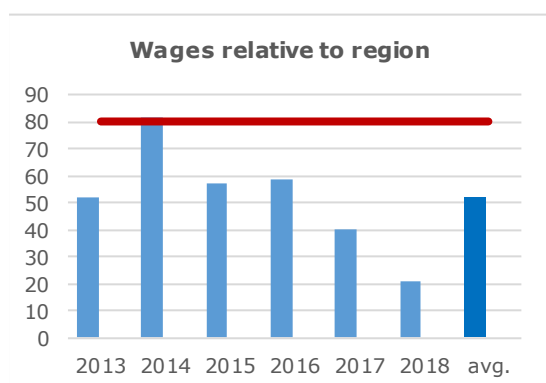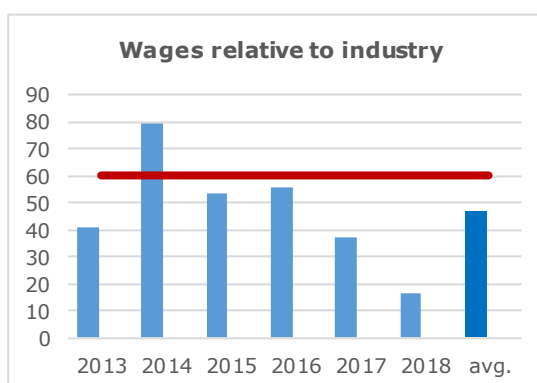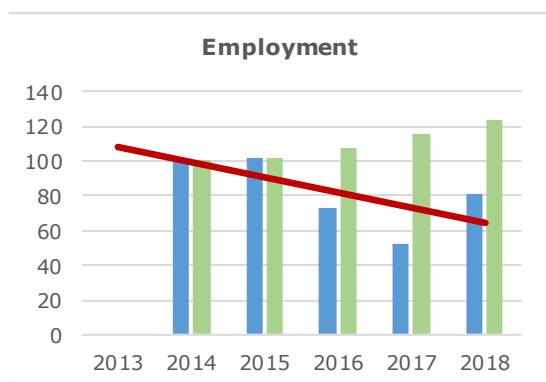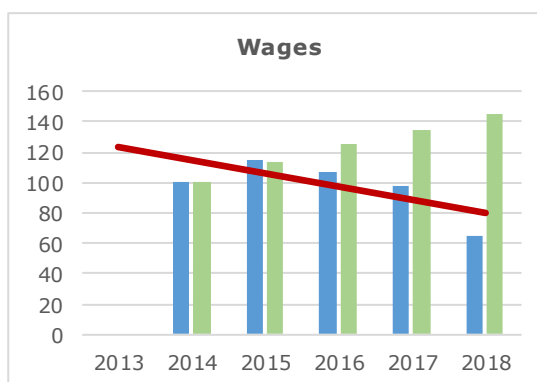
Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

26 Manufacture of other non-metallic mineral products
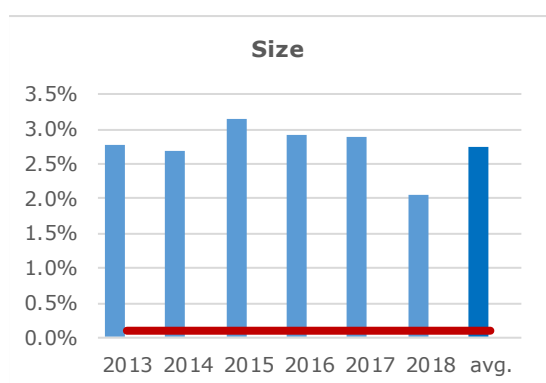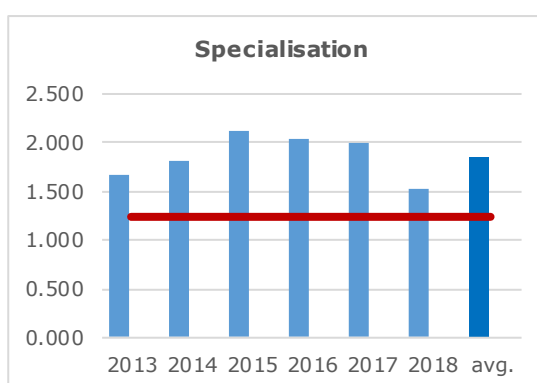
Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

Red line: relative to region threshold

Wages relative to industry

Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
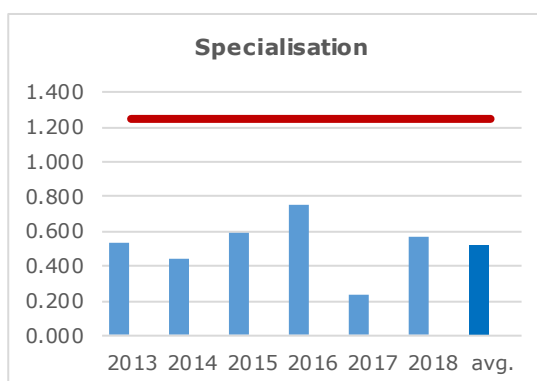Red line: regression line
Green columns: Imereti

Wages
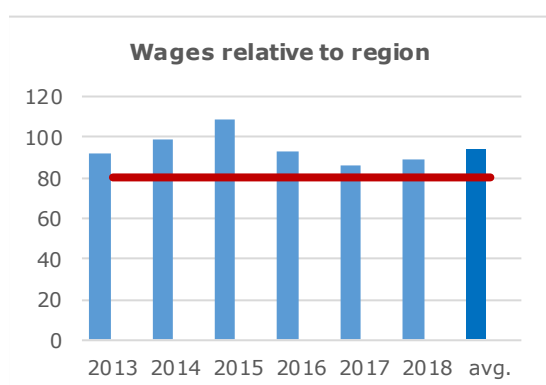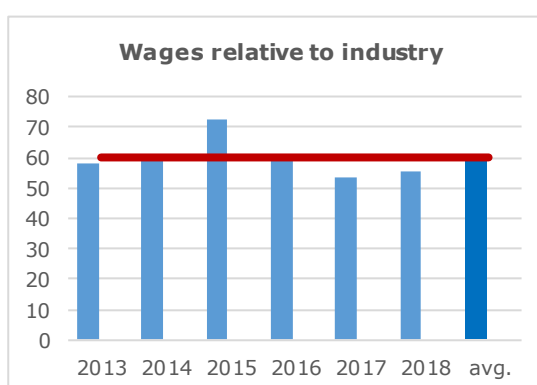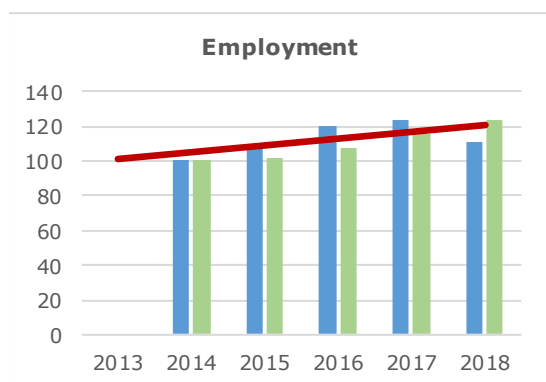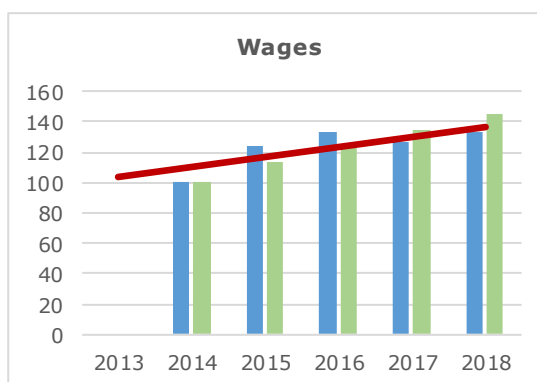
Two-year averages. Index values relative to 2014
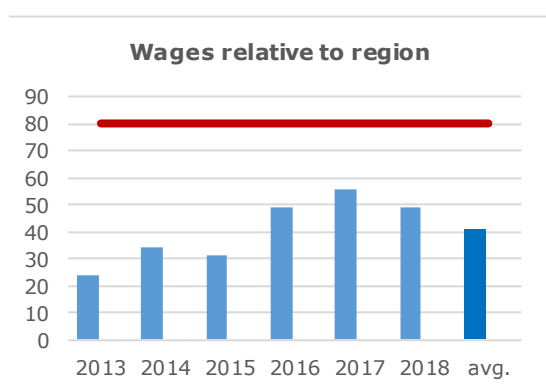Red line: regression line
Green columns: Imereti

26.5 Manufacture of cement, lime and plaster
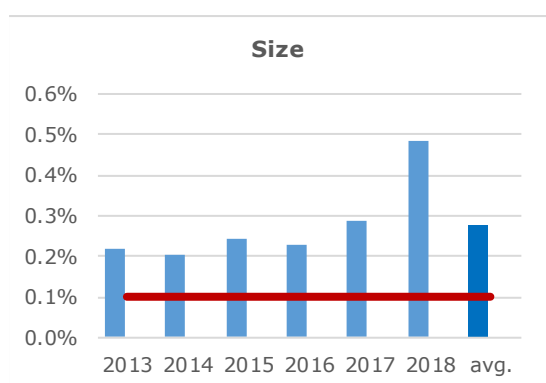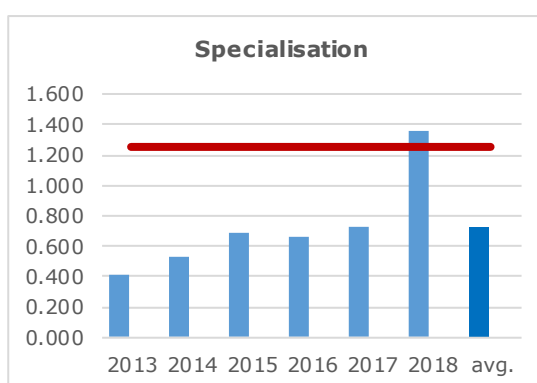
Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region
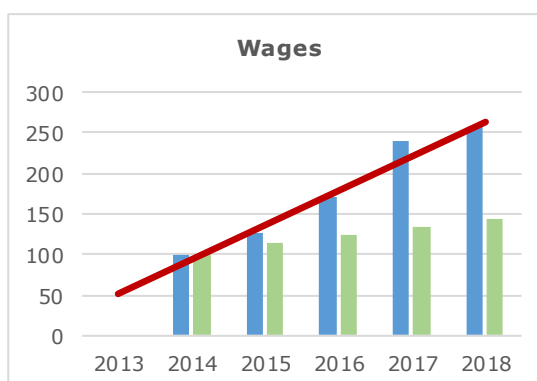
Red line: relative to region threshold

Wages relative to industry

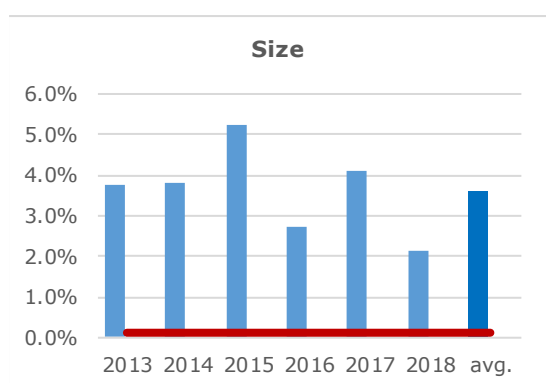Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

Wages
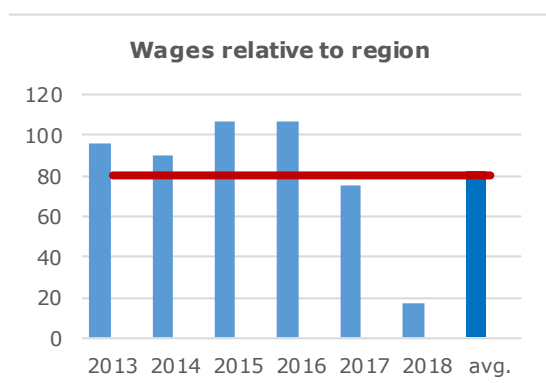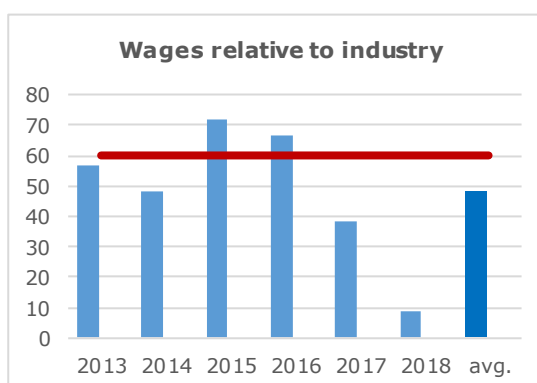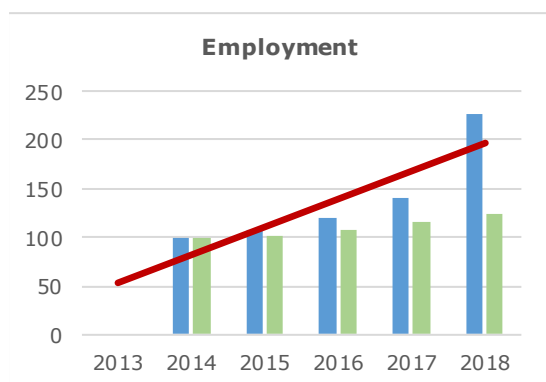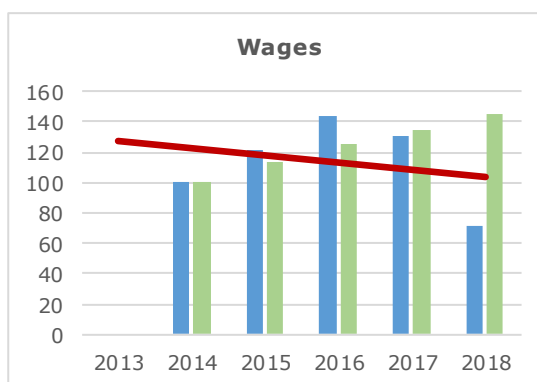
Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

26.6 Manufacture of articles of concrete, plaster and cement
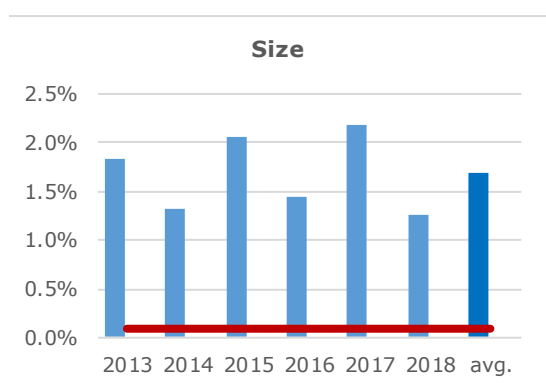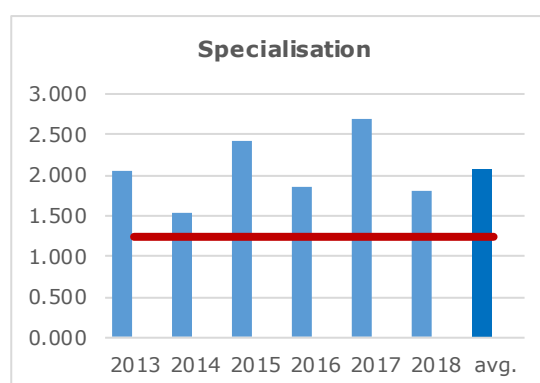
Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

Red line: relative to region threshold

Wages relative to industry

Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
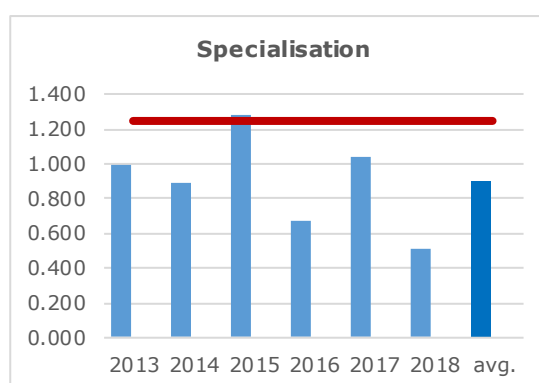Red line: regression line
Green columns: Imereti

Wages
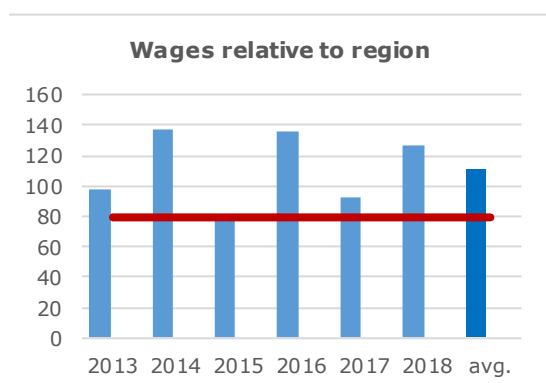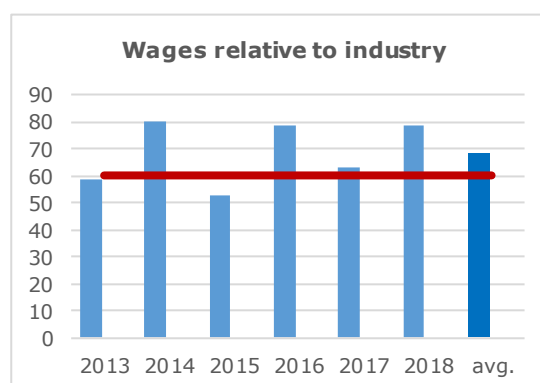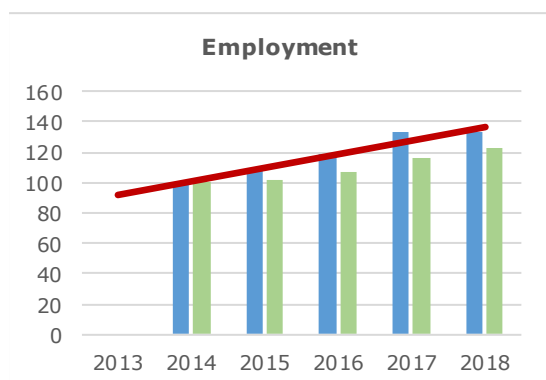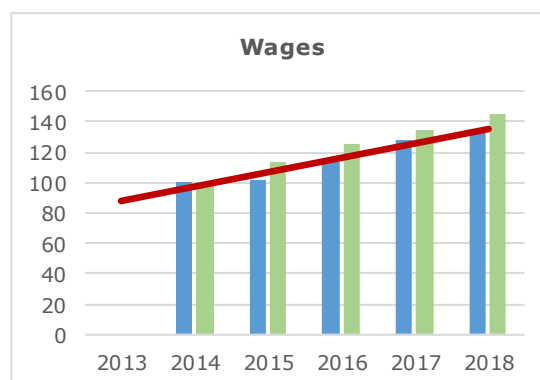
Two-year averages. Index values relative to 2014
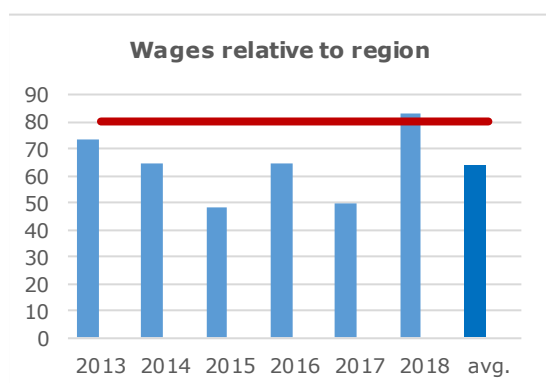Red line: regression line
Green columns: Imereti

NACE 26.6 has a dynamic economic potential.

26.7 Cutting, shaping and finishing of ornamental and building stone
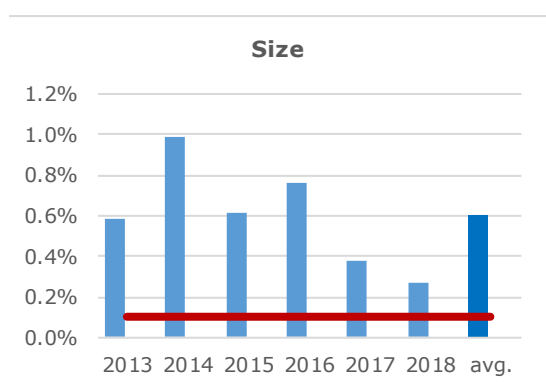
Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

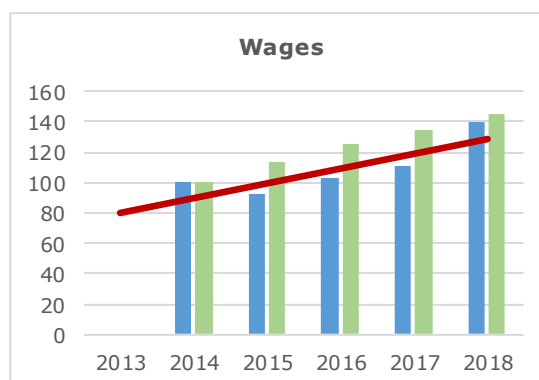Red line: relative to region threshold

Wages relative to industry

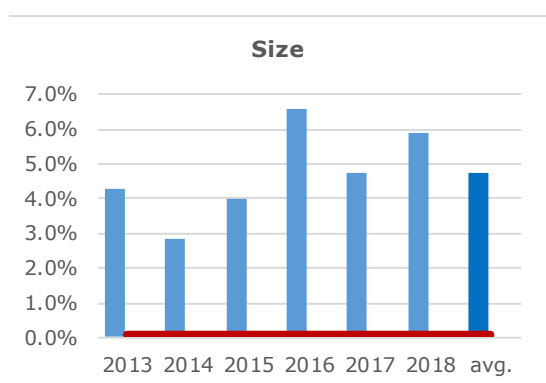Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

Wages
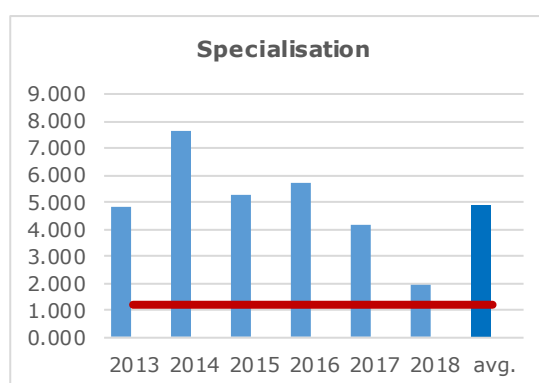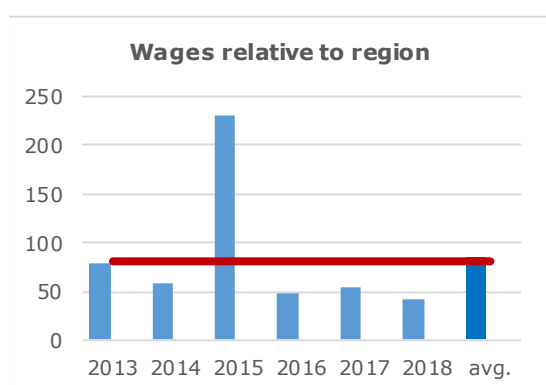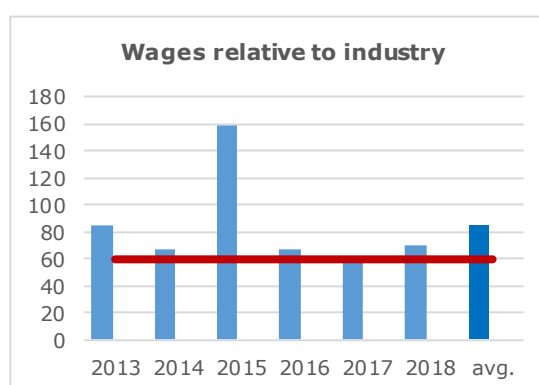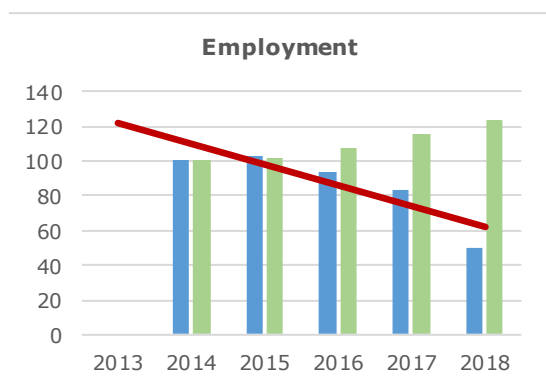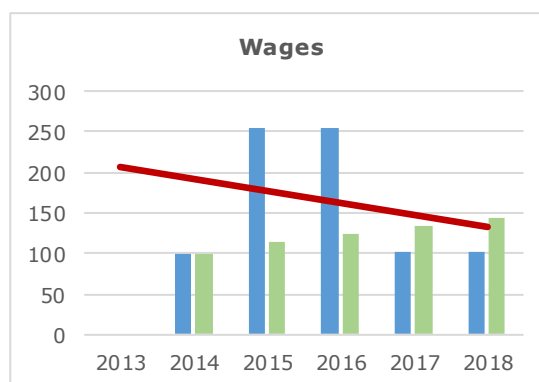
Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

27 Manufacture of basic metals
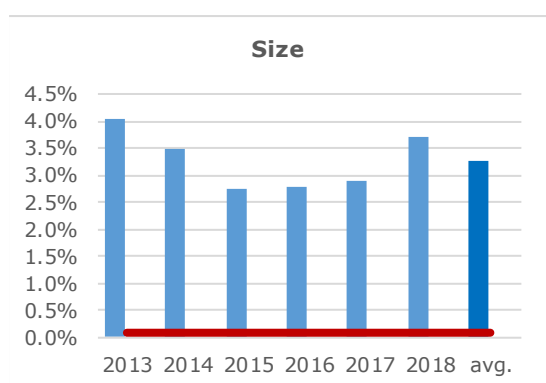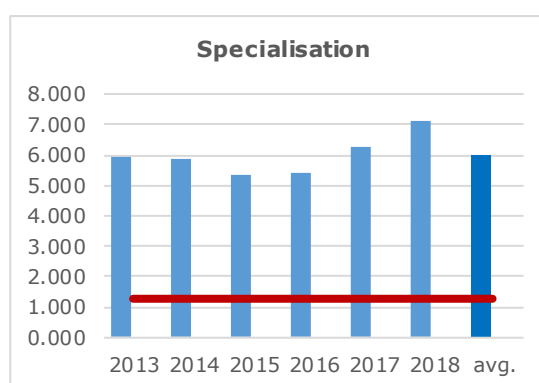
Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

Red line: relative to region threshold

Wages relative to industry

Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
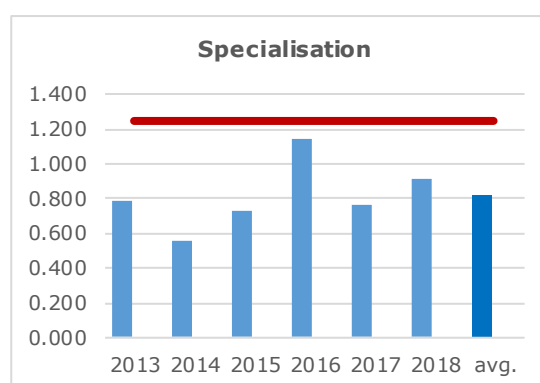Red line: regression line
Green columns: Imereti

Wages
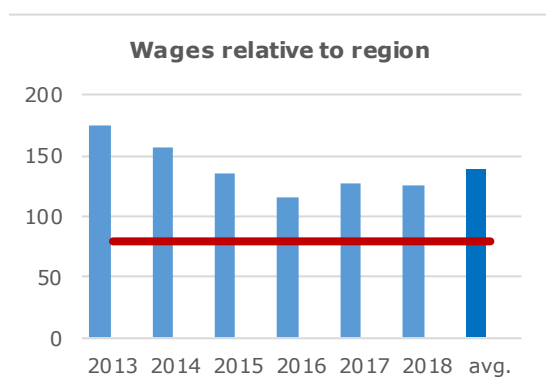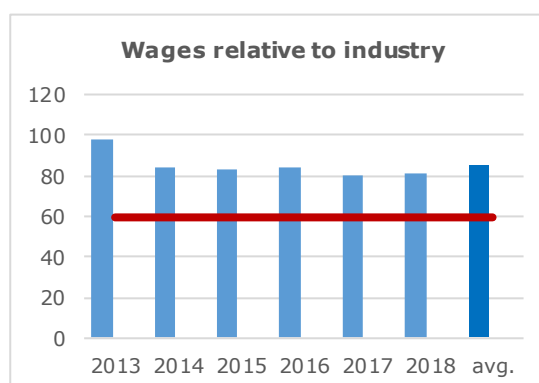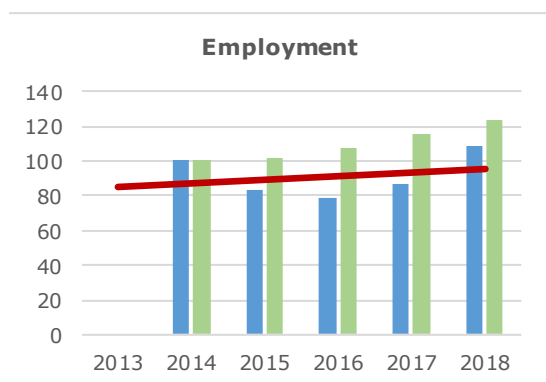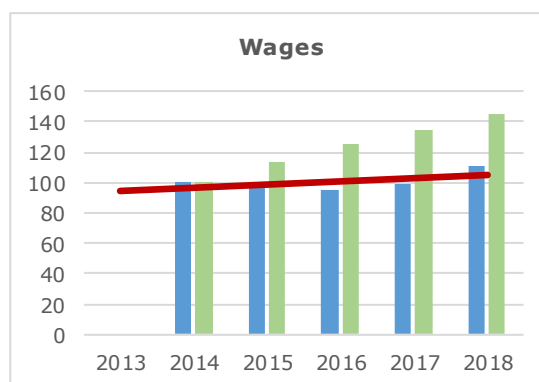
Two-year averages. Index values relative to 2014
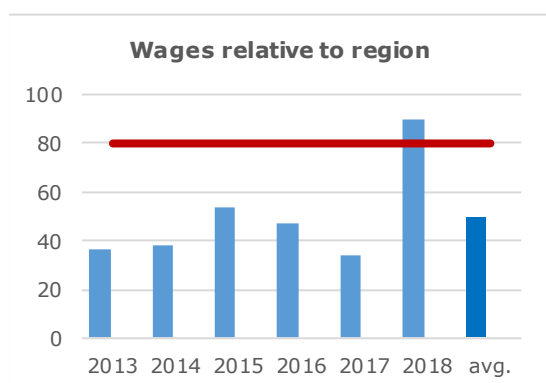Red line: regression line
Green columns: Imereti

27.1 Manufacture of basic iron and steel and of ferro-alloys
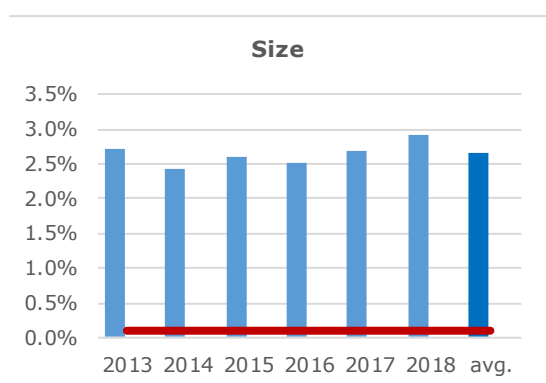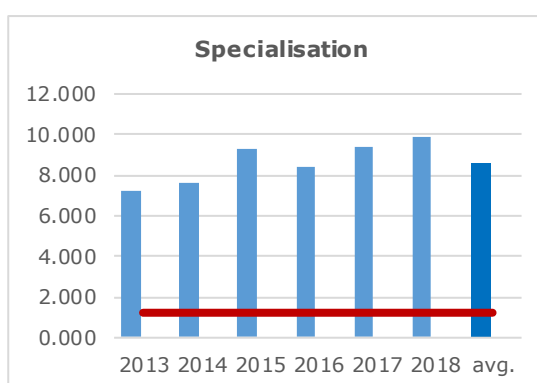
Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

Red line: relative to region threshold
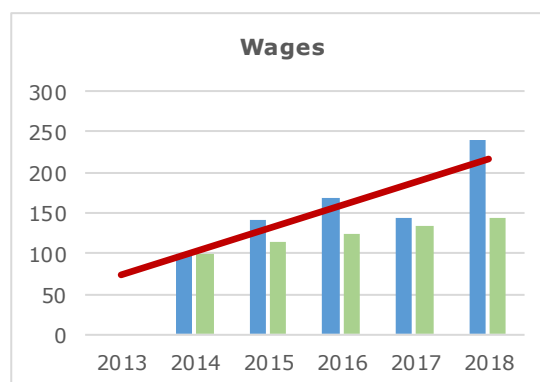
Wages relative to industry

Red line: relative to industry threshold
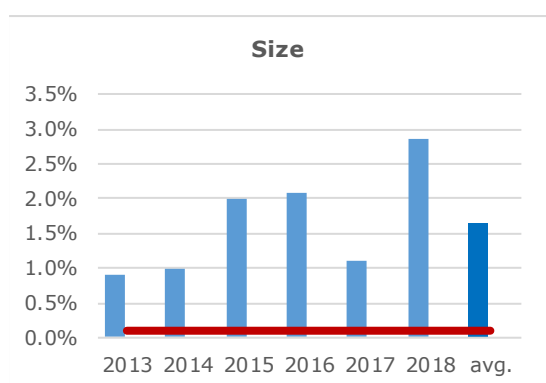
Employment

Two-year averages. Index values relative to 2014
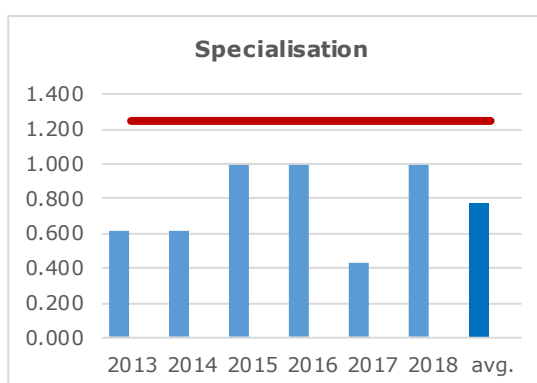Red line: regression line
Green columns: Imereti

Wages
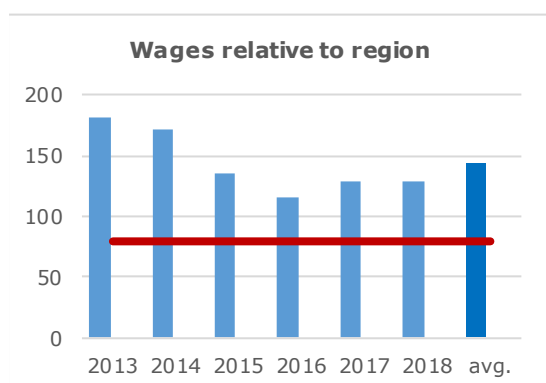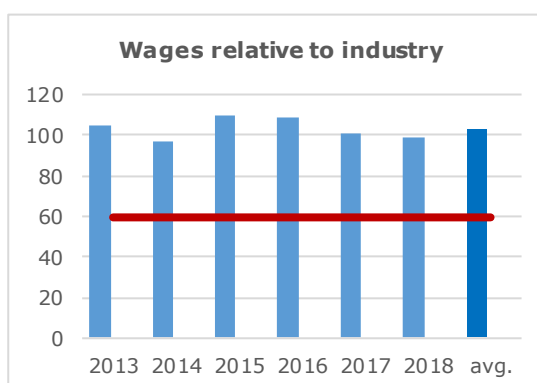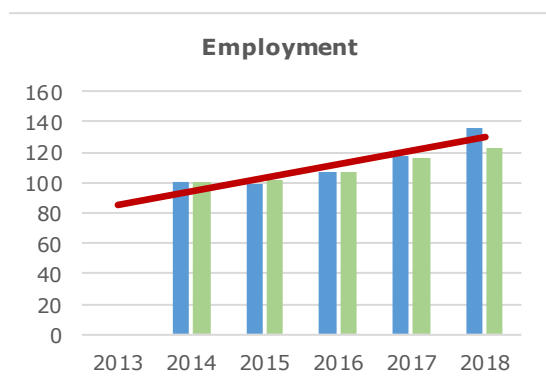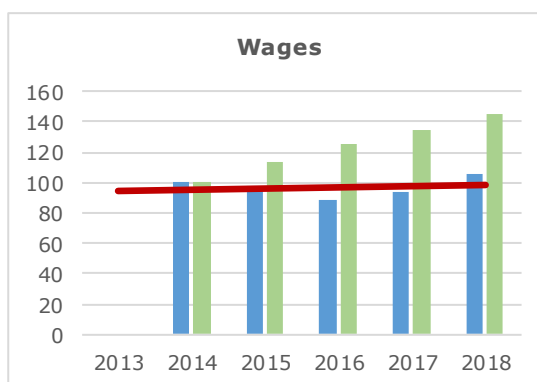
Two-year averages. Index values relative to 2014
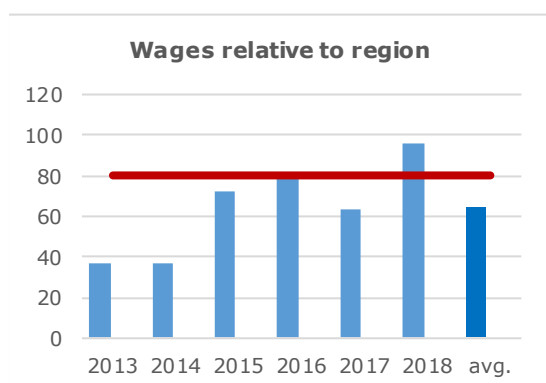Red line: regression line
Green columns: Imereti

NACE 27.1 has a static economic potential.

27.5 Casting of metals
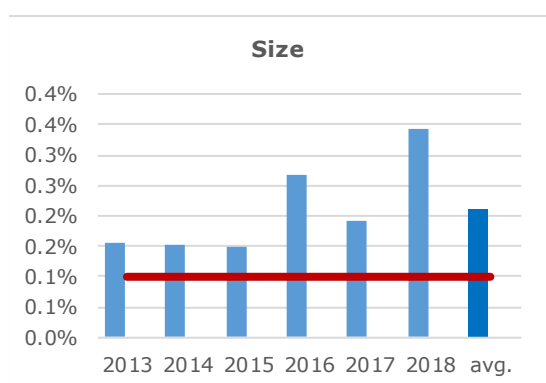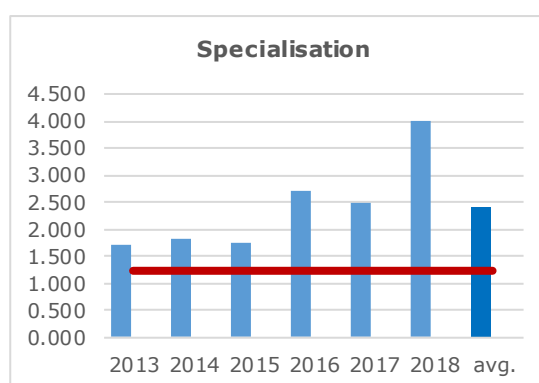
Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

Red line: relative to region threshold

Wages relative to industry

Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

Wages
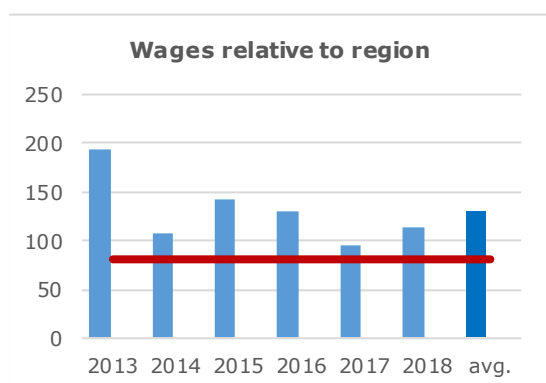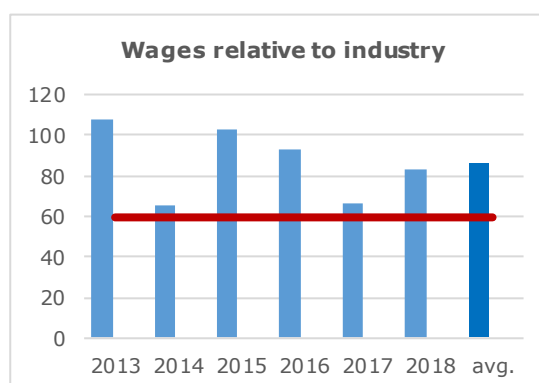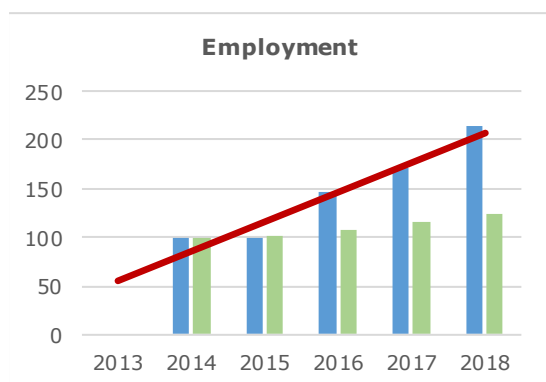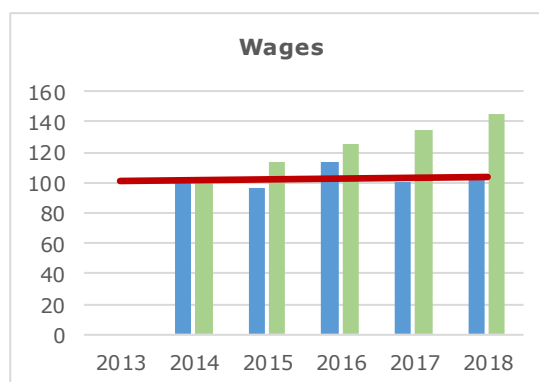
Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

NACE 27.5 has a static economic potential.

28 Manufacture of fabricated metal products, except machinery and equipment
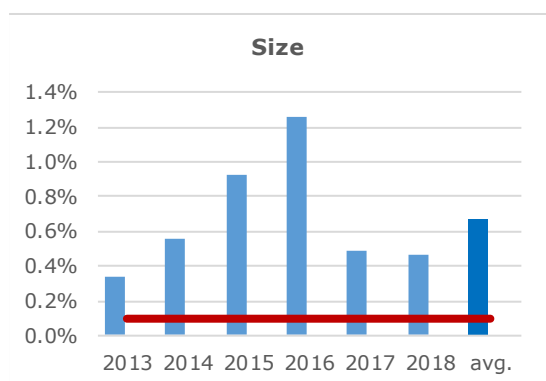
Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

Red line: relative to region threshold

Wages relative to industry

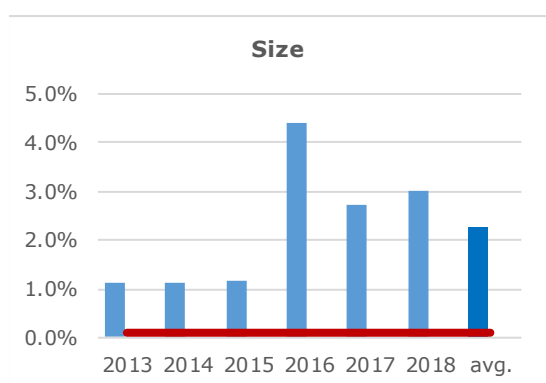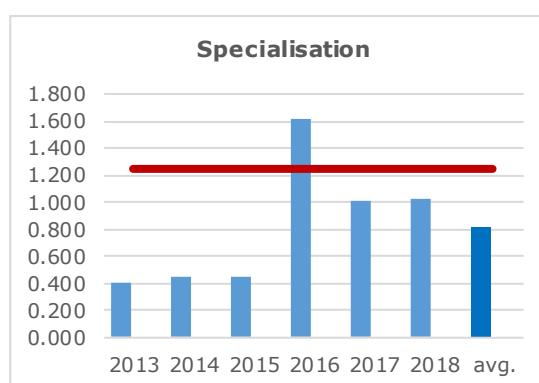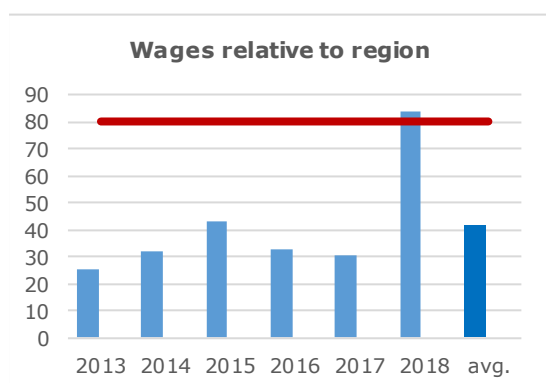Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

Wages
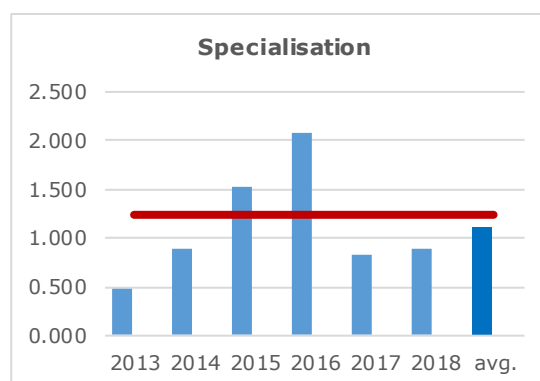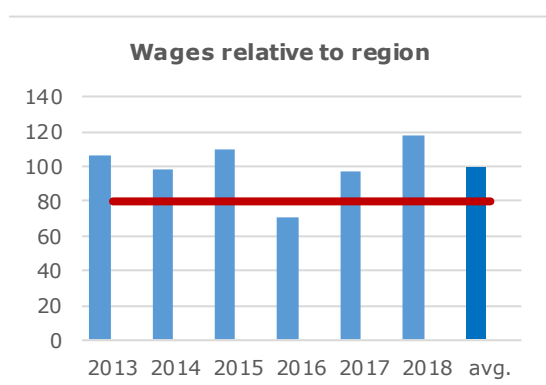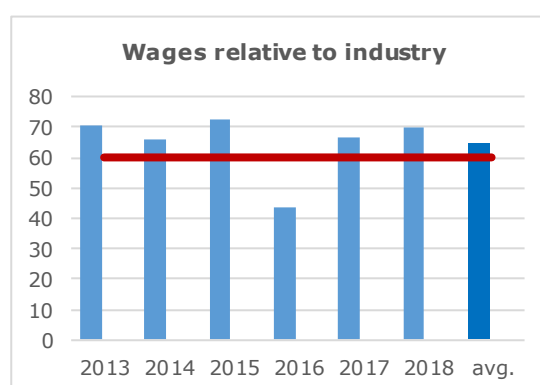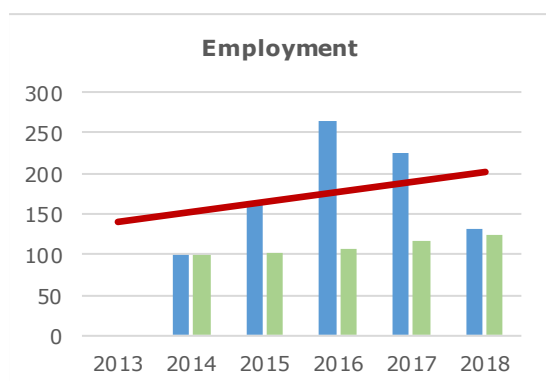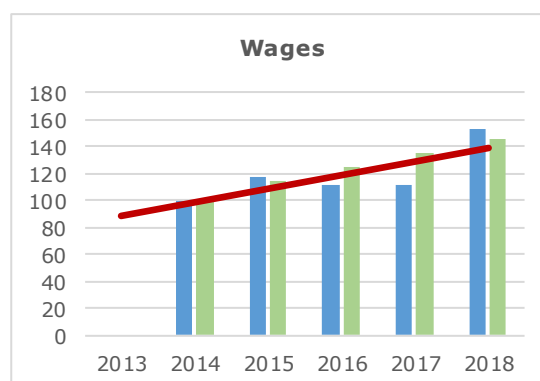
Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

28.1 Manufacture of structural metal products
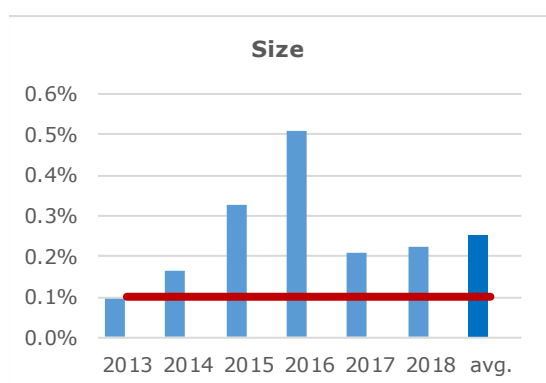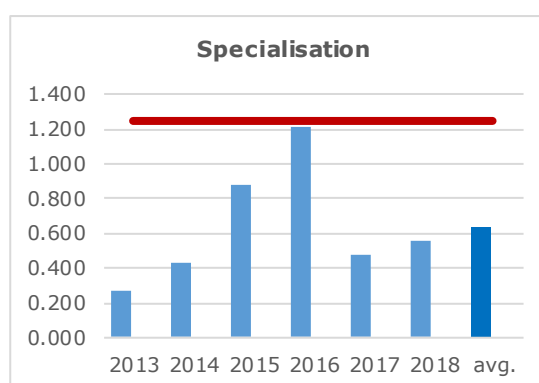
Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

Red line: relative to region threshold

Wages relative to industry

Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

Wages
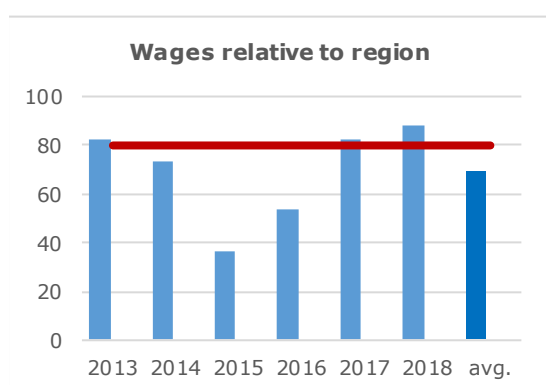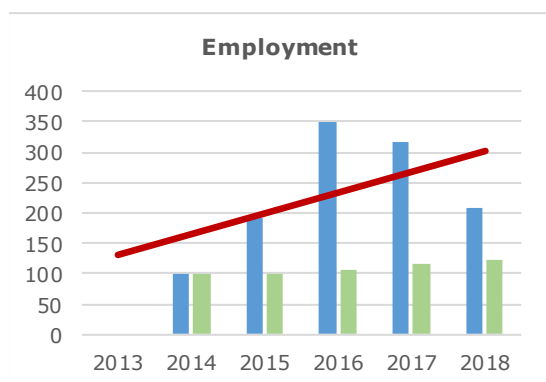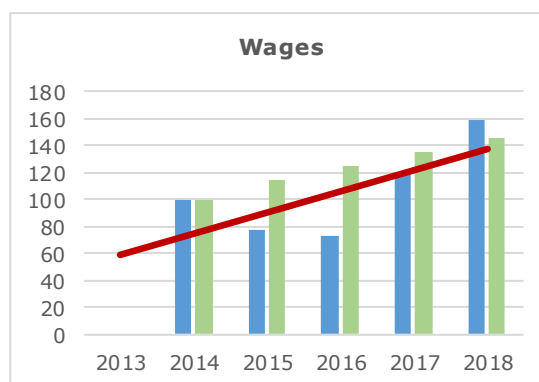
Two-year averages. Index values relative to 2014
Red line: regression line
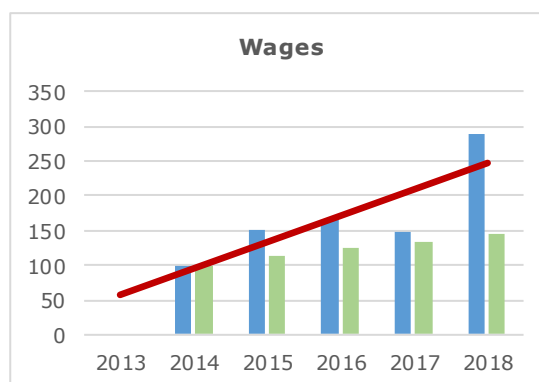Green columns: Imereti

28.7 Manufacture of other fabricated metal products
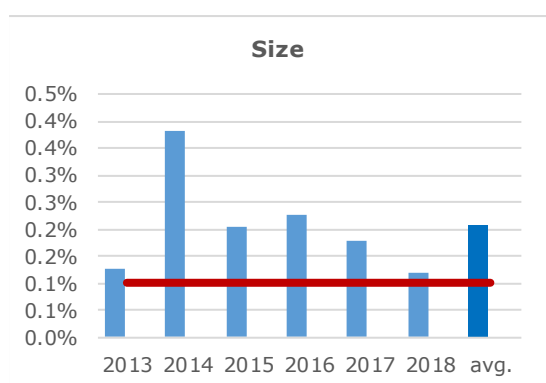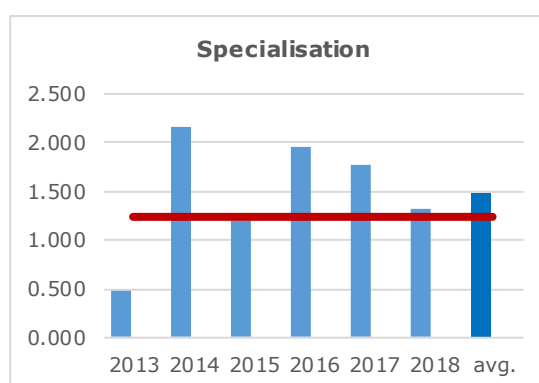
Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

Red line: relative to region threshold

Wages relative to industry

Red line: relative to industry threshold
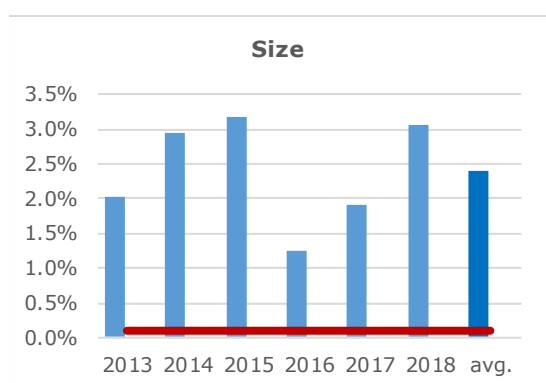
Employment

Two-year averages. Index values relative to 2014
Red line: regression line
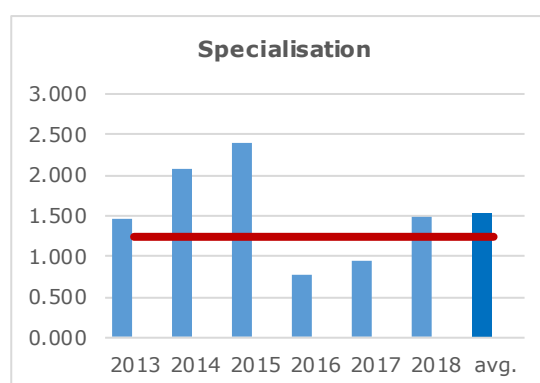Green columns: Imereti

Wages
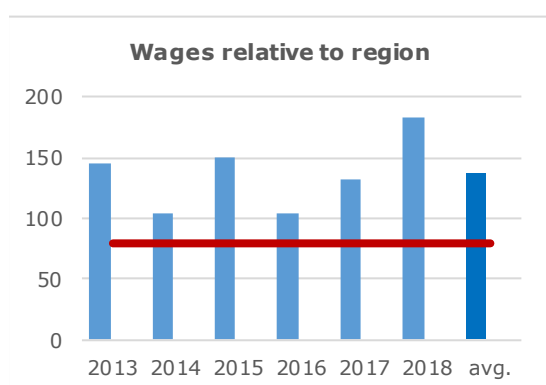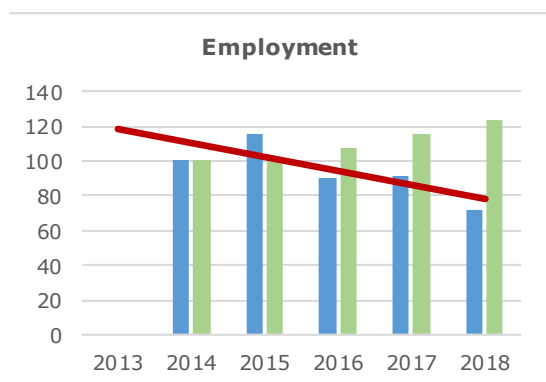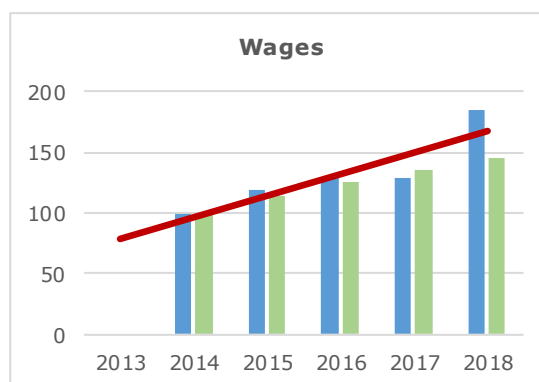
Two-year averages. Index values relative to 2014
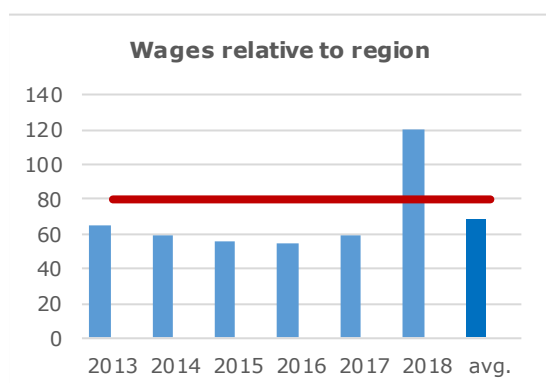Red line: regression line
Green columns: Imereti

29 Manufacture of machinery and equipment n.e.c.
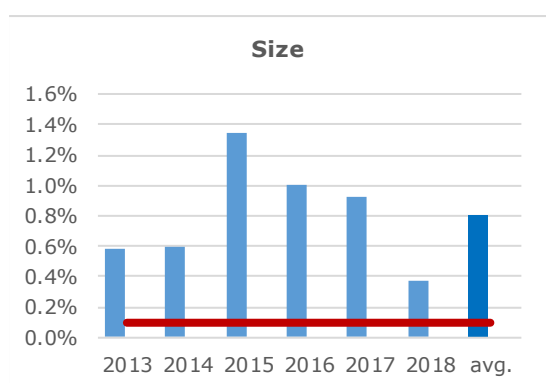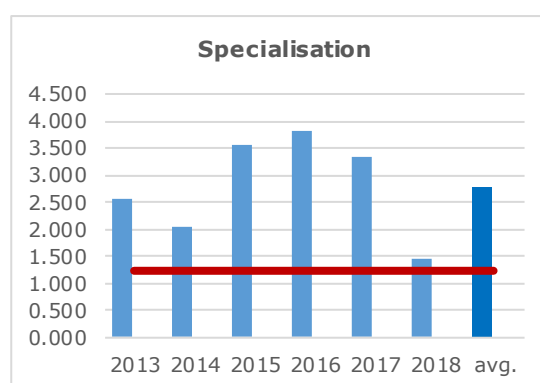
Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

Red line: relative to region threshold

Wages relative to industry

Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

Wages
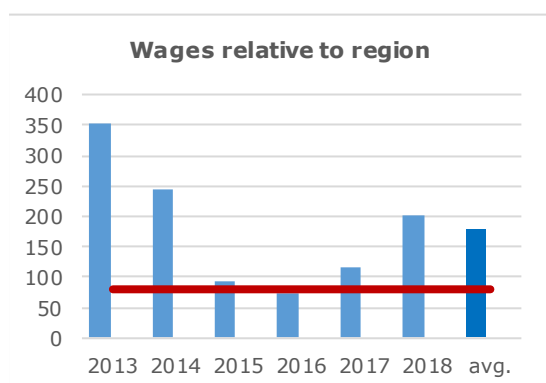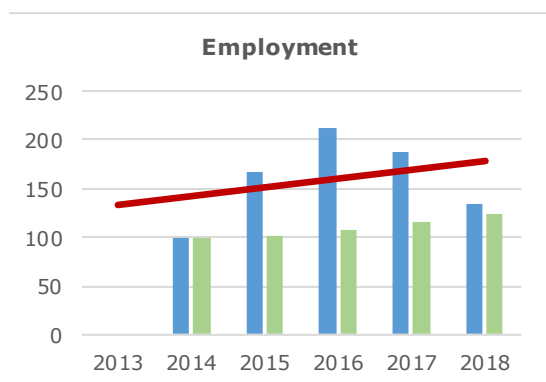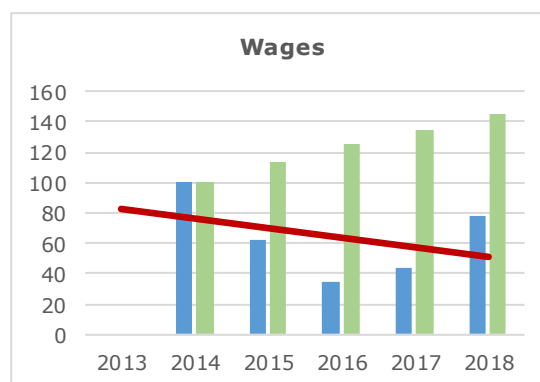
Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

NACE 29 has a static economic potential.

31 Manufacture of electrical machinery and apparatus n.e.c.
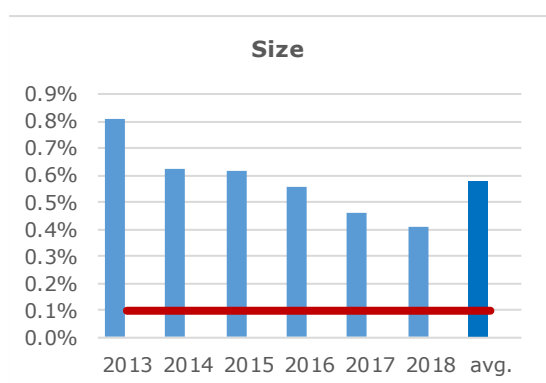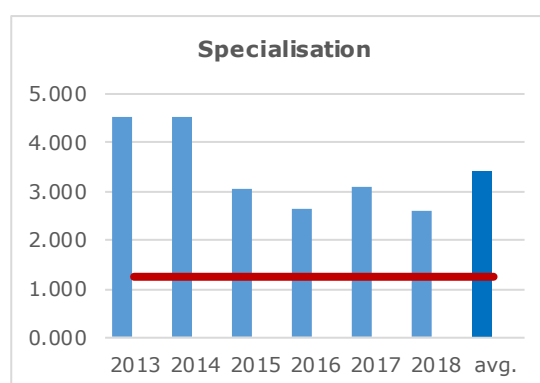
Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region
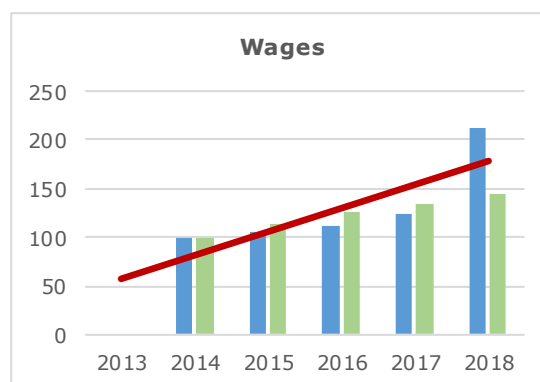
Red line: relative to region threshold

Wages relative to industry

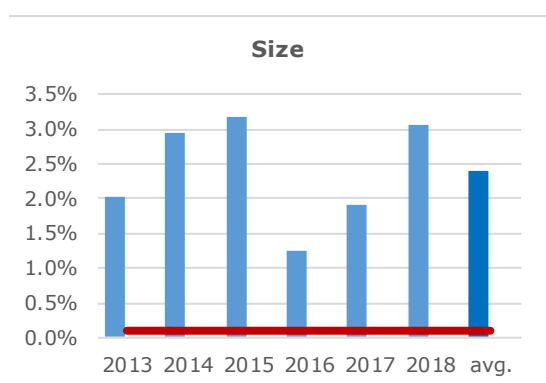Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
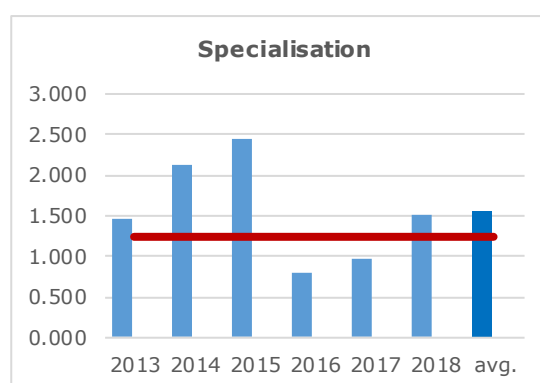Red line: regression line
Green columns: Imereti

Wages
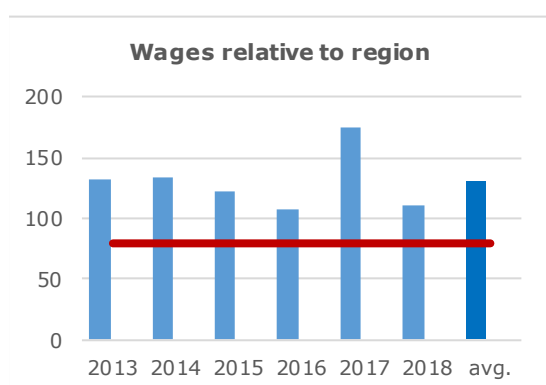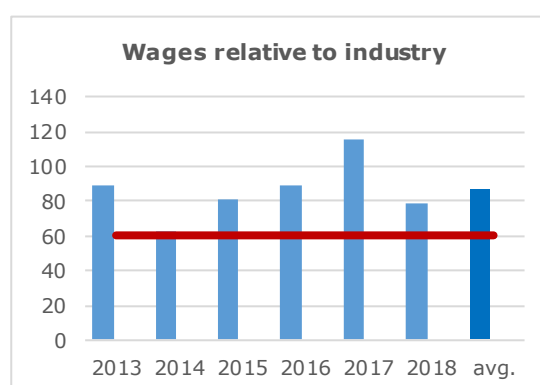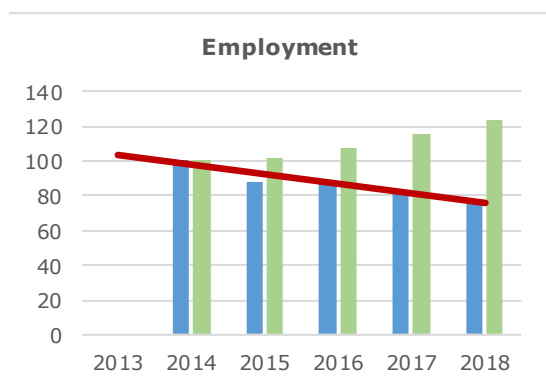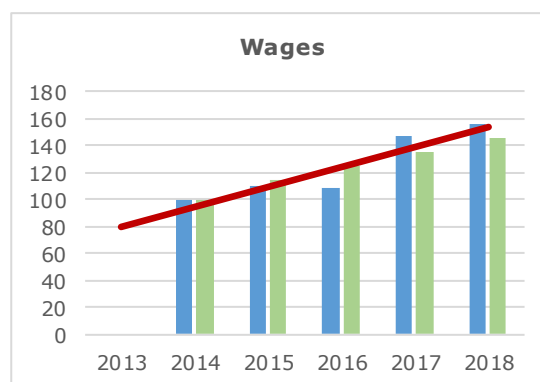
Two-year averages. Index values relative to 2014
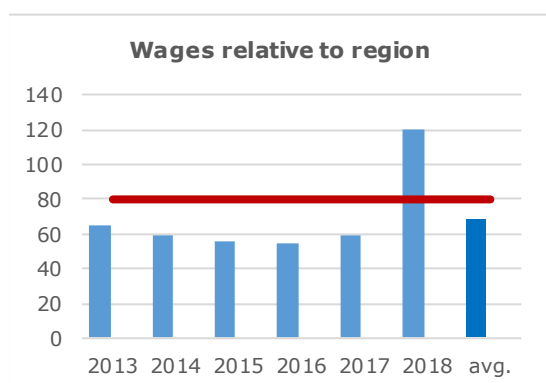Red line: regression line
Green columns: Imereti

NACE 31 has a static economic potential.

36 Manufacture of furniture; manufacturing n.e.c.
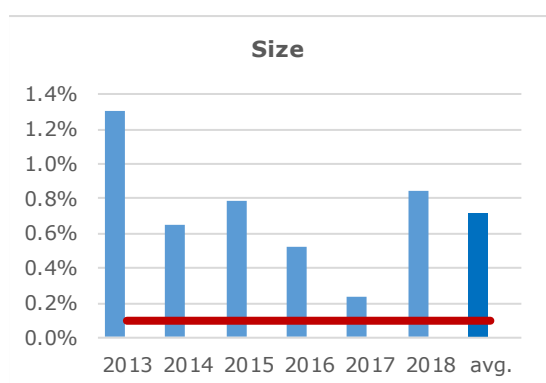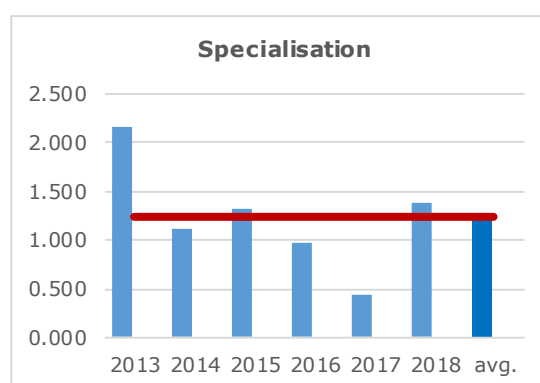
Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

Red line: relative to region threshold

Wages relative to industry

Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

Wages
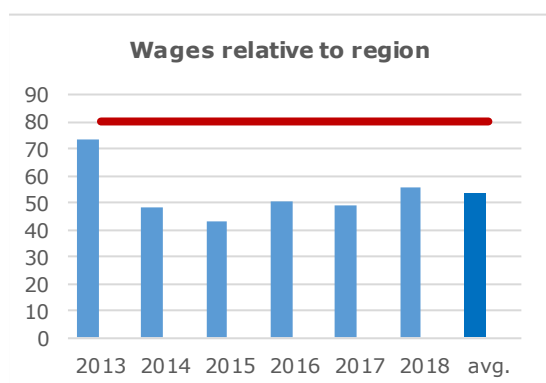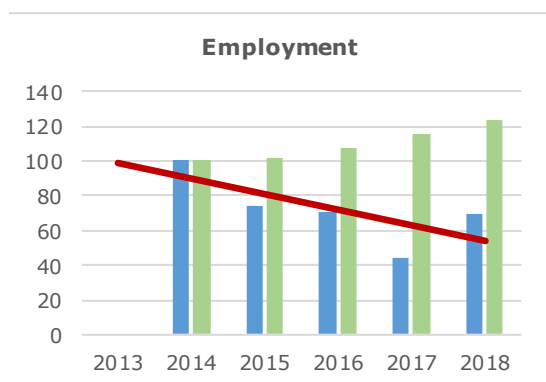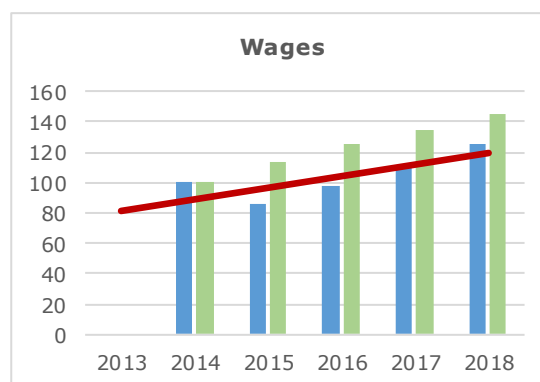
Two-year averages. Index values relative to 2014
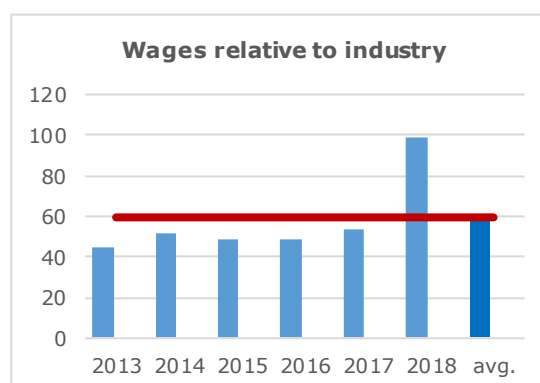Red line: regression line
Green columns: Imereti
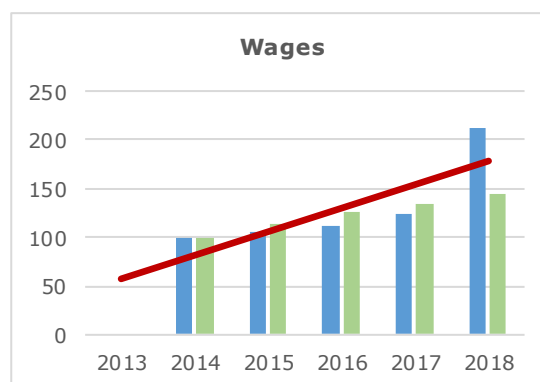
36.1 Manufacture of furniture
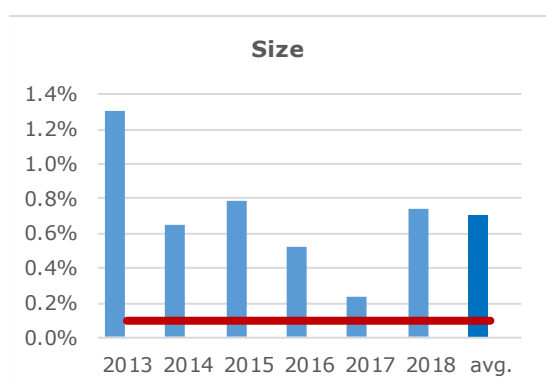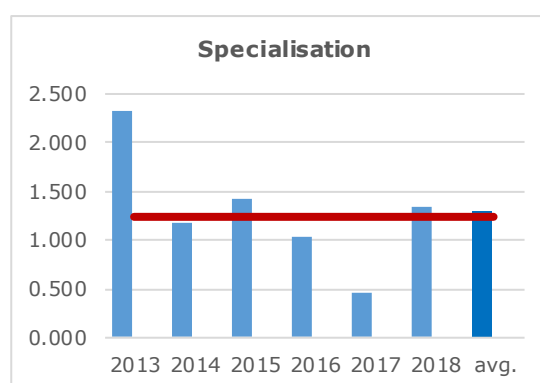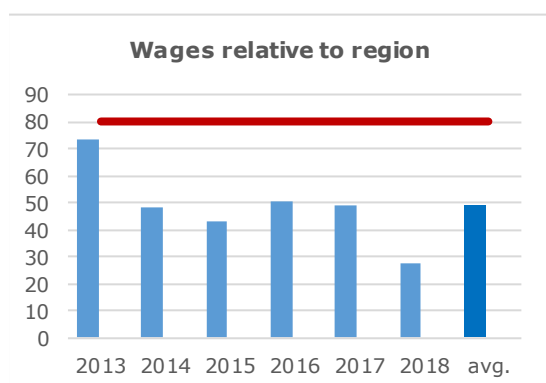
Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

Red line: relative to region threshold

Wages relative to industry

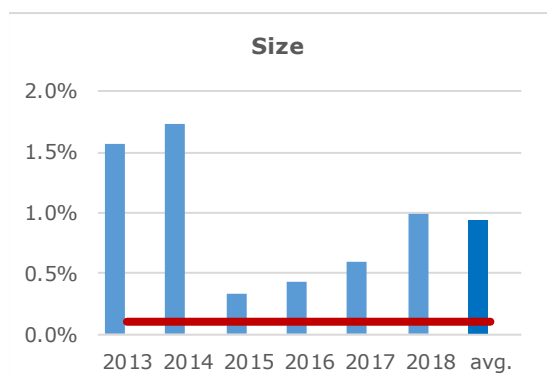Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
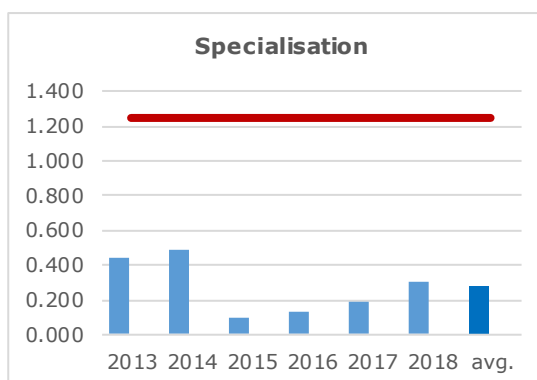Red line: regression line
Green columns: Imereti

Wages
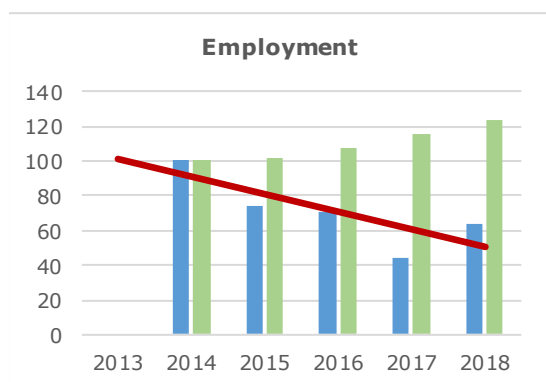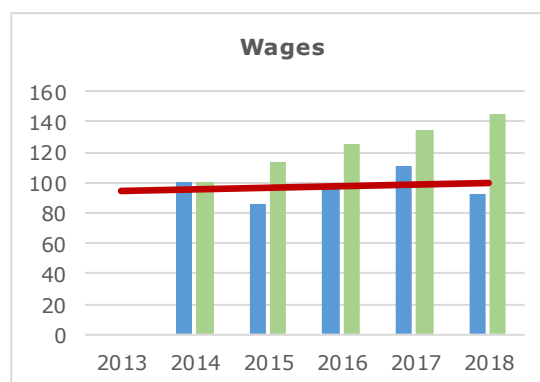
Two-year averages. Index values relative to 2014
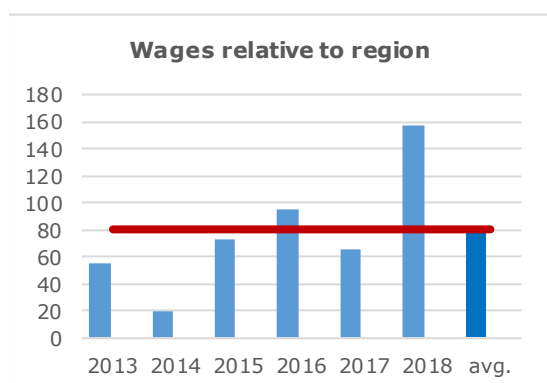Red line: regression line
Green columns: Imereti

40 Electricity, gas, steam and hot water supply
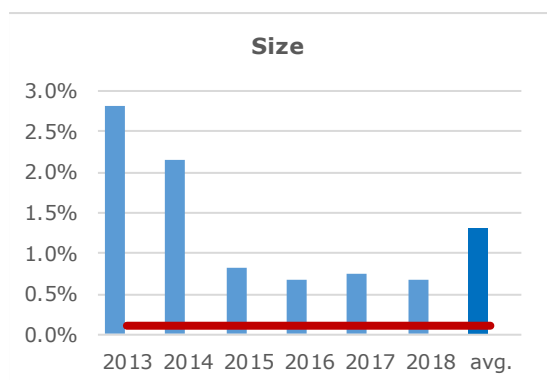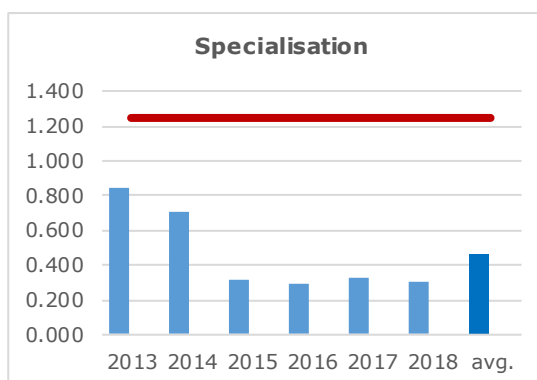
Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

Red line: relative to region threshold

Wages relative to industry

Red line: relative to industry threshold

Employment

Wages
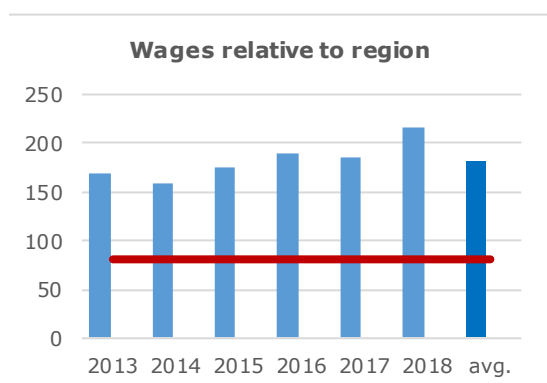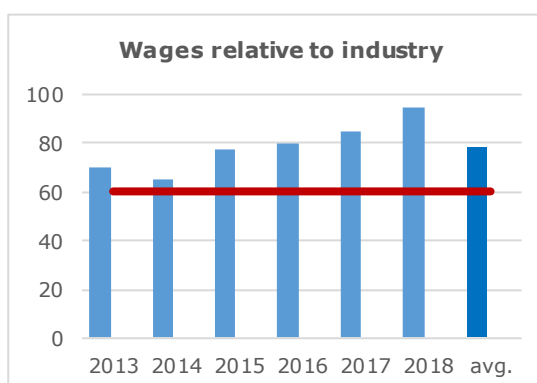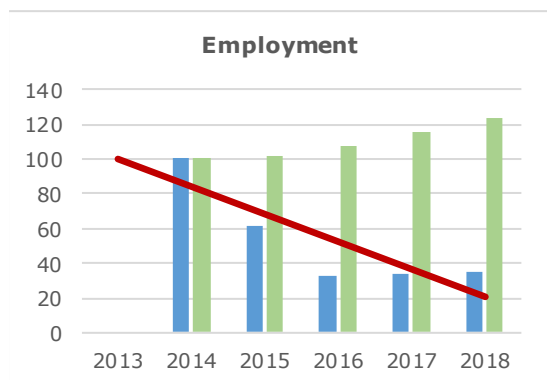
Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti
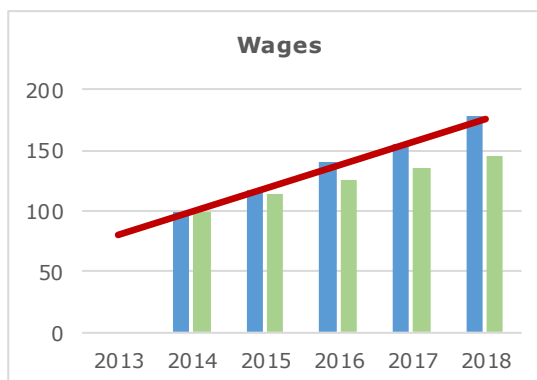
Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

45 Construction
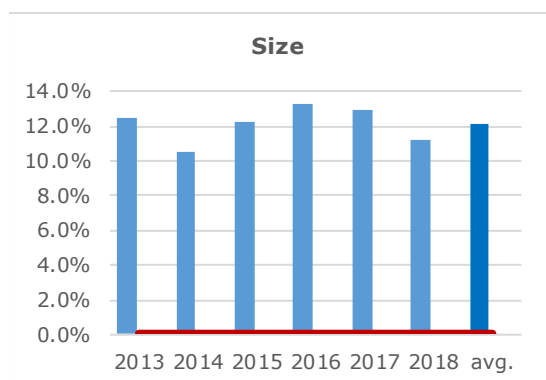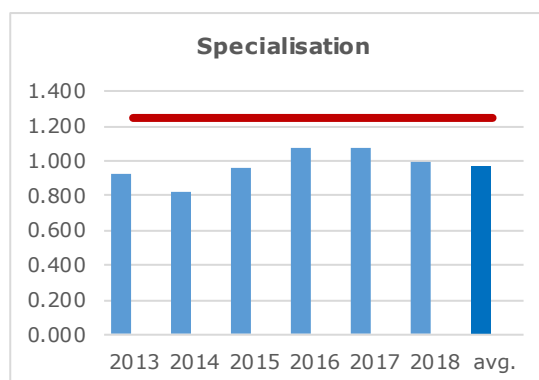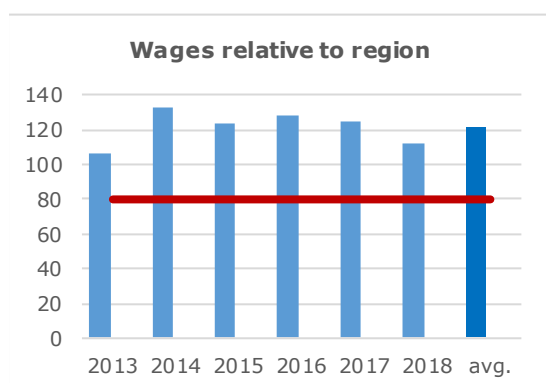
Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

Red line: relative to region threshold
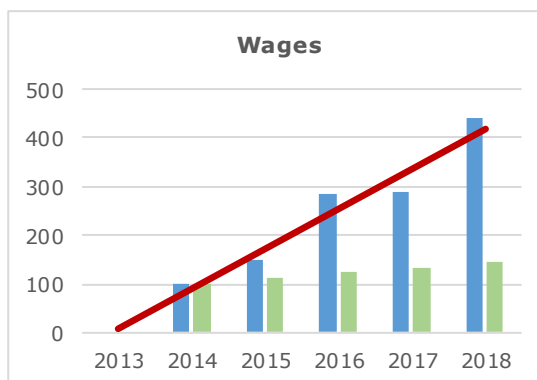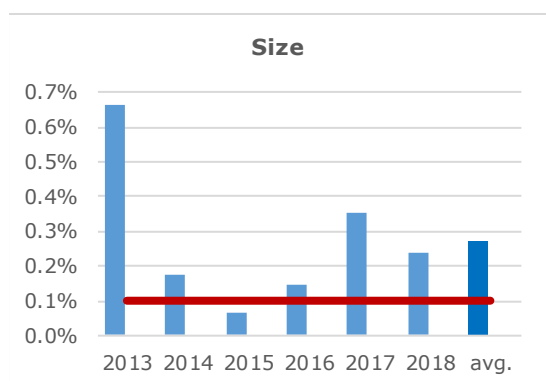
Wages relative to industry

Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
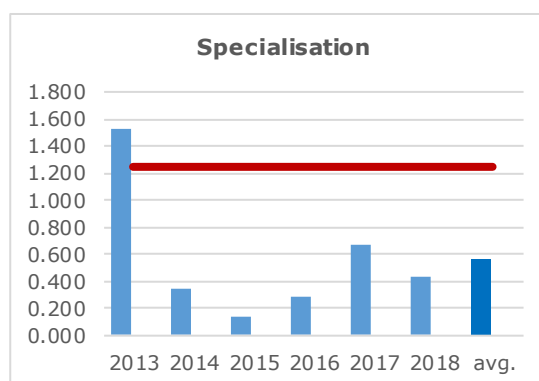Red line: regression line
Green columns: Imereti

Wages
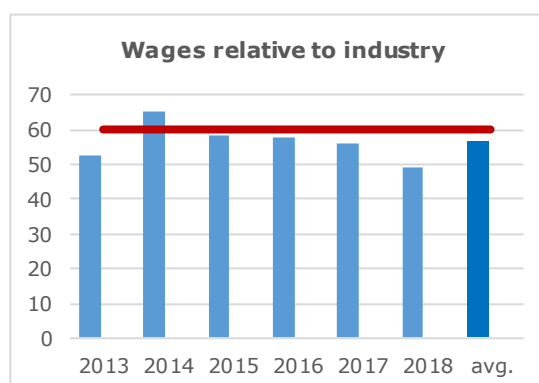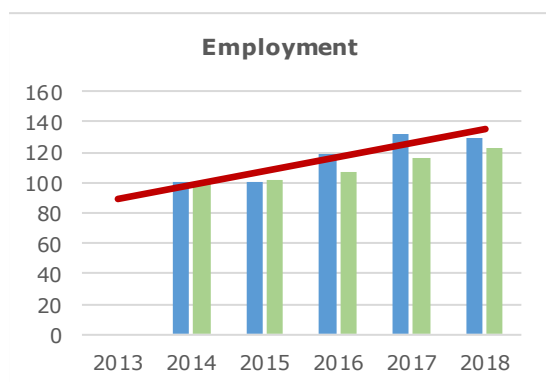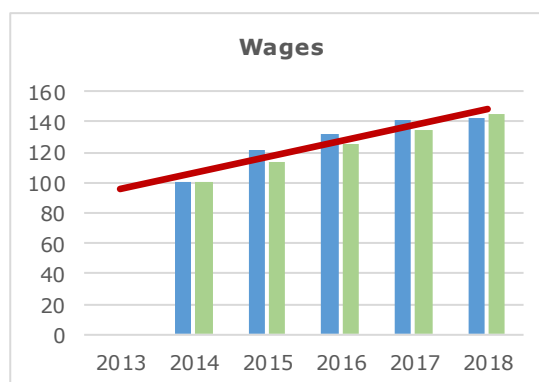
Two-year averages. Index values relative to 2014
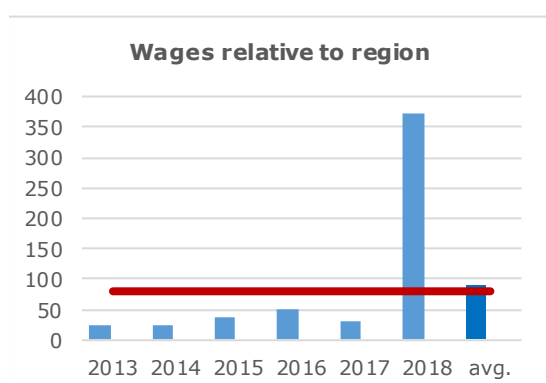Red line: regression line
Green columns: Imereti

NACE 45 has a dynamic economic potential.

45.2 Building of complete constructions or parts thereof; civil engineering
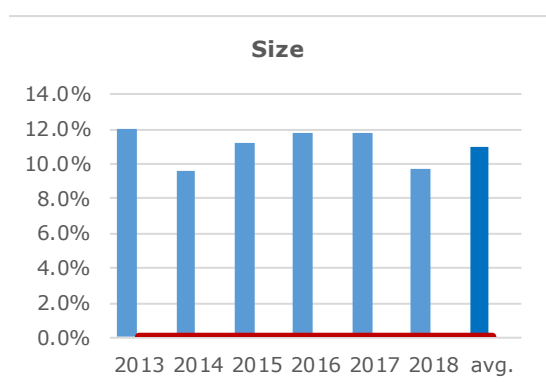
Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

Red line: relative to region threshold

Wages relative to industry

Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

Wages
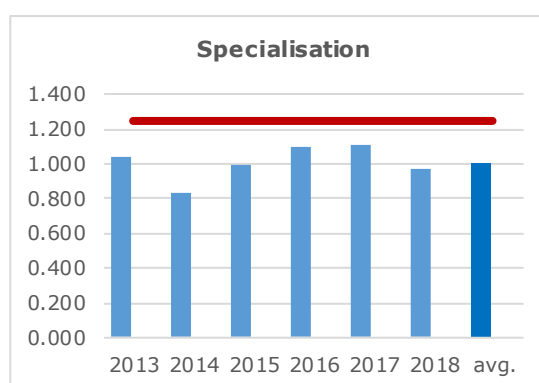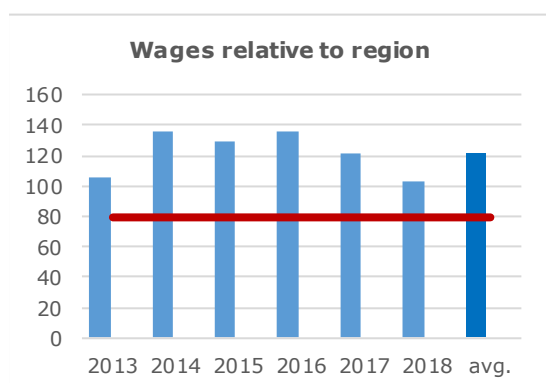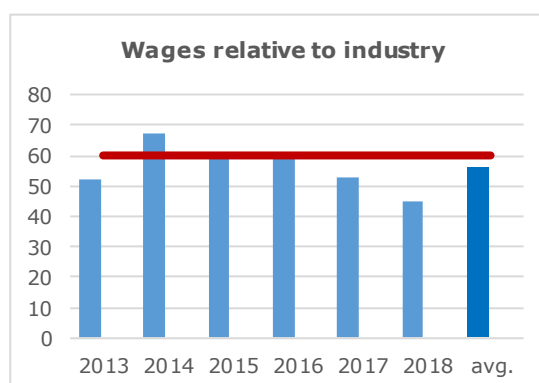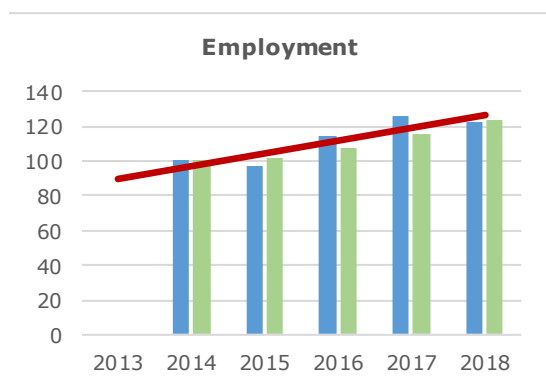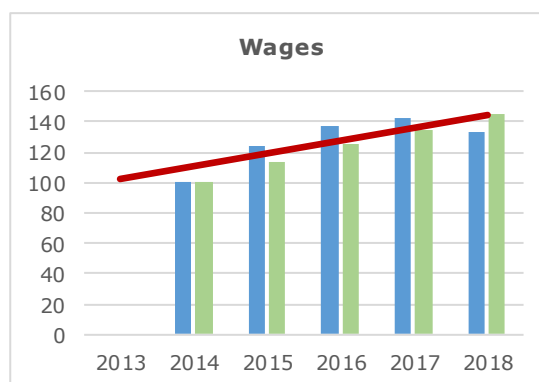
Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

45.3 Building installation
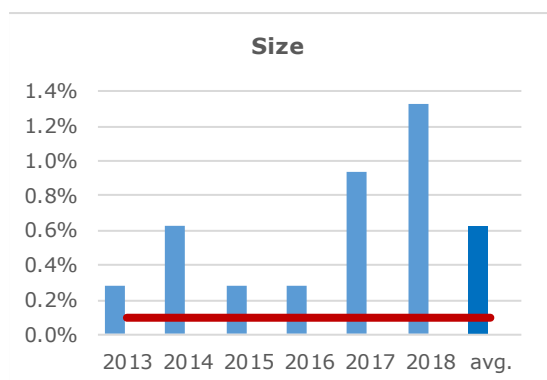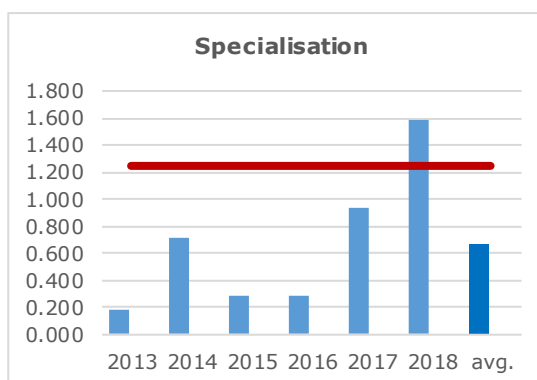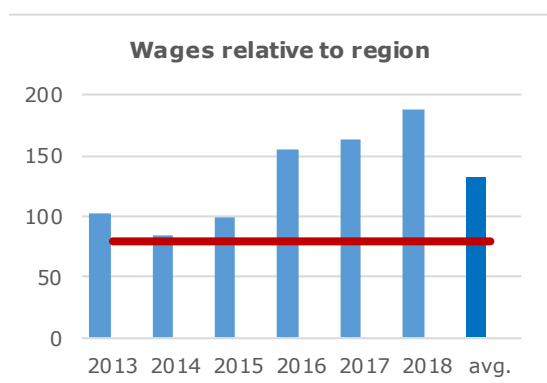
Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

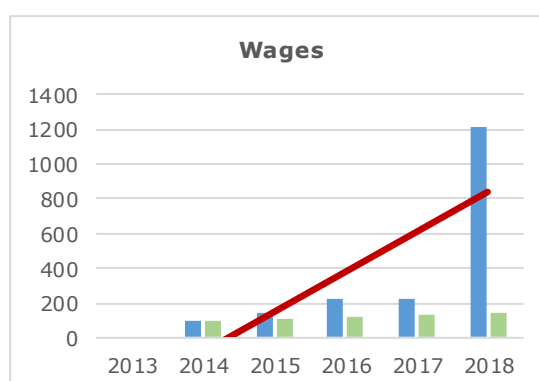
Red line: relative to region threshold

Wages relative to industry

Red line: relative to industry threshold
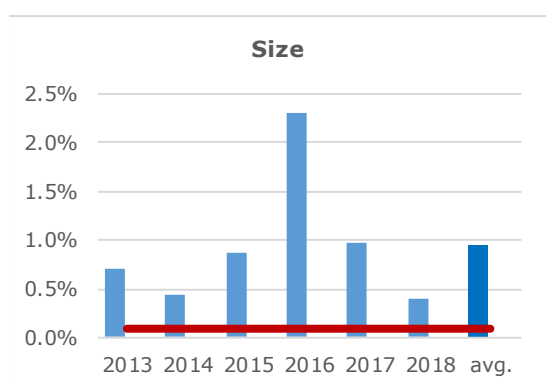
Employment

Two-year averages. Index values relative to 2014
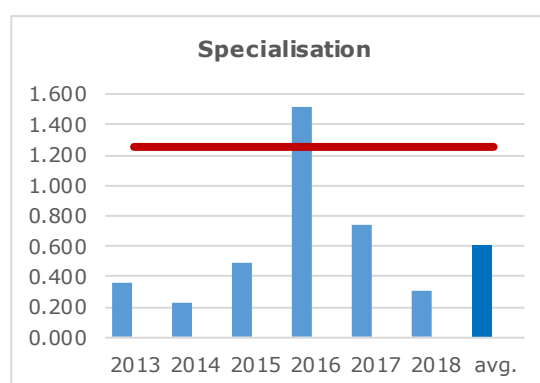Red line: regression line
Green columns: Imereti

Wages
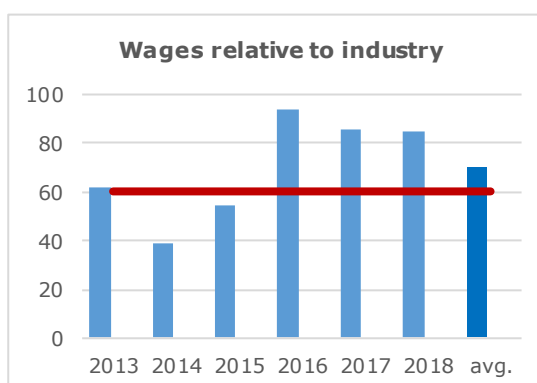
Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

45.5 Renting of construction or demolition equipment with operator

Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

Red line: relative to region threshold

Wages relative to industry

Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

Wages
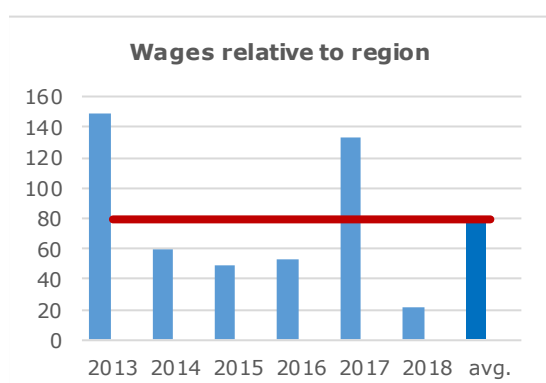
Two-year averages. Index values relative to 2014
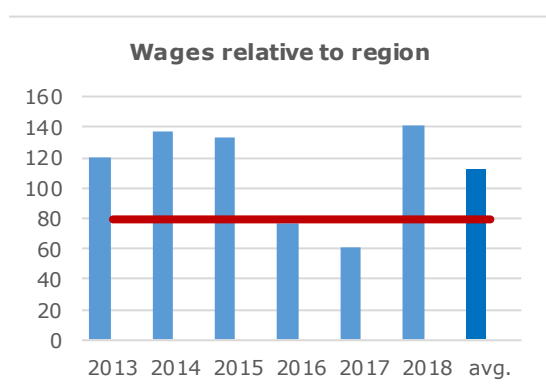Red line: regression line
Green columns: Imereti

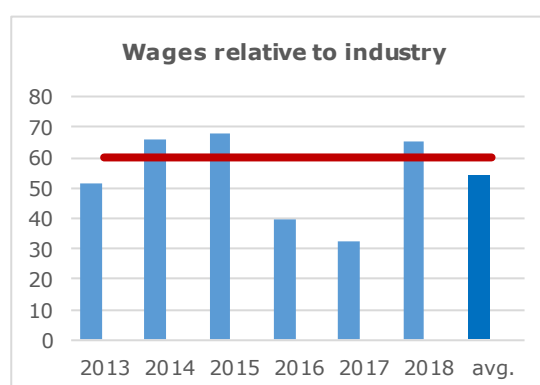## 50 Sale, maintenance and repair of motor vehicles and motorcycles; retail sale of automotive fuel

Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

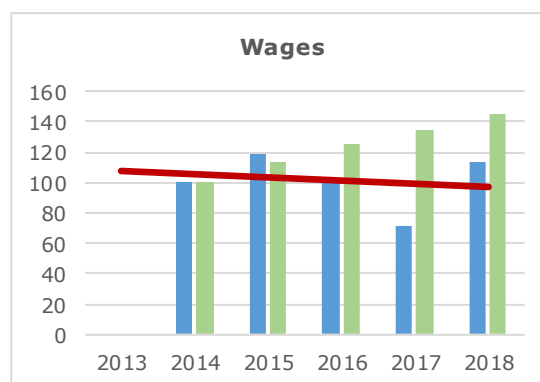Red line: relative to region threshold

Wages relative to industry

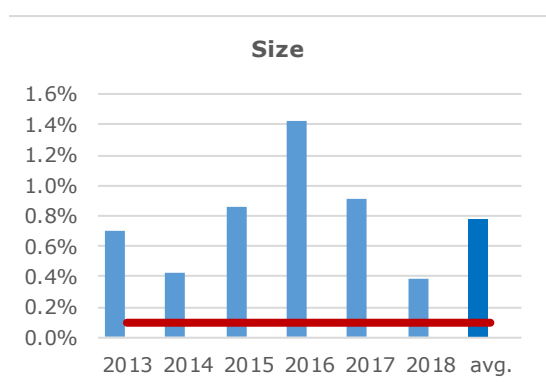Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
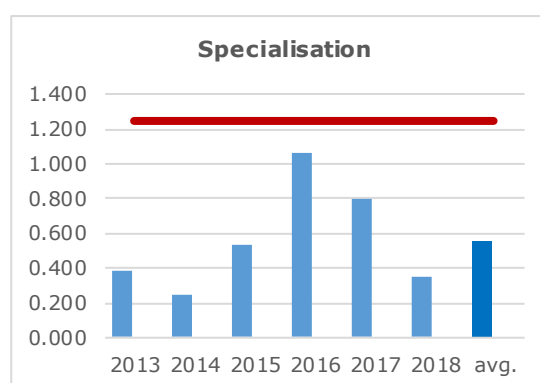Red line: regression line
Green columns: Imereti

Wages
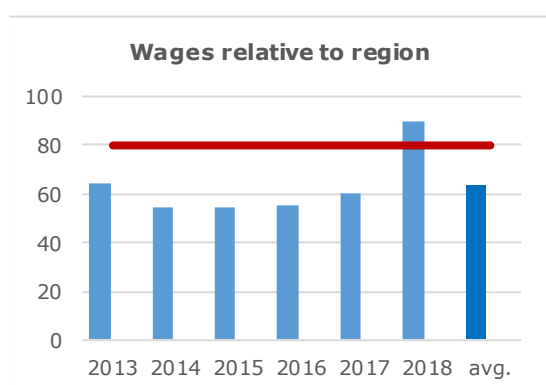
Two-year averages. Index values relative to 2014
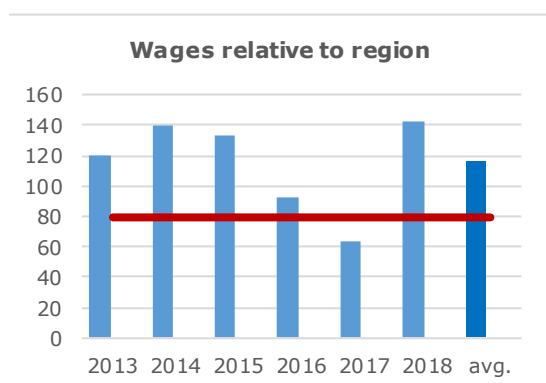Red line: regression line
Green columns: Imereti

NACE 50 has a dynamic economic potential.

50.3 Sale of motor vehicle parts and accessories

Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

Red line: relative to region threshold

Wages relative to industry

Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

Wages
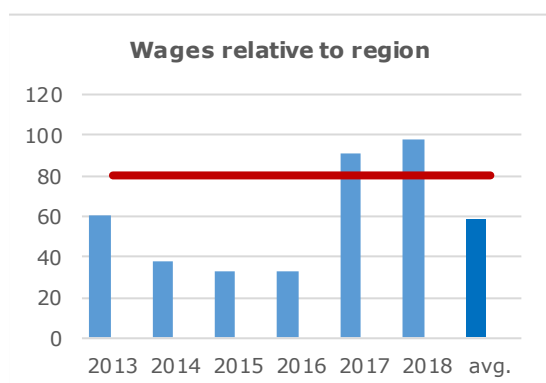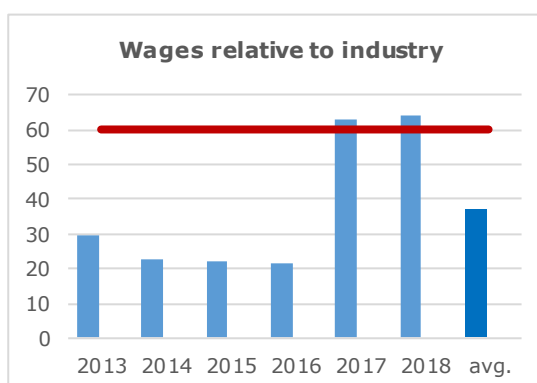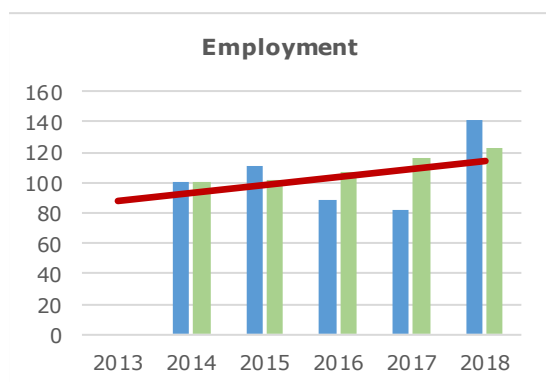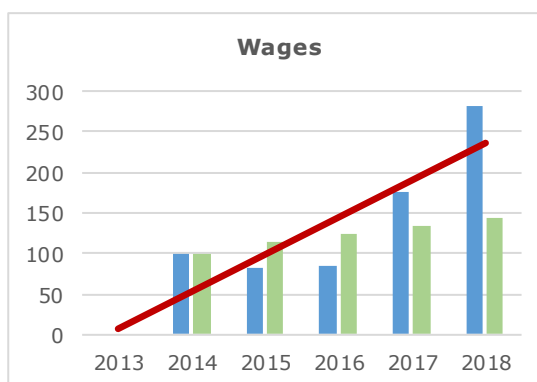
Two-year averages. Index values relative to 2014
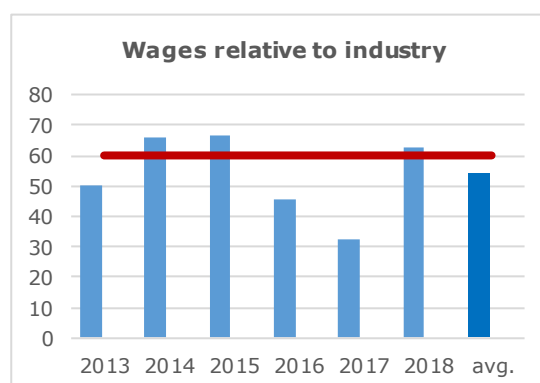Red line: regression line
Green columns: Imereti

50.5 Retail sale of automotive fuel

Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

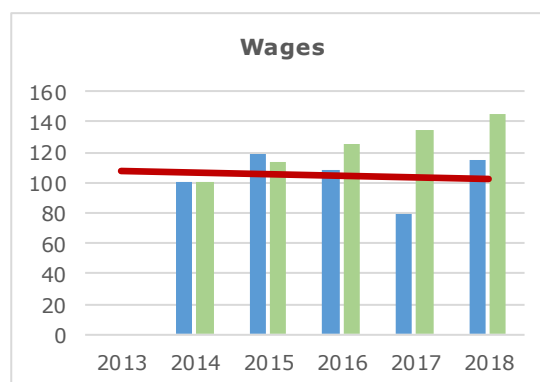

Red line: relative to region threshold

Wages relative to industry

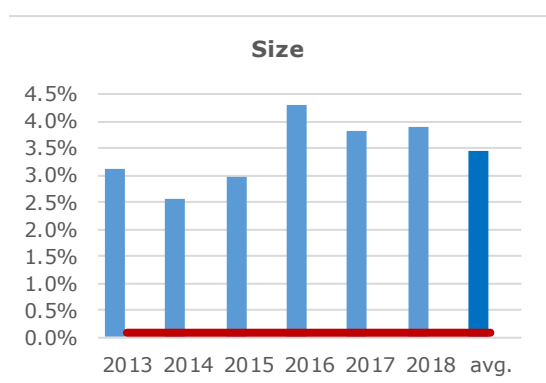Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
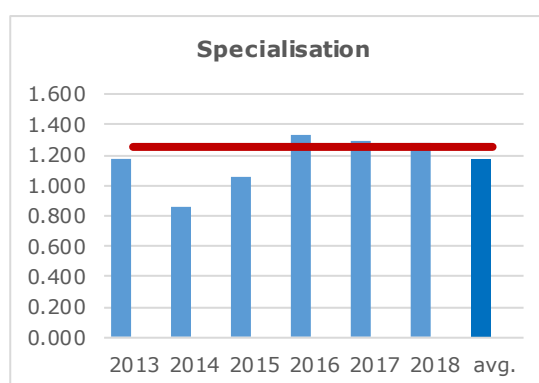Red line: regression line
Green columns: Imereti

Wages

Two-year averages. Index values relative to 2014
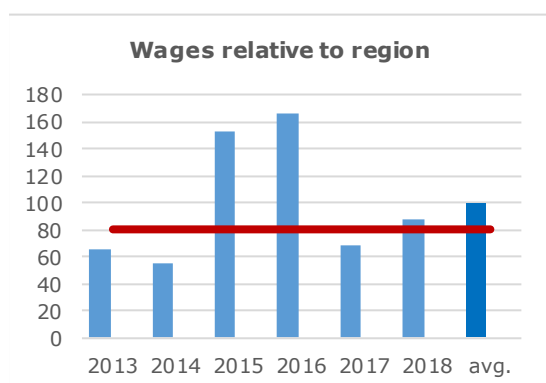Red line: regression line
Green columns: Imereti

51 Wholesale trade and commission trade, except of motor vehicles and motorcycles

Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

Red line: relative to region threshold

Wages relative to industry

Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

Wages
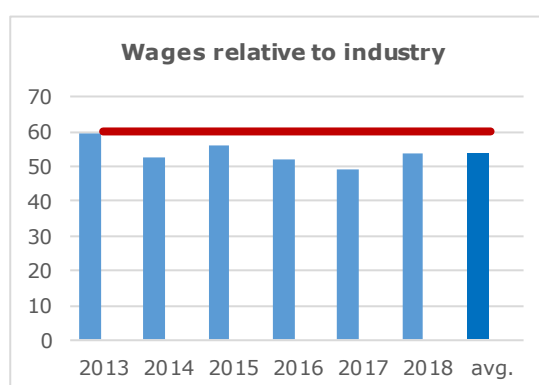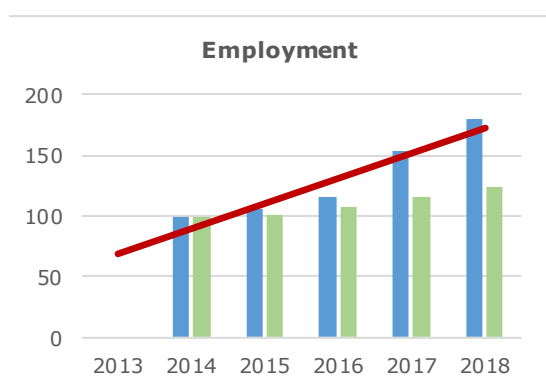
Two-year averages. Index values relative to 2014
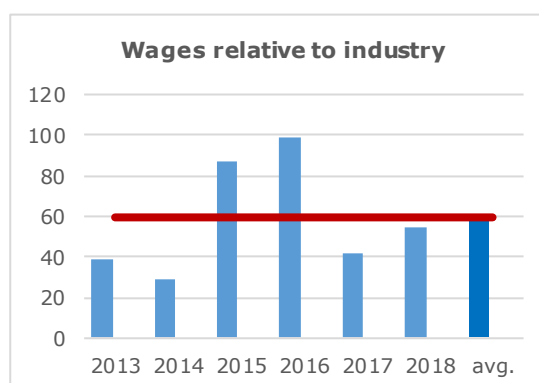Red line: regression line
Green columns: Imereti

51.2 Wholesale of agricultural raw materials and live animals

Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region
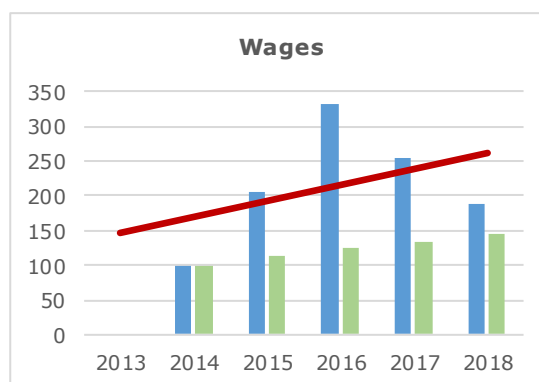
Red line: relative to region threshold

Wages relative to industry

Red line: relative to industry threshold
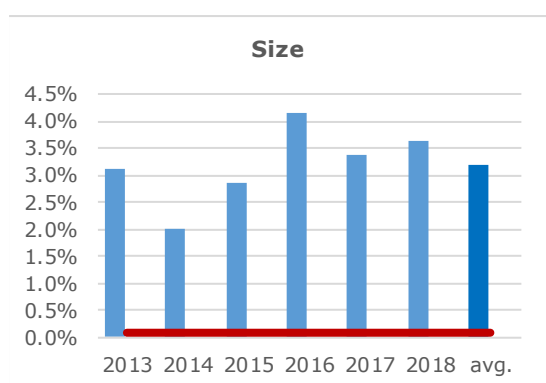
Employment

Two-year averages. Index values relative to 2014
Red line: regression line
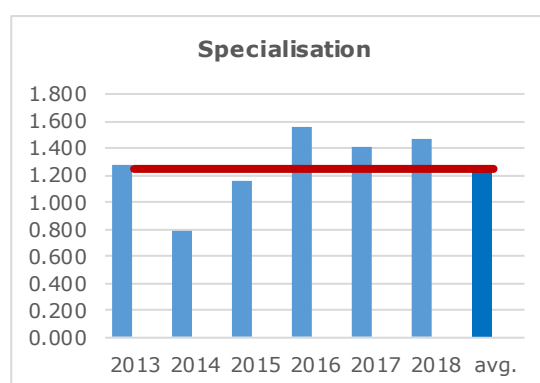Green columns: Imereti

Wages

Two-year averages. Index values relative to 2014
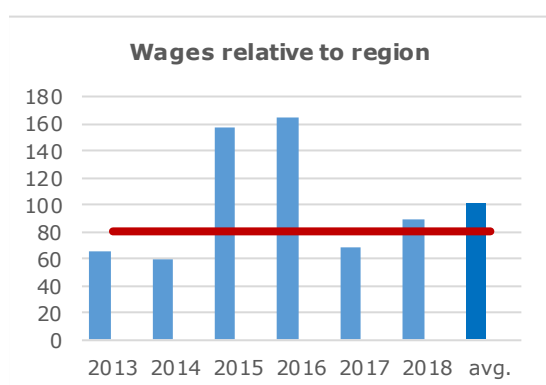Red line: regression line
Green columns: Imereti

51.3 Wholesale of food, beverages and tobacco

Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

Red line: relative to region threshold

Wages relative to industry

Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

Wages
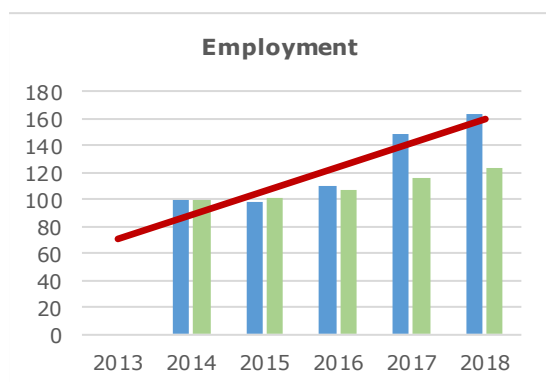
Two-year averages. Index values relative to 2014
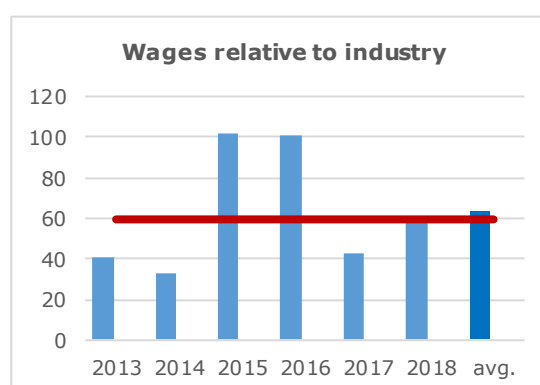Red line: regression line
Green columns: Imereti

51.4 Wholesale of household goods

Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region
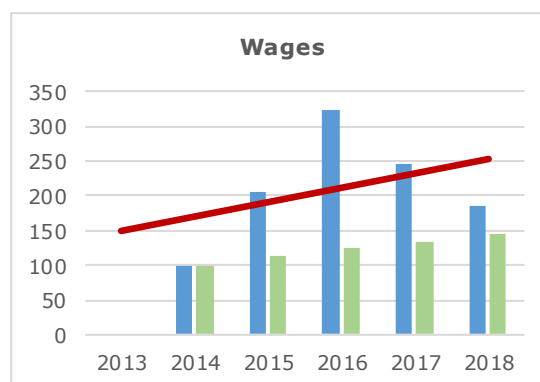
Red line: relative to region threshold

Wages relative to industry

Red line: relative to industry threshold
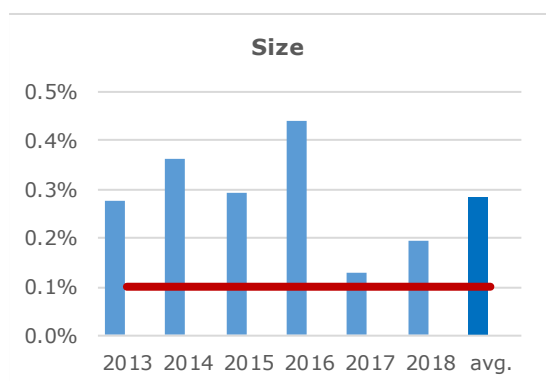
Employment

Two-year averages. Index values relative to 2014
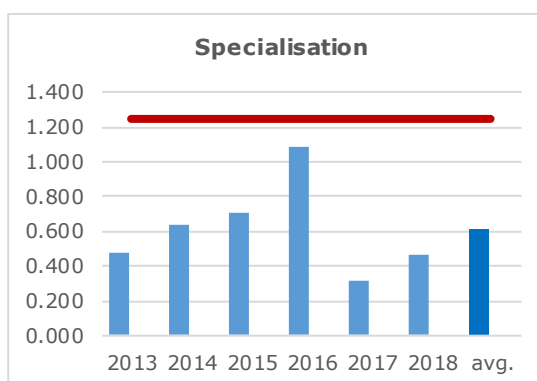Red line: regression line
Green columns: Imereti

Wages
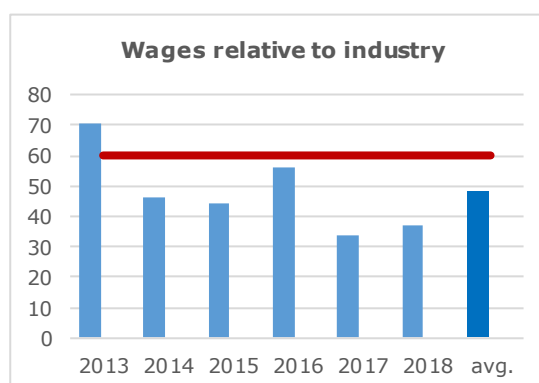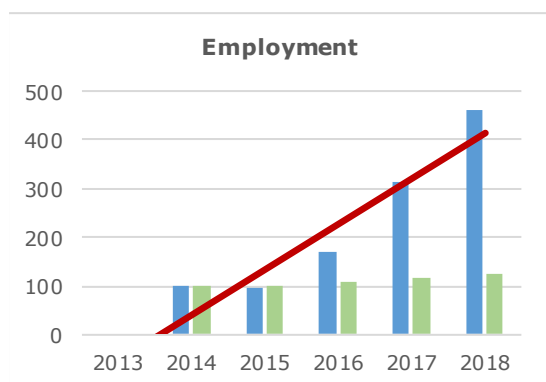
Two-year averages. Index values relative to 2014
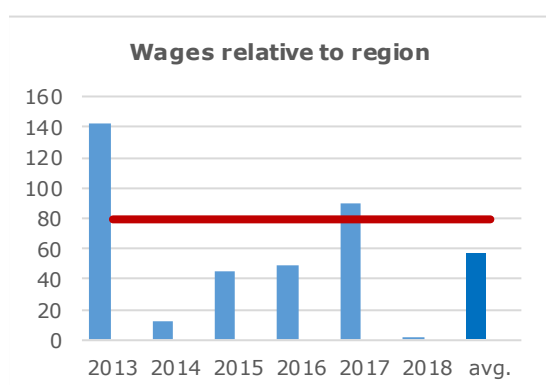Red line: regression line
Green columns: Imereti

51.5 Wholesale of non-agricultural intermediate products, waste and scrap

Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

Red line: relative to region threshold

Wages relative to industry

Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

Wages
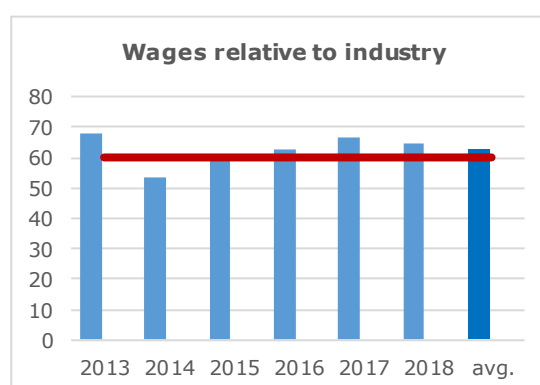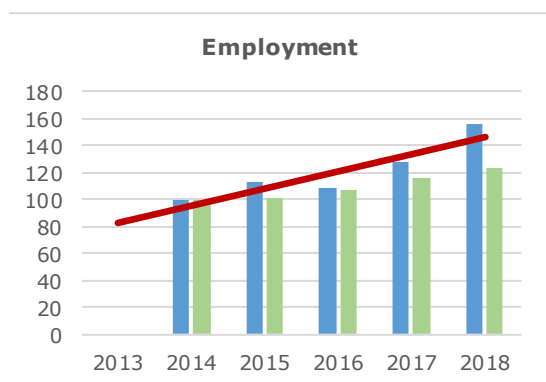
Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

NACE 51.5 has a dynamic economic potential.

51.8 Wholesale of machinery, equipment and supplies

Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

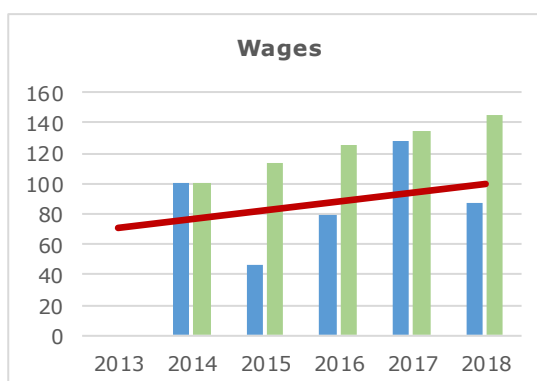Red line: relative to region threshold

Wages relative to industry

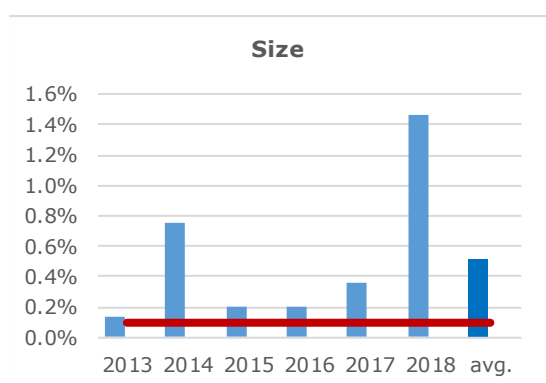Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
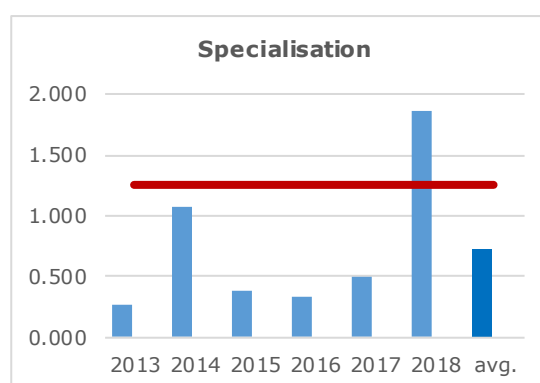Red line: regression line
Green columns: Imereti

Wages
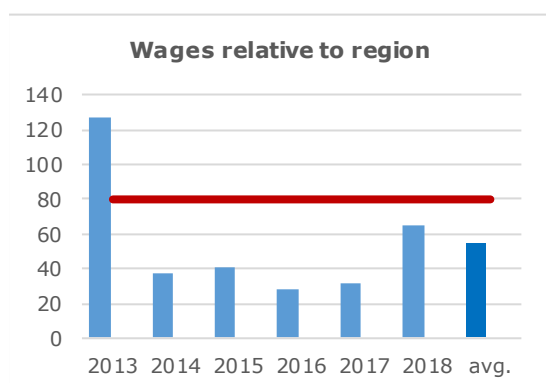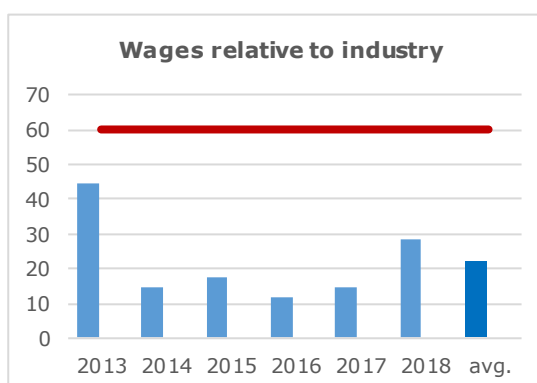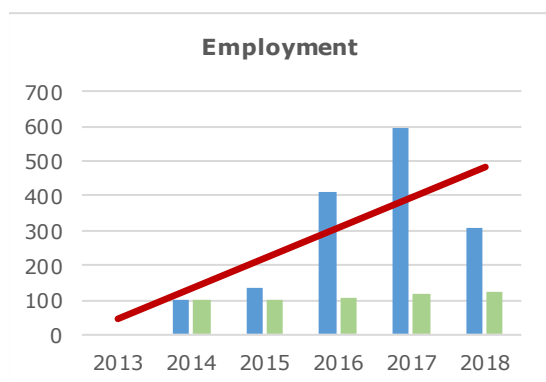
Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

51.9 Other wholesale

Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

Red line: relative to region threshold

Wages relative to industry

Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

Wages
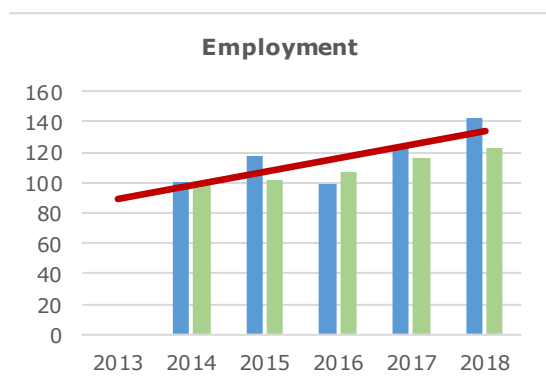
Two-year averages. Index values relative to 2014
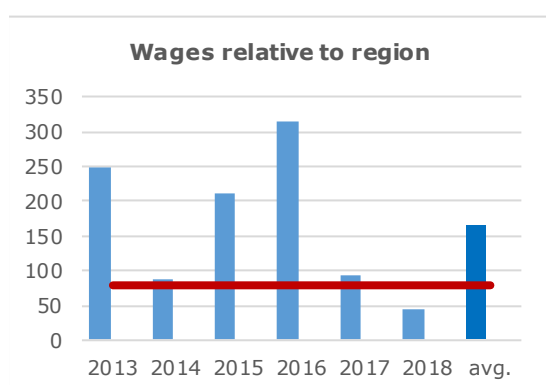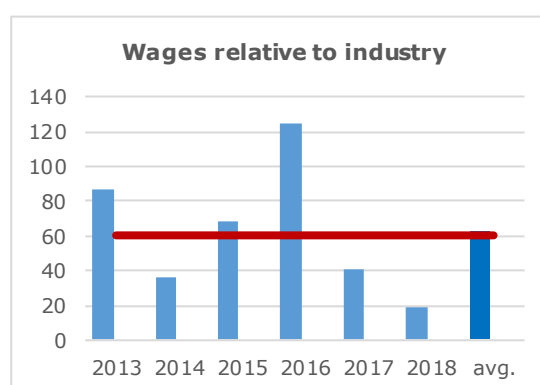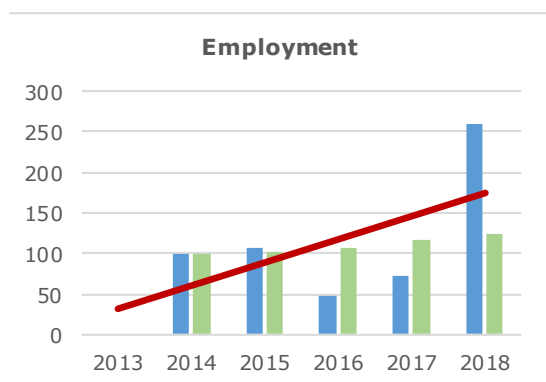Red line: regression line
Green columns: Imereti

52 Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods

Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

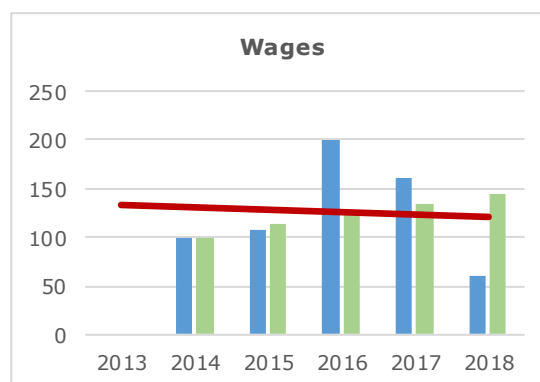Red line: relative to region threshold

Wages relative to industry

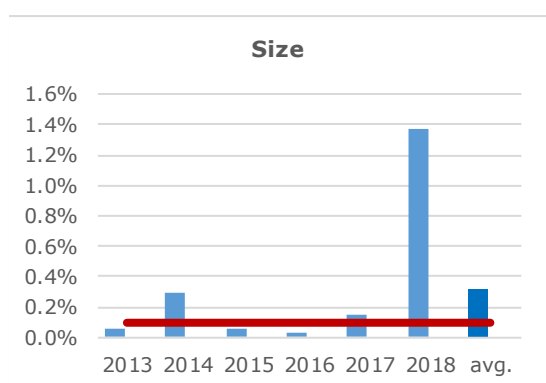Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
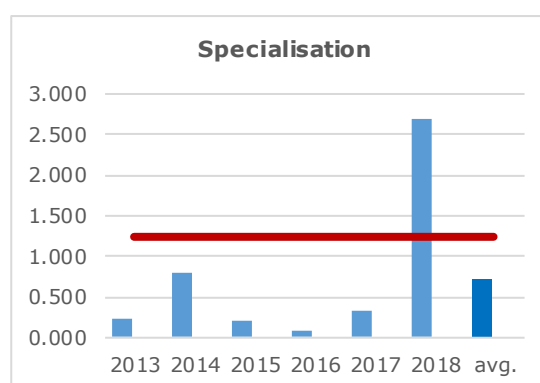Red line: regression line
Green columns: Imereti

Wages
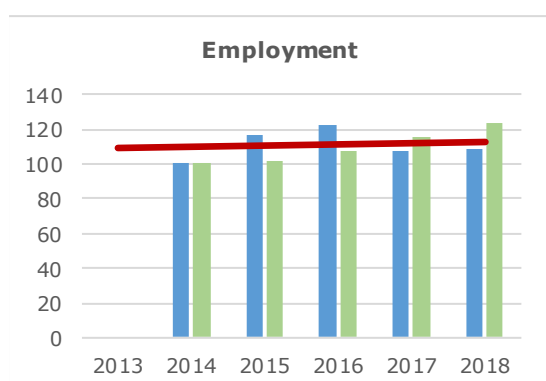
Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

52.1 Retail sale in non-specialized stores

Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

Red line: relative to region threshold

Wages relative to industry

Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

Wages
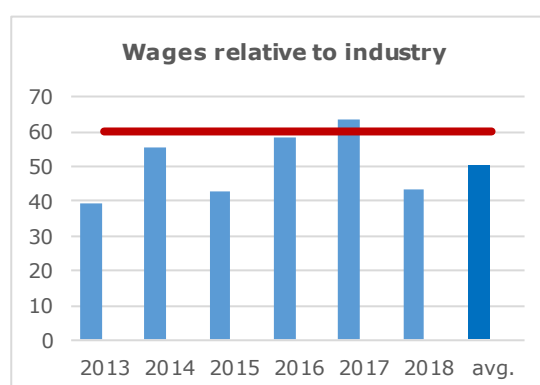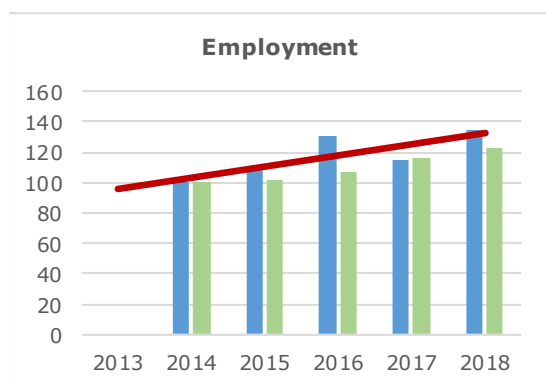
Two-year averages. Index values relative to 2014
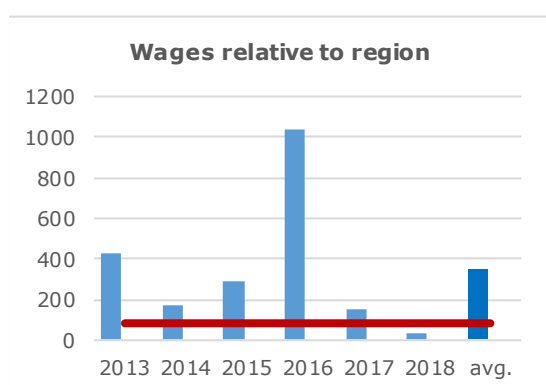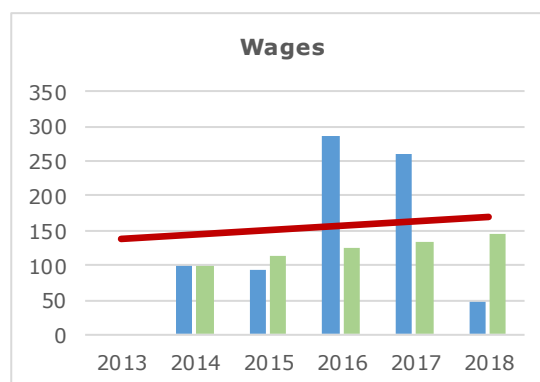Red line: regression line
Green columns: Imereti

52.2 Retail sale of food, beverages and tobacco in specialized stores

Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

Red line: relative to region threshold

Wages relative to industry

Red line: relative to industry threshold
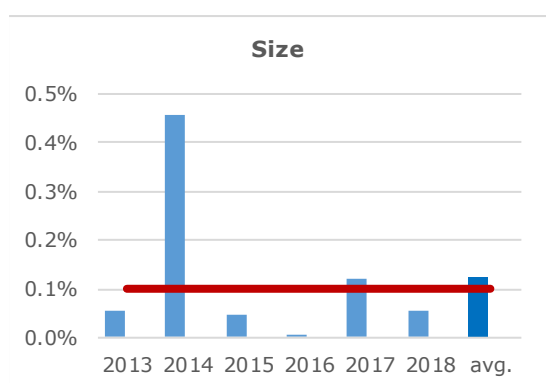
Employment

Two-year averages. Index values relative to 2014
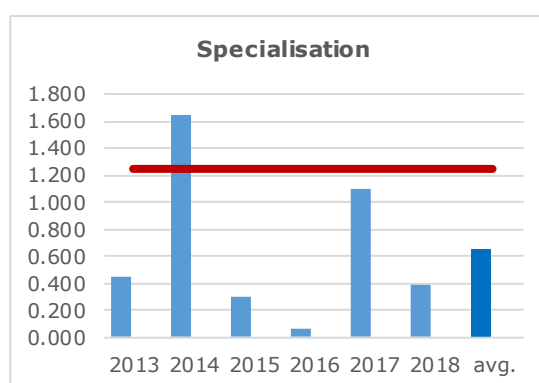Red line: regression line
Green columns: Imereti

Wages
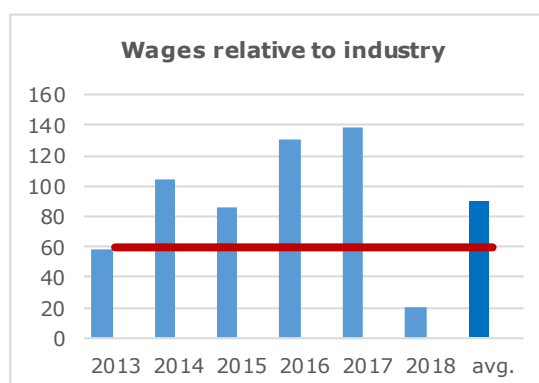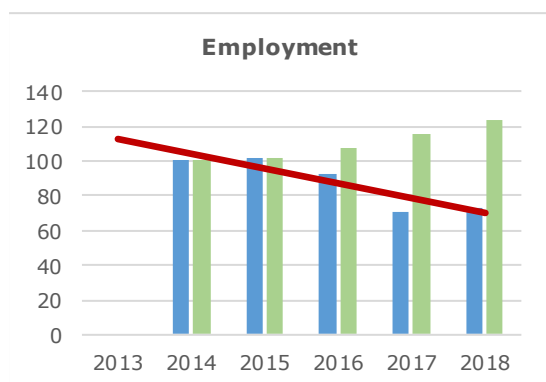
Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

52.3 Retail sale of pharmaceutical and medical goods, cosmetic and toilet articles

Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

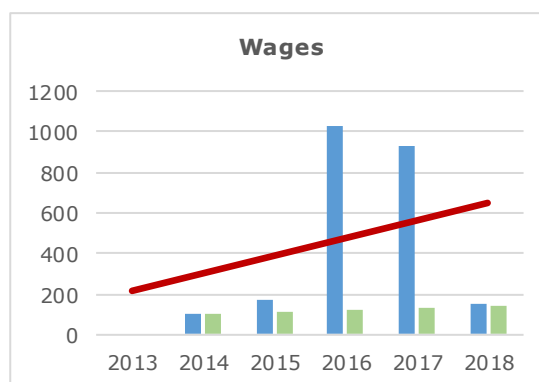Red line: relative to region threshold

Wages relative to industry

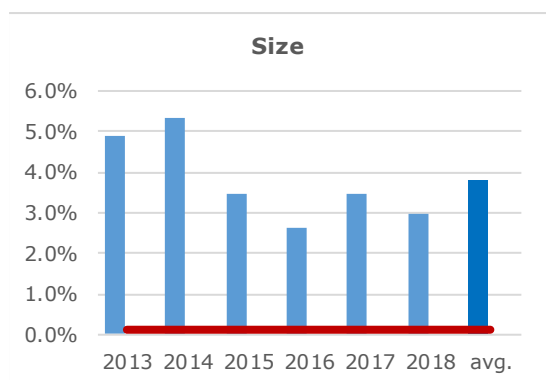Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

Wages
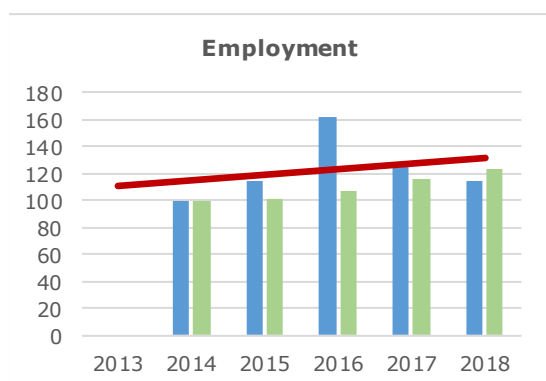
Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

52.4 Other retail sale of new goods in specialized stores

Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

Red line: relative to region threshold

Wages relative to industry

Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
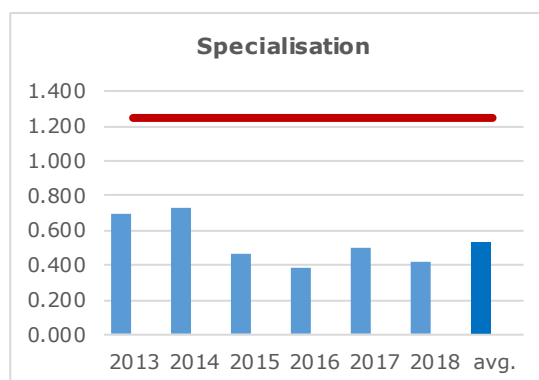Red line: regression line
Green columns: Imereti

Wages
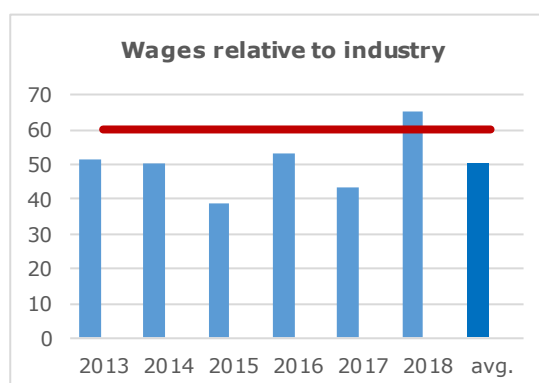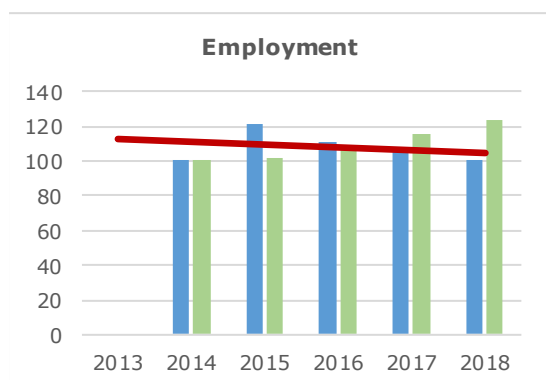
Two-year averages. Index values relative to 2014
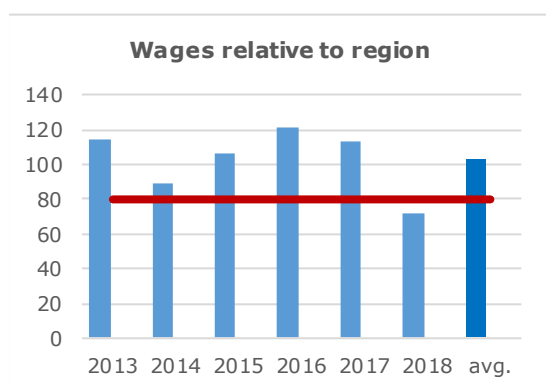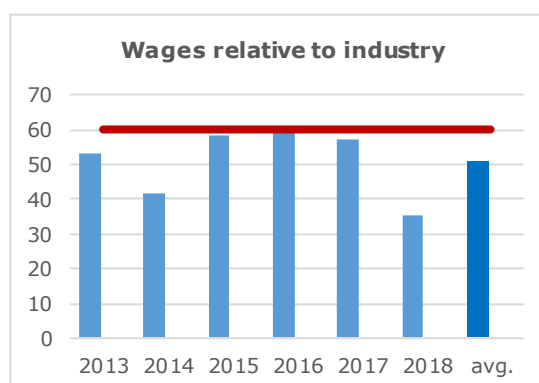Red line: regression line
Green columns: Imereti

55 Hotels and restaurants

Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

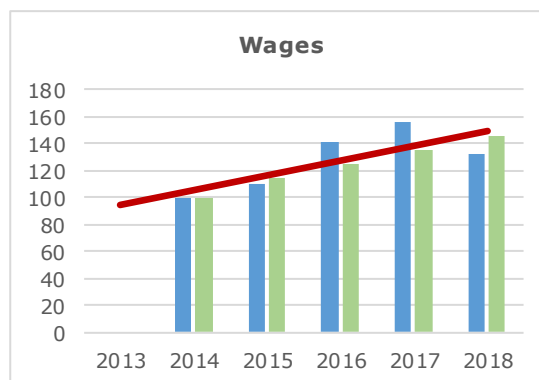Red line: relative to region threshold

Wages relative to industry

Red line: relative to industry threshold
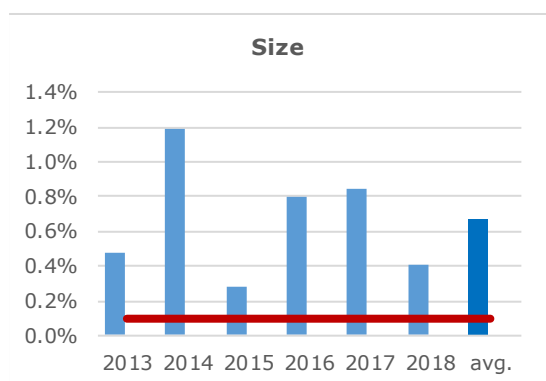
Employment

Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

Wages
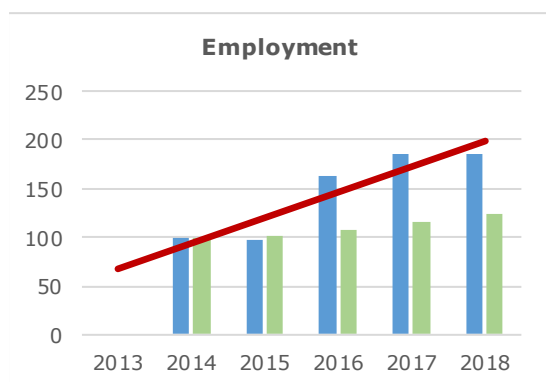
Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

55.1 Hotels

Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

Red line: relative to region threshold

Wages relative to industry

Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
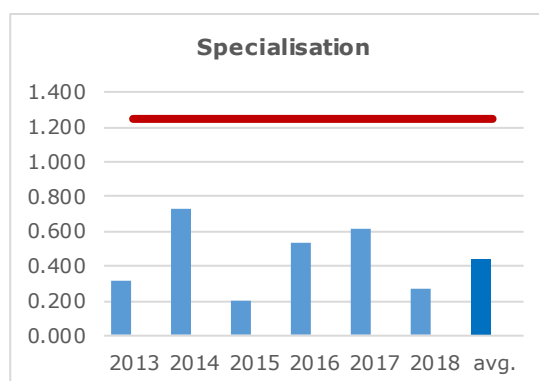Red line: regression line
Green columns: Imereti

Wages
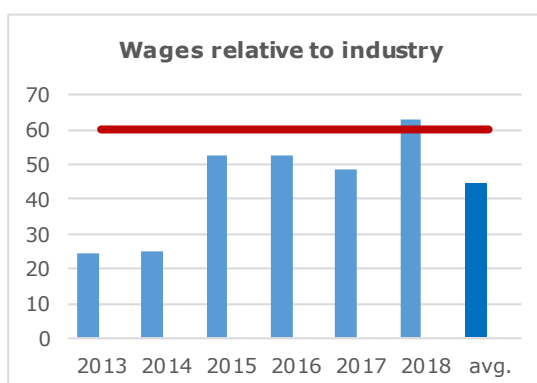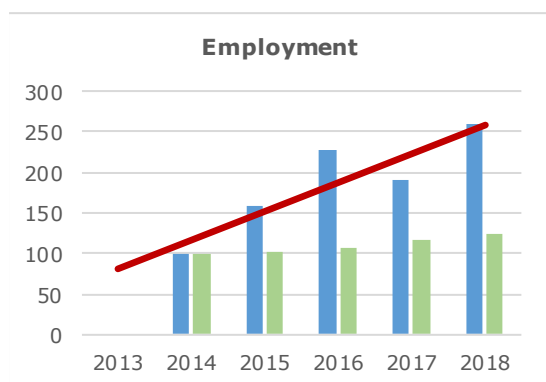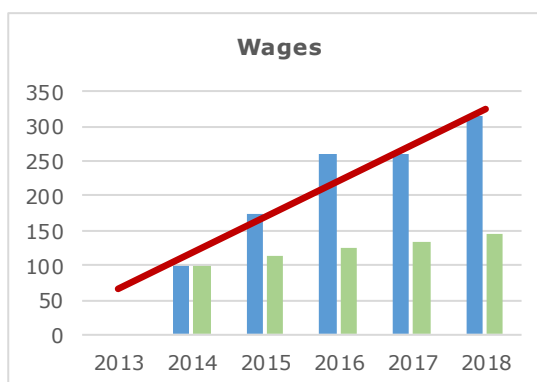
Two-year averages. Index values relative to 2014
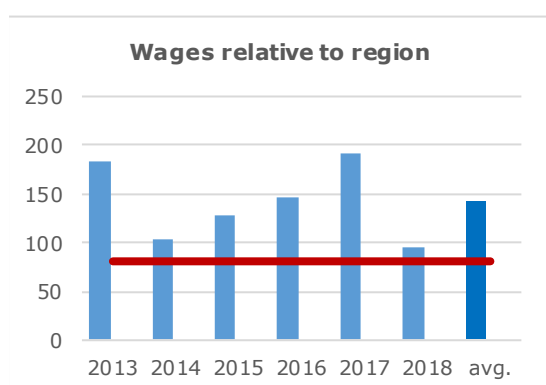Red line: regression line
Green columns: Imereti

NACE 55.1 has a dynamic economic potential.

55.3 Restaurants

Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

Red line: relative to region threshold
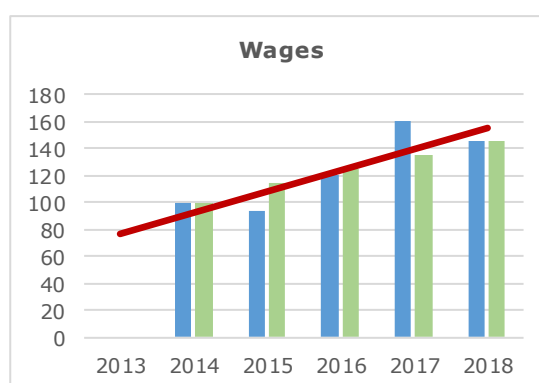
Wages relative to industry

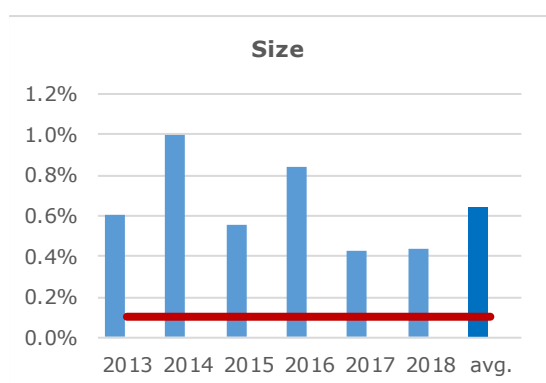Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

Wages
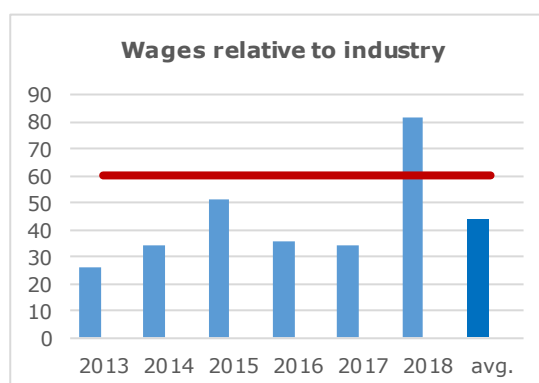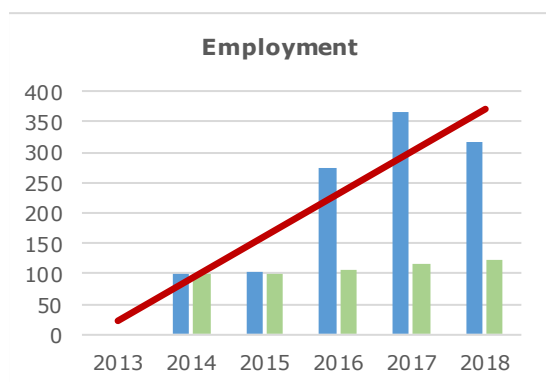
Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

60 Land transport; transport via pipelines

Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

Red line: relative to region threshold

Wages relative to industry

Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
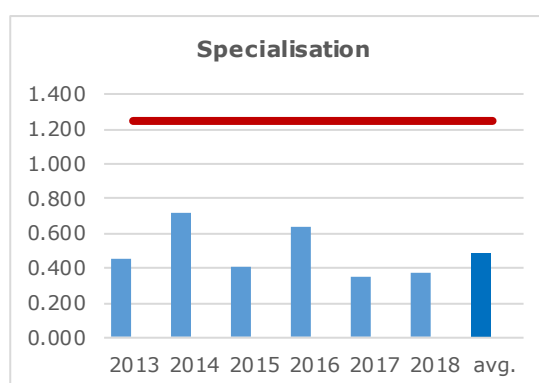Red line: regression line
Green columns: Imereti

Wages
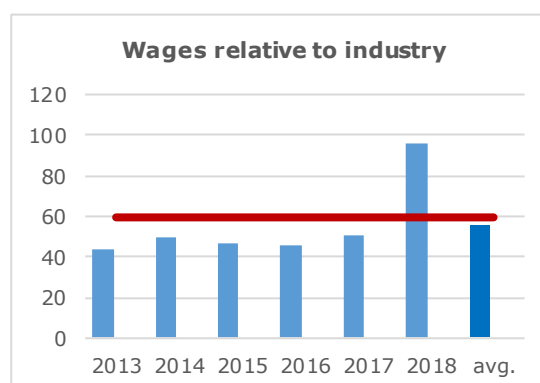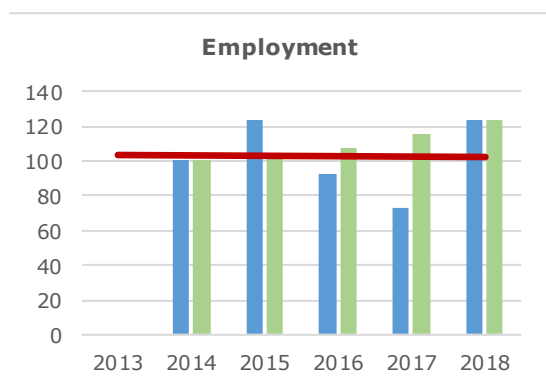
Two-year averages. Index values relative to 2014
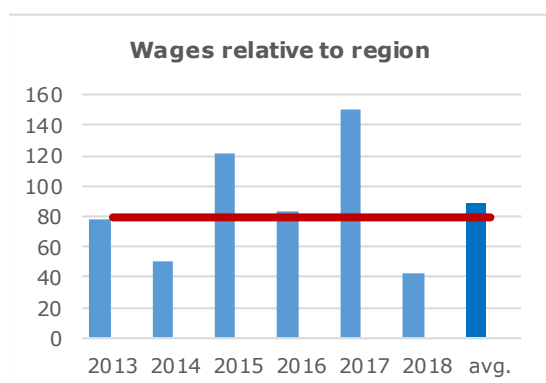Red line: regression line
Green columns: Imereti

60.2 Other land transport

Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

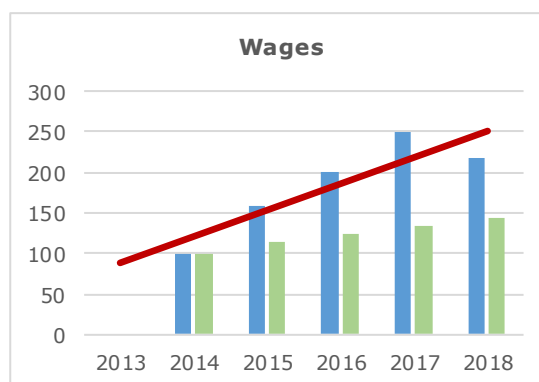Red line: relative to region threshold

Wages relative to industry

Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

Wages
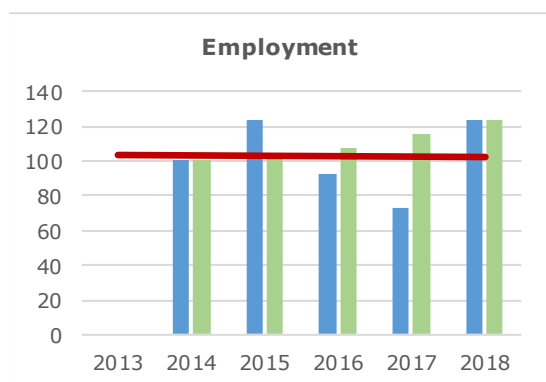
Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

63 Supporting and auxiliary transport activities; activities of travel agencies

Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

Red line: relative to region threshold

Wages relative to industry

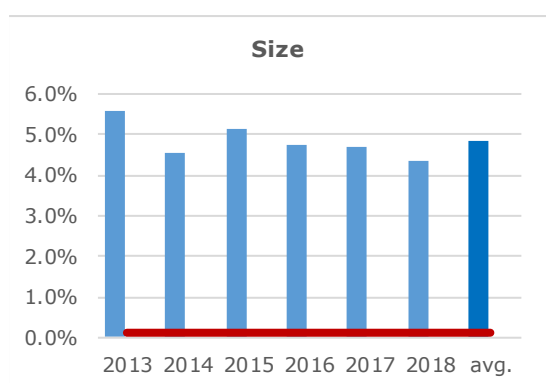Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
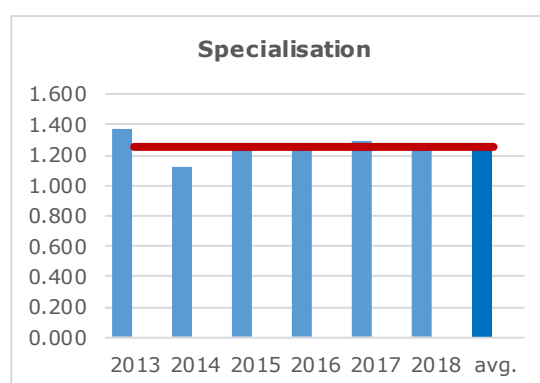Red line: regression line
Green columns: Imereti

Wages

Two-year averages. Index values relative to 2014
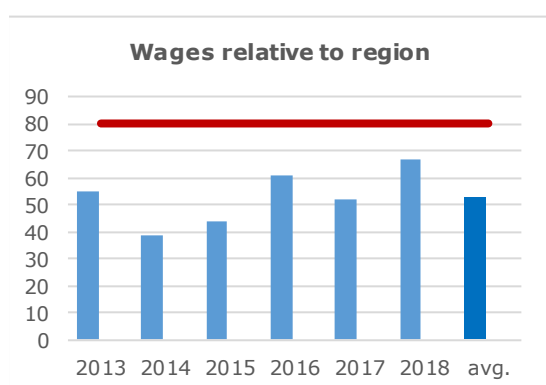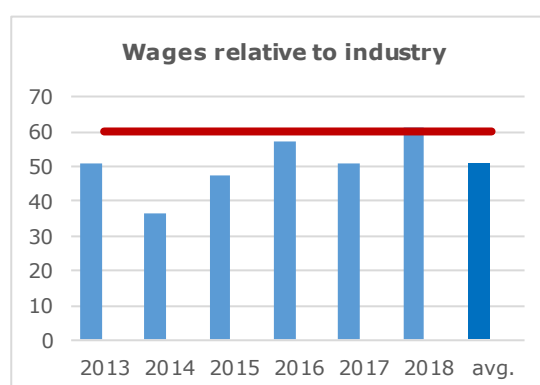Red line: regression line
Green columns: Imereti

113

63.3 Activities of travel agencies and tour operators; tourist assistance activities n.e.c.

Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

Red line: relative to region threshold

Wages relative to industry

Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

Wages

Two-year averages. Index values relative to 2014
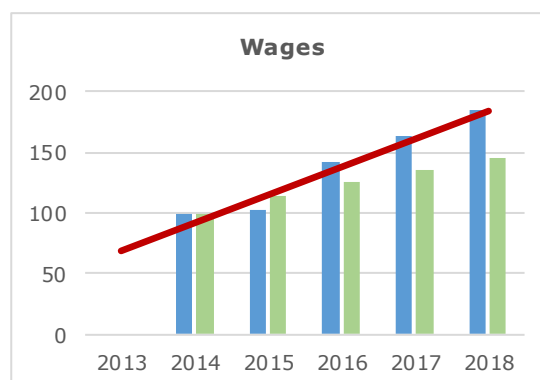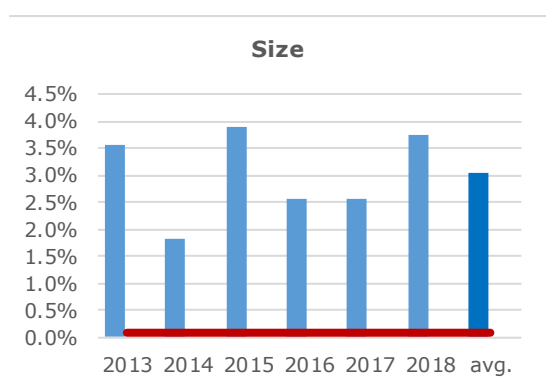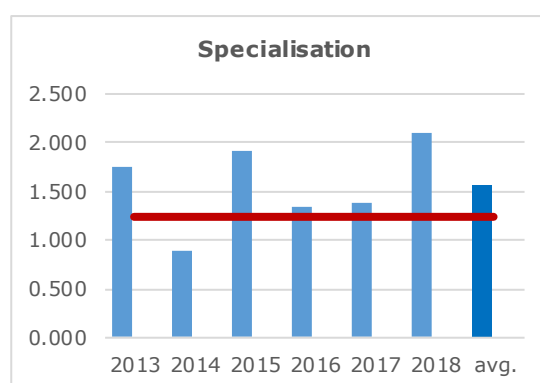Red line: regression line
Green columns: Imereti

64 Post and telecommunications

Size

2.5%
2.0%
1.5%
1.0%
0.5%
0.0%

2013 2014 2015 2016 2017 2018 avg.

Red line: size threshold

Specialisation

1.600
1.400
1.200
1.000
0.800
0.600
0.400
0.200
0.000

2013 2014 2015 2016 2017 2018 avg.

Red line: specialisation threshold

Wages relative to region

160
140
120
100
80
60
40
20
0

2013 2014 2015 2016 2017 2018 avg.

Red line: relative to region threshold

Wages relative to industry

80
70
60
50
40
30
20
10
0

2013 2014 2015 2016 2017 2018 avg.

Red line: relative to industry threshold

Employment

350
300
250
200
150
100
50
0

2013 2014 2015 2016 2017 2018

Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

Wages

160
140
120
100
80
60
40
20
0

2013 2014 2015 2016 2017 2018
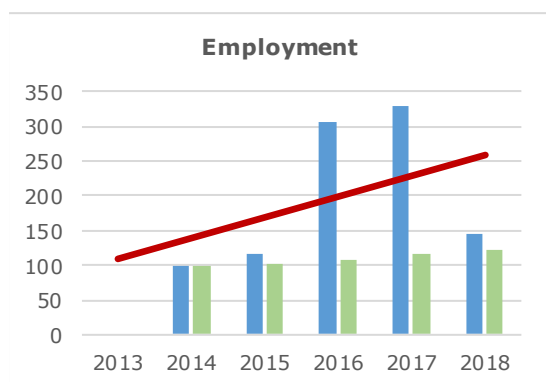
Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

64.2 Telecommunications

Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region
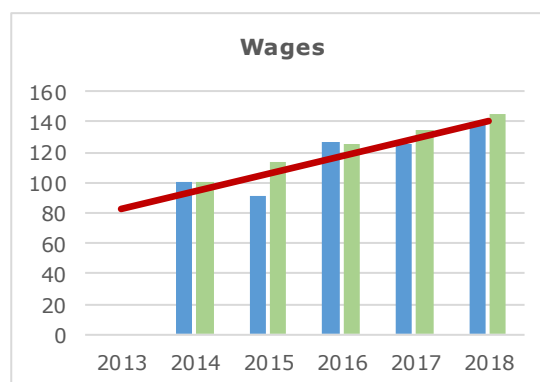

Red line: relative to region threshold

Wages relative to industry

Red line: relative to industry threshold
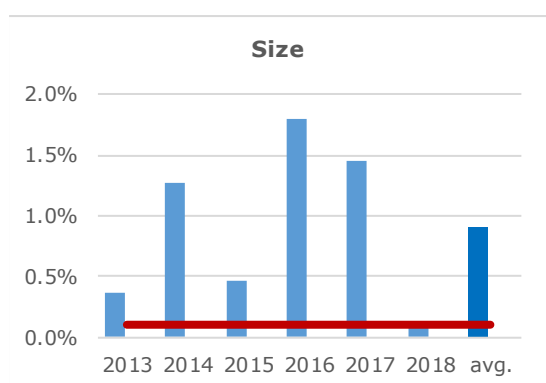
Employment

Two-year averages. Index values relative to 2014
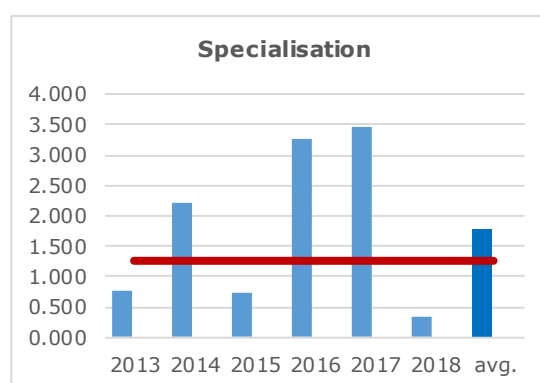Red line: regression line
Green columns: Imereti

Wages
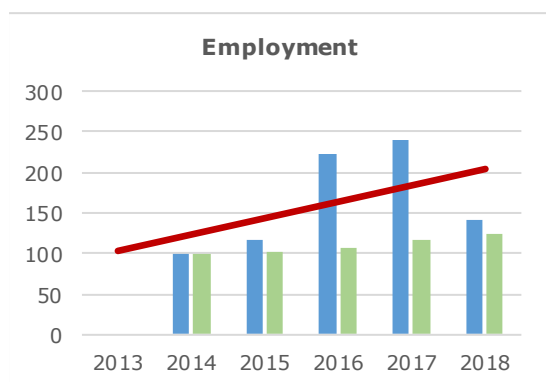
Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

70 Real estate activities

Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

Red line: relative to region threshold

Wages relative to industry

Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

Wages
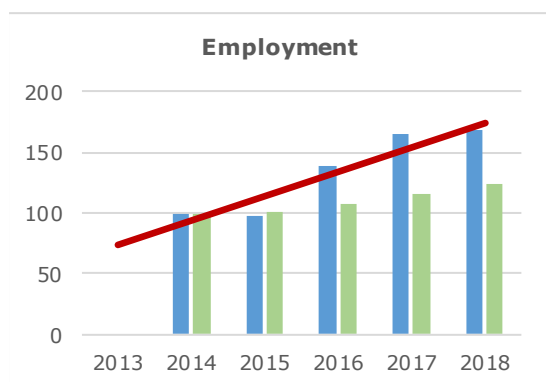
Two-year averages. Index values relative to 2014
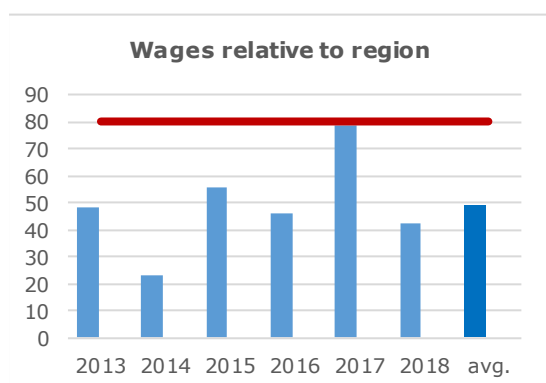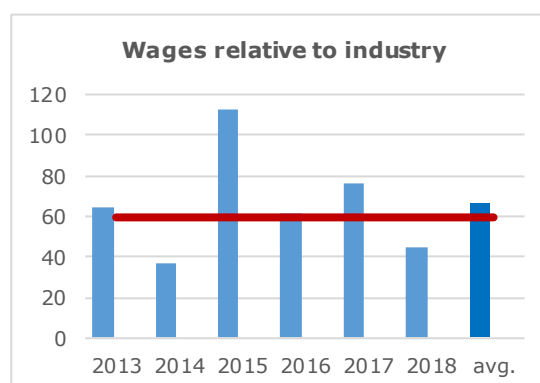Red line: regression line
Green columns: Imereti

70.2 Letting of own property

Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

Red line: relative to region threshold

Wages relative to industry

Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

Wages
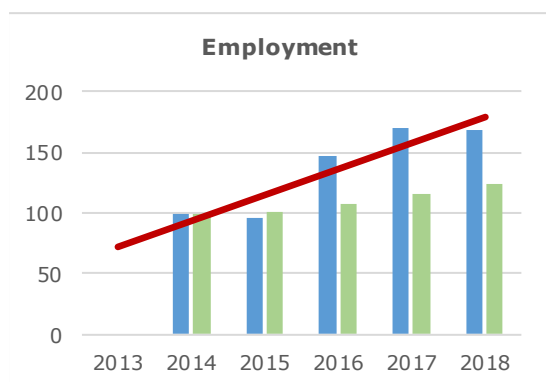
Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

71 Renting of machinery and equipment without operator and of personal and household goods

Red line: size threshold
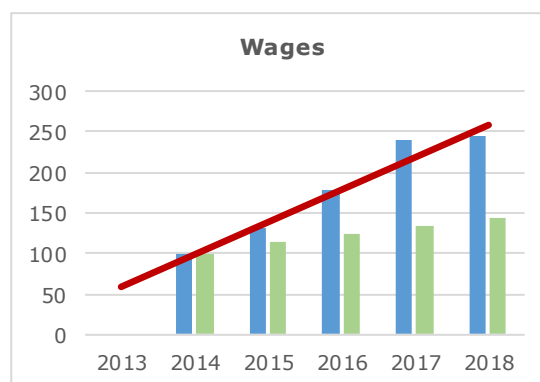

Red line: specialisation threshold

Red line: relative to region threshold
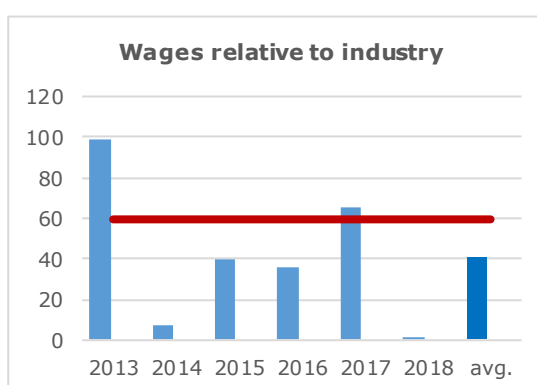
Red line: relative to industry threshold
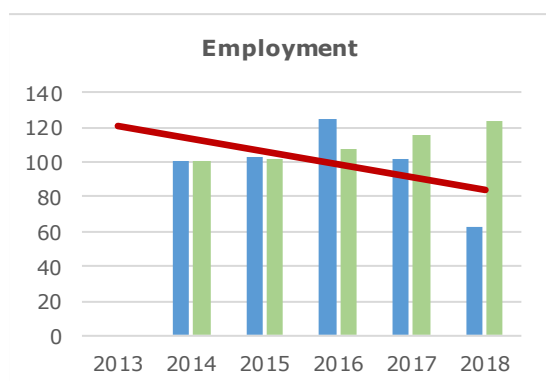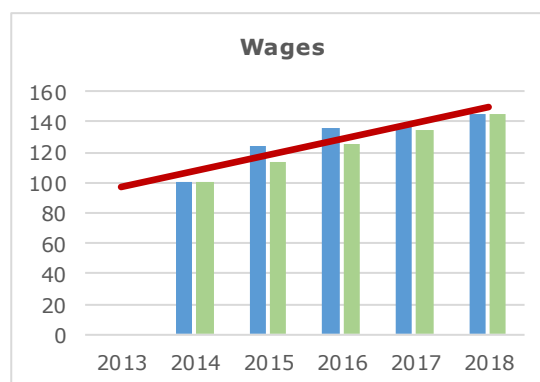

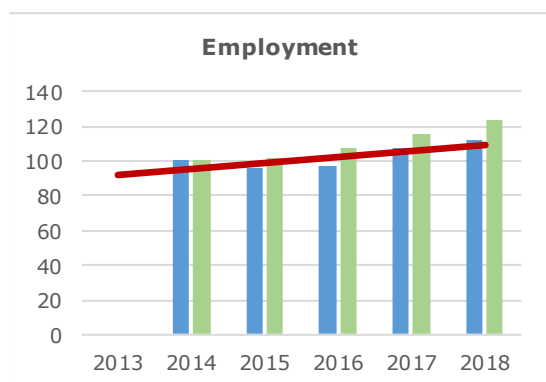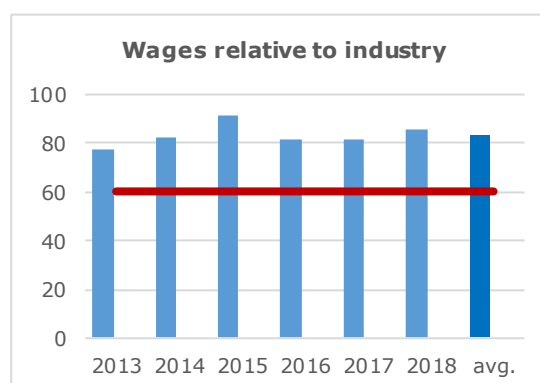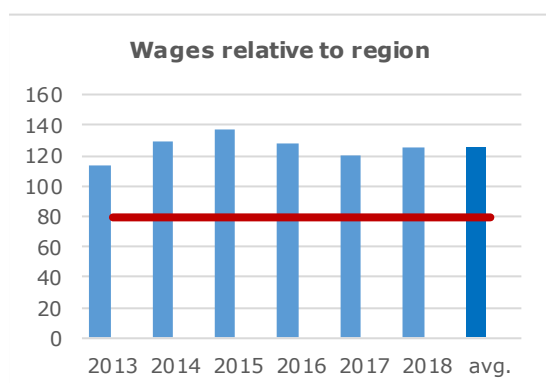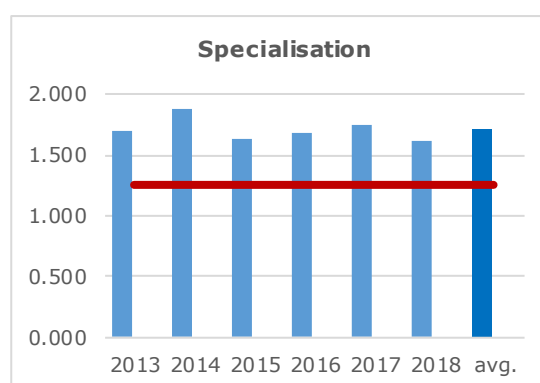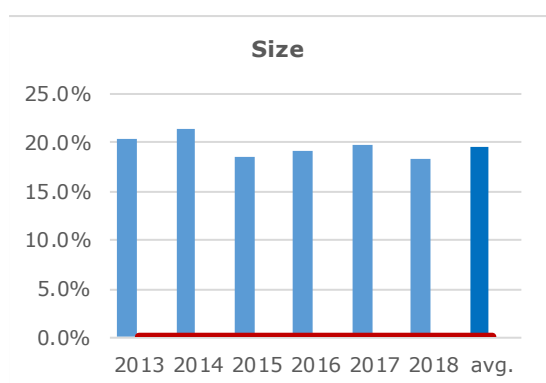Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

72 Computer and related activities

Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

Red line: relative to region threshold

Wages relative to industry

Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

Wages

Two-year averages. Index values relative to 2014
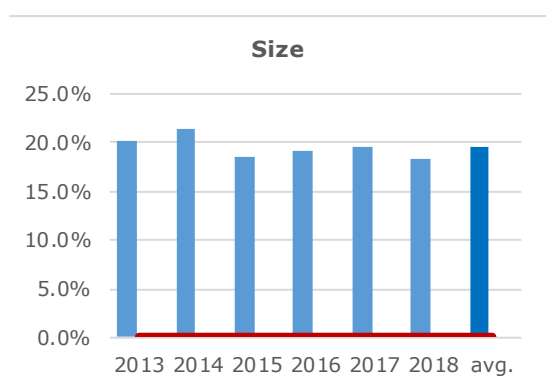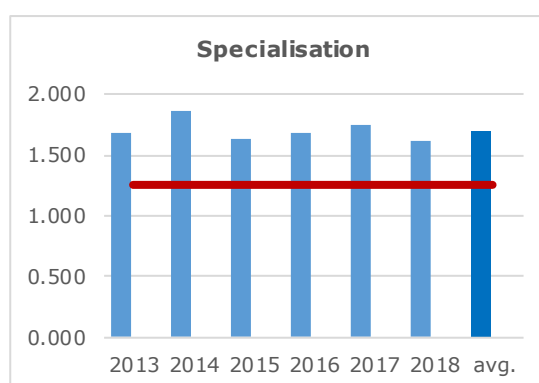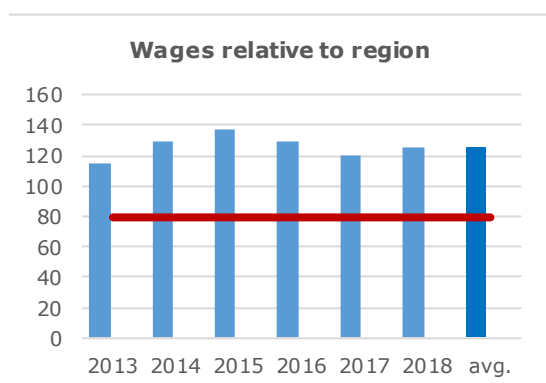Red line: regression line
Green columns: Imereti

72.2 Software consultancy and supply

Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

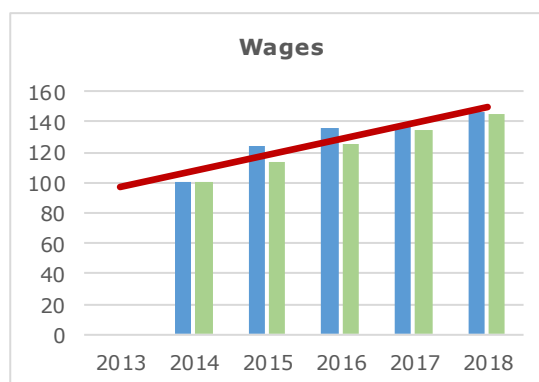Red line: relative to region threshold

Wages relative to industry

Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

Wages
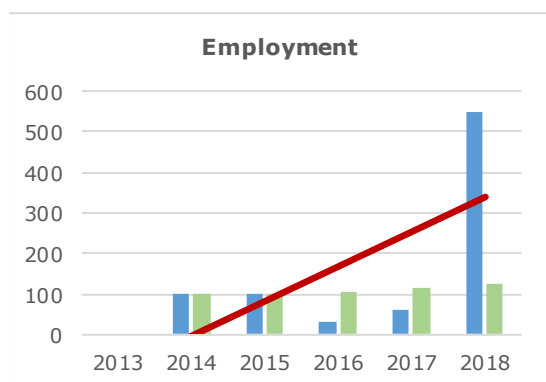
Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

72.5 Maintenance and repair of office, accounting and computing machinery

Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

Red line: relative to region threshold

Wages relative to industry

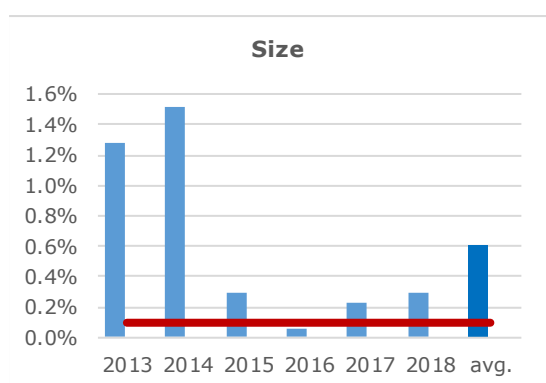Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
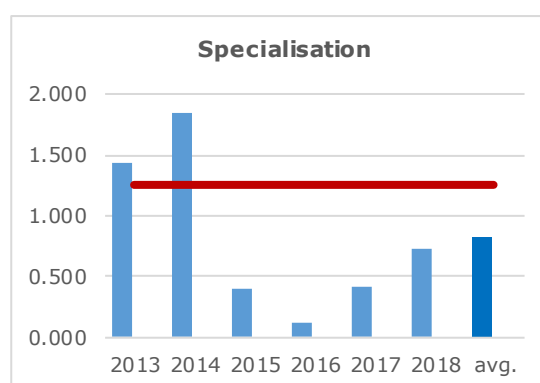Red line: regression line
Green columns: Imereti

Wages
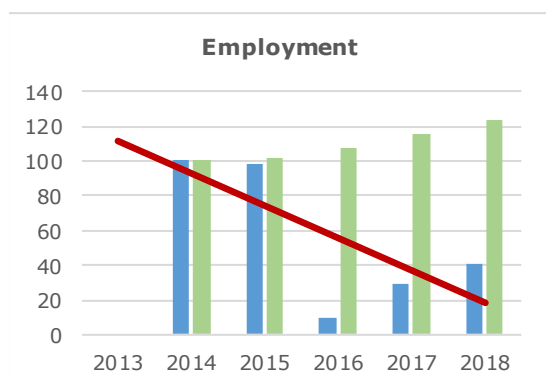
Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

74 Other business activities

Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

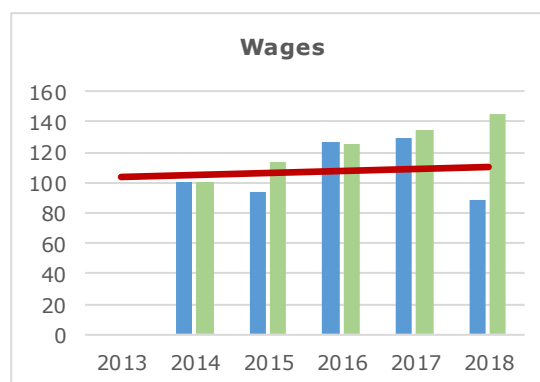Red line: relative to region threshold

Wages relative to industry

Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

Wages
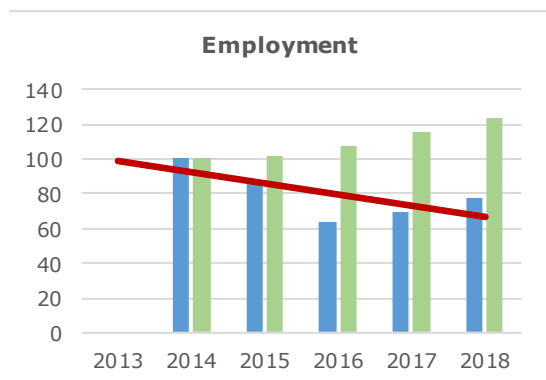
Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

74.1 Legal, accounting, book-keeping and auditing activities; tax consultancy; market research and public opinion polling; business and management

Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

Red line: relative to region threshold

Wages relative to industry

Red line: relative to industry threshold
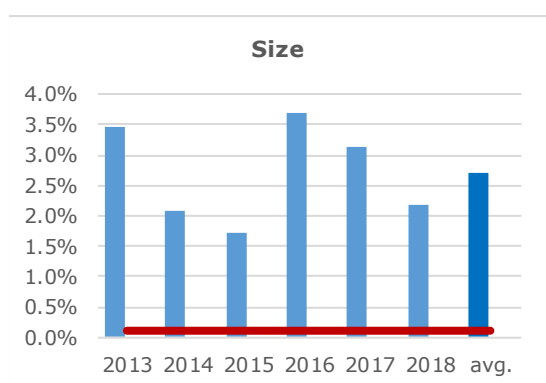

Employment

Two-year averages. Index values relative to 2014
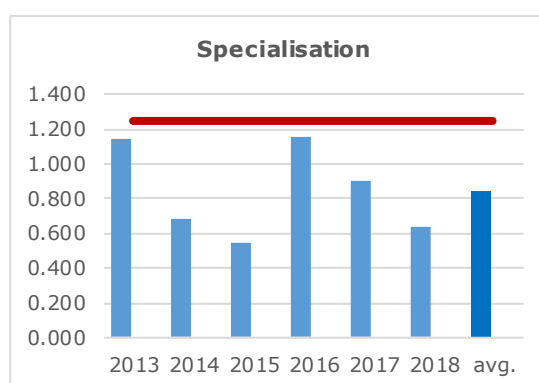Red line: regression line
Green columns: Imereti

Wages
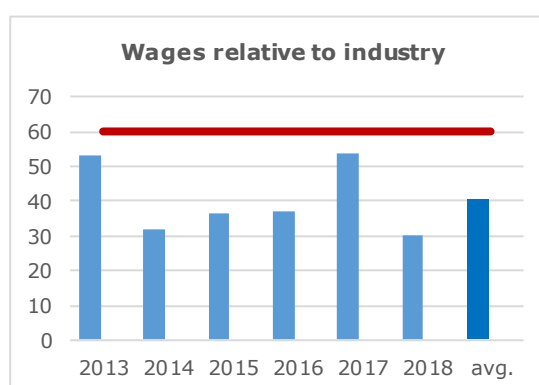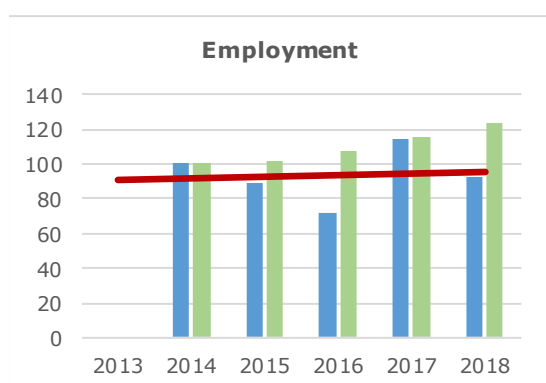
Two-year averages. Index values relative to 2014
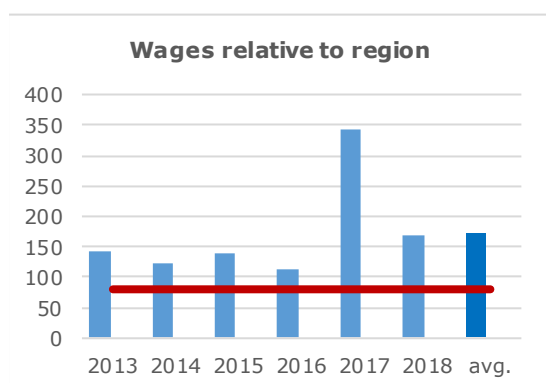Red line: regression line
Green columns: Imereti

74.2 Architectural and engineering activities and related technical consultancy
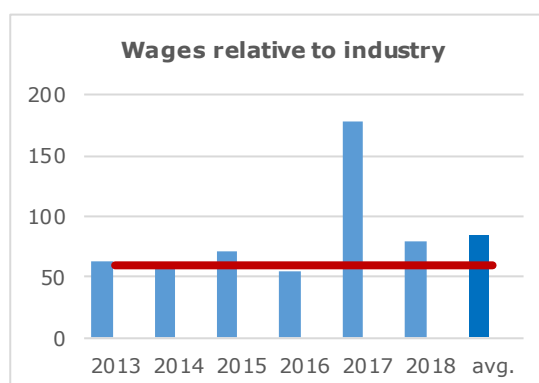
Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

Red line: relative to region threshold

Wages relative to industry

Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

Wages
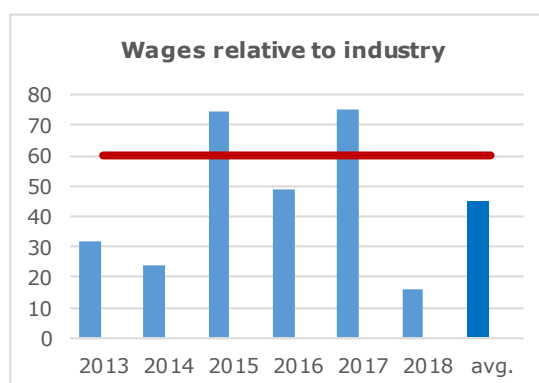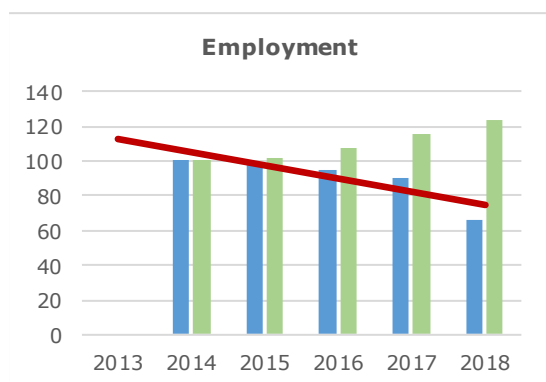
Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti
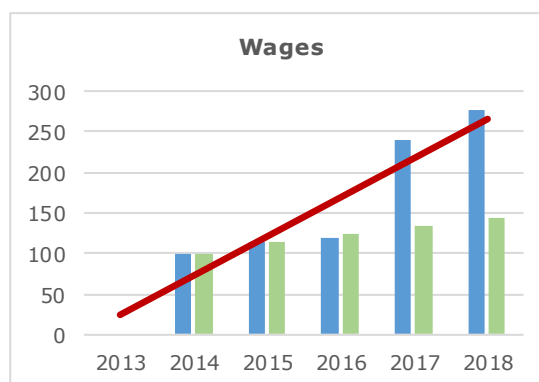
80 Education

Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

Red line: relative to region threshold

Wages relative to industry

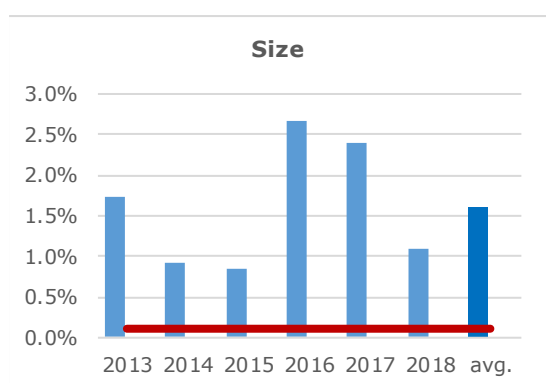Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
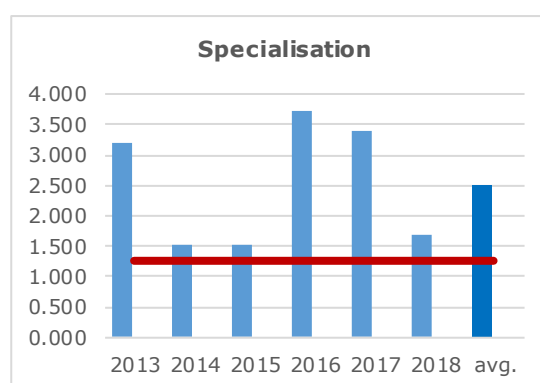Red line: regression line
Green columns: Imereti

Wages
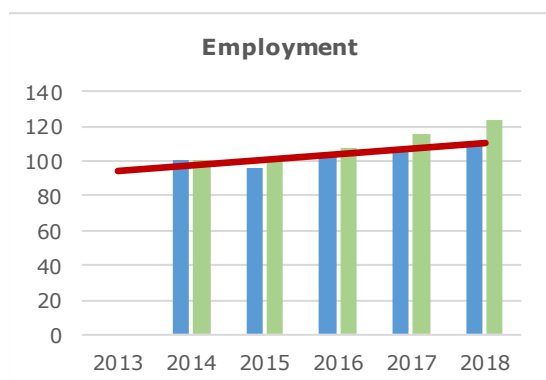
Two-year averages. Index values relative to 2014
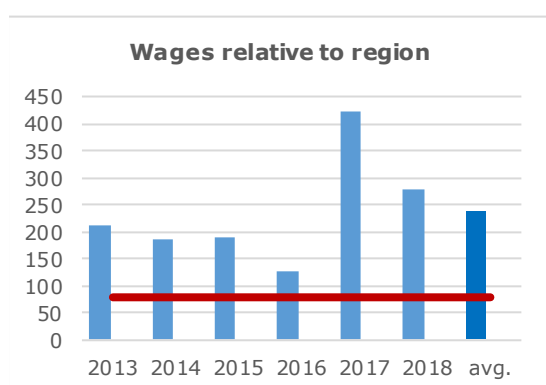Red line: regression line
Green columns: Imereti

NACE 80 has a dynamic economic potential.

80.2 Secondary education
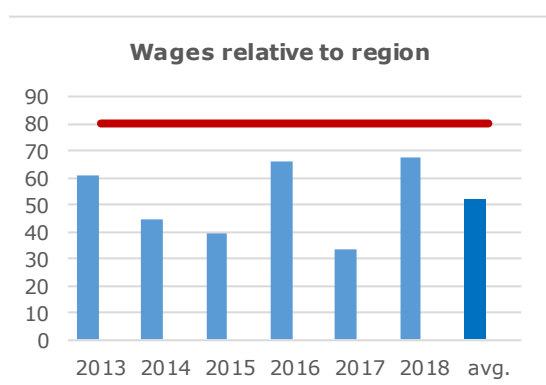
Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

Red line: relative to region threshold

Wages relative to industry

Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

Wages
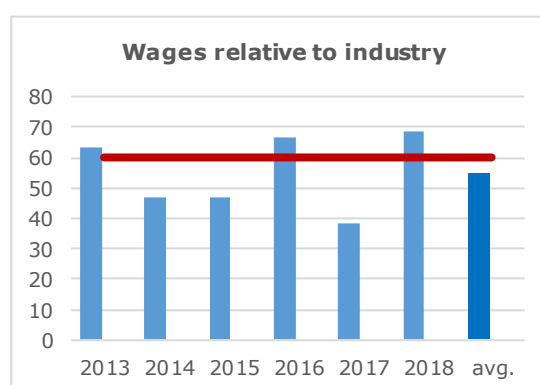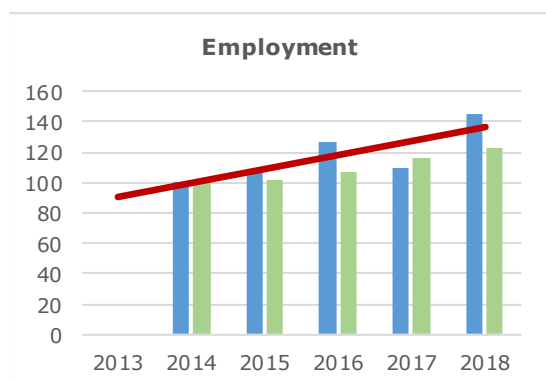
Two-year averages. Index values relative to 2014
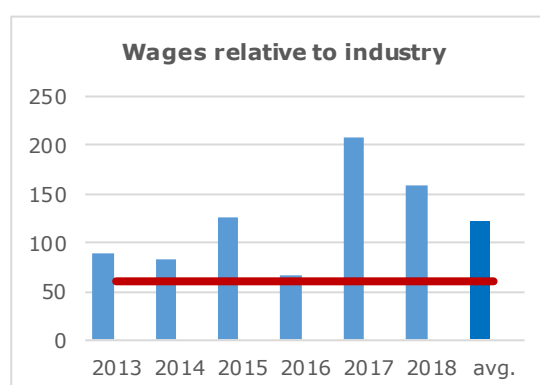Red line: regression line
Green columns: Imereti
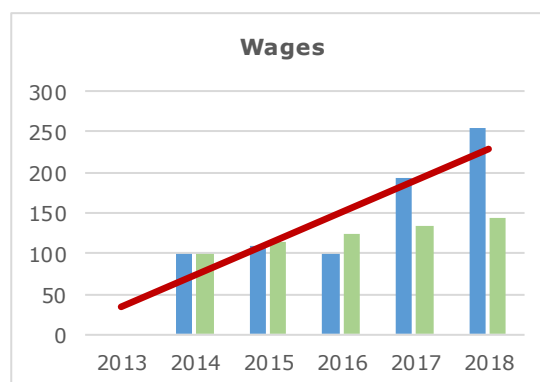
80.4 Adult and other education

Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

Red line: relative to region threshold

Wages relative to industry

Red line: relative to industry threshold
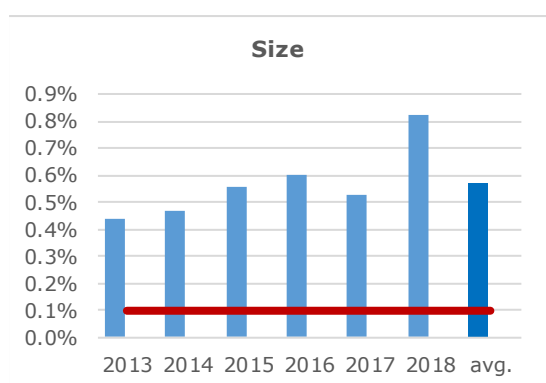

Employment

Two-year averages. Index values relative to 2014
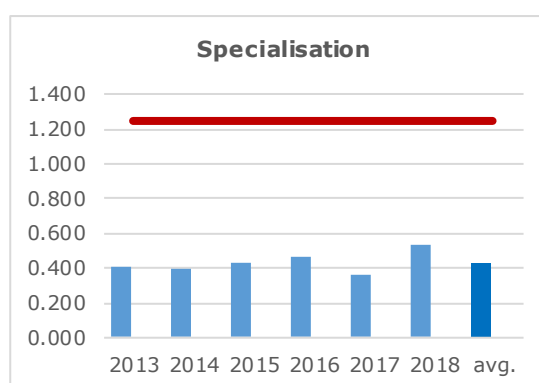Red line: regression line
Green columns: Imereti

Wages
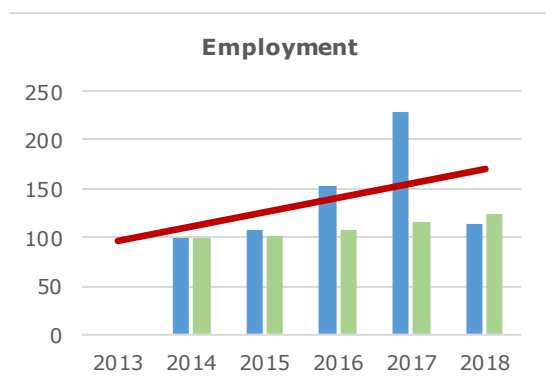
Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

85 Health and social work

Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

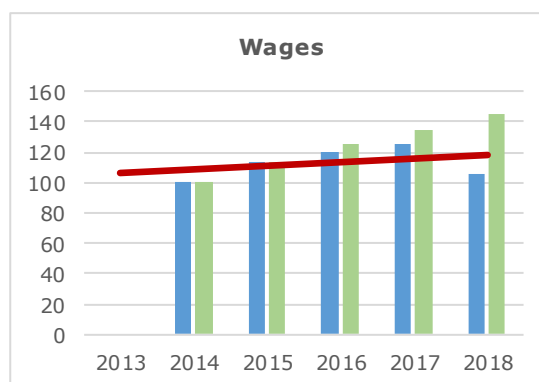Red line: relative to region threshold

Wages relative to industry

Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

Wages

Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

85.1 Human health activities

Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

Red line: relative to region threshold

Wages relative to industry

Red line: relative to industry threshold
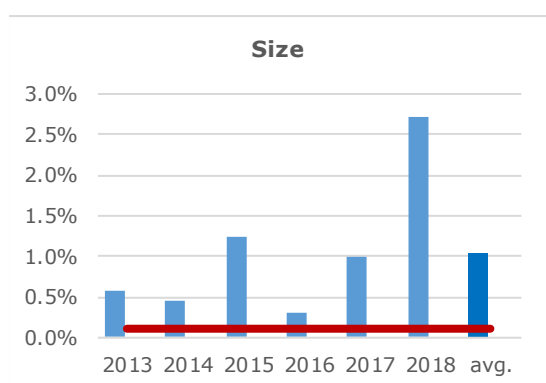
Employment

Two-year averages. Index values relative to 2014
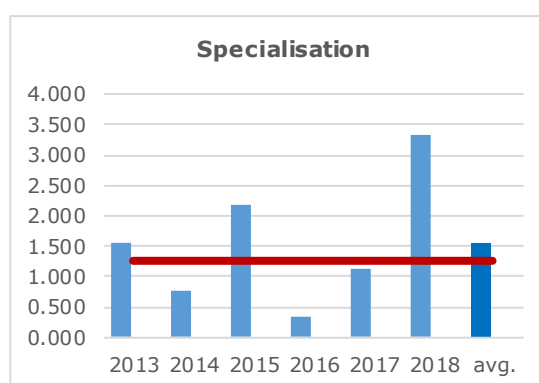Red line: regression line
Green columns: Imereti

Wages
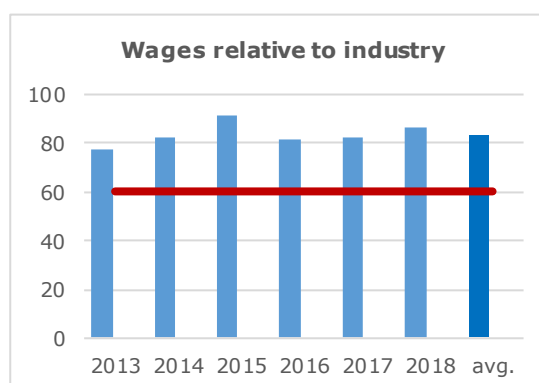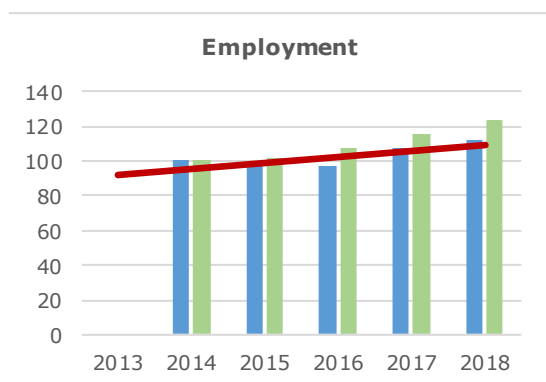
Two-year averages. Index values relative to 2014
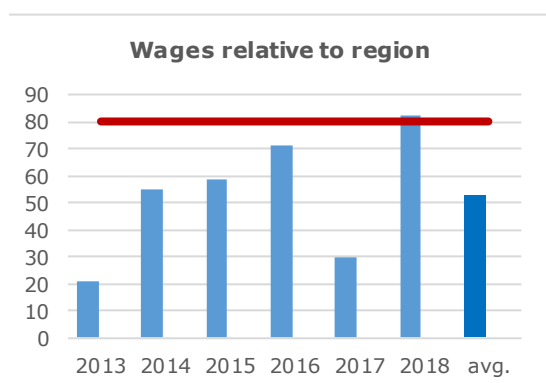Red line: regression line
Green columns: Imereti

NACE 85.1 has a static economic potential.

90 Sewage and refuse disposal, sanitation and similar activities

Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

Red line: relative to region threshold

Wages relative to industry

Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

Wages
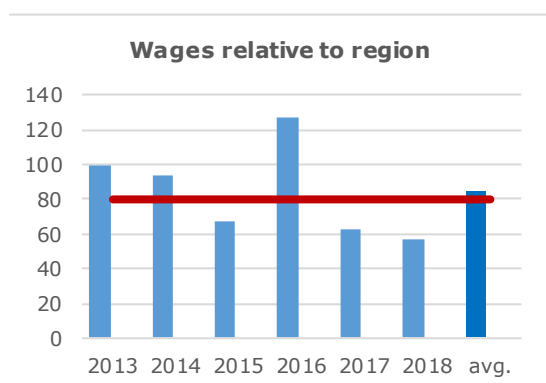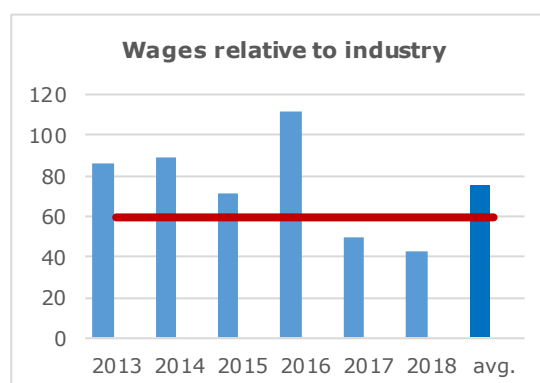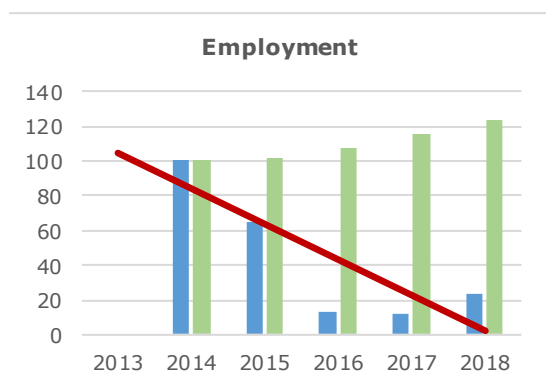
Two-year averages. Index values relative to 2014
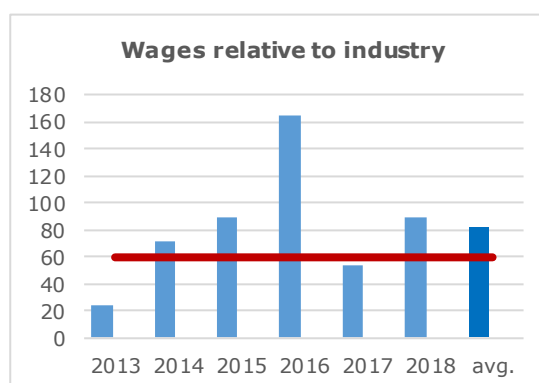Red line: regression line
Green columns: Imereti

92 Recreational, cultural and sporting activities
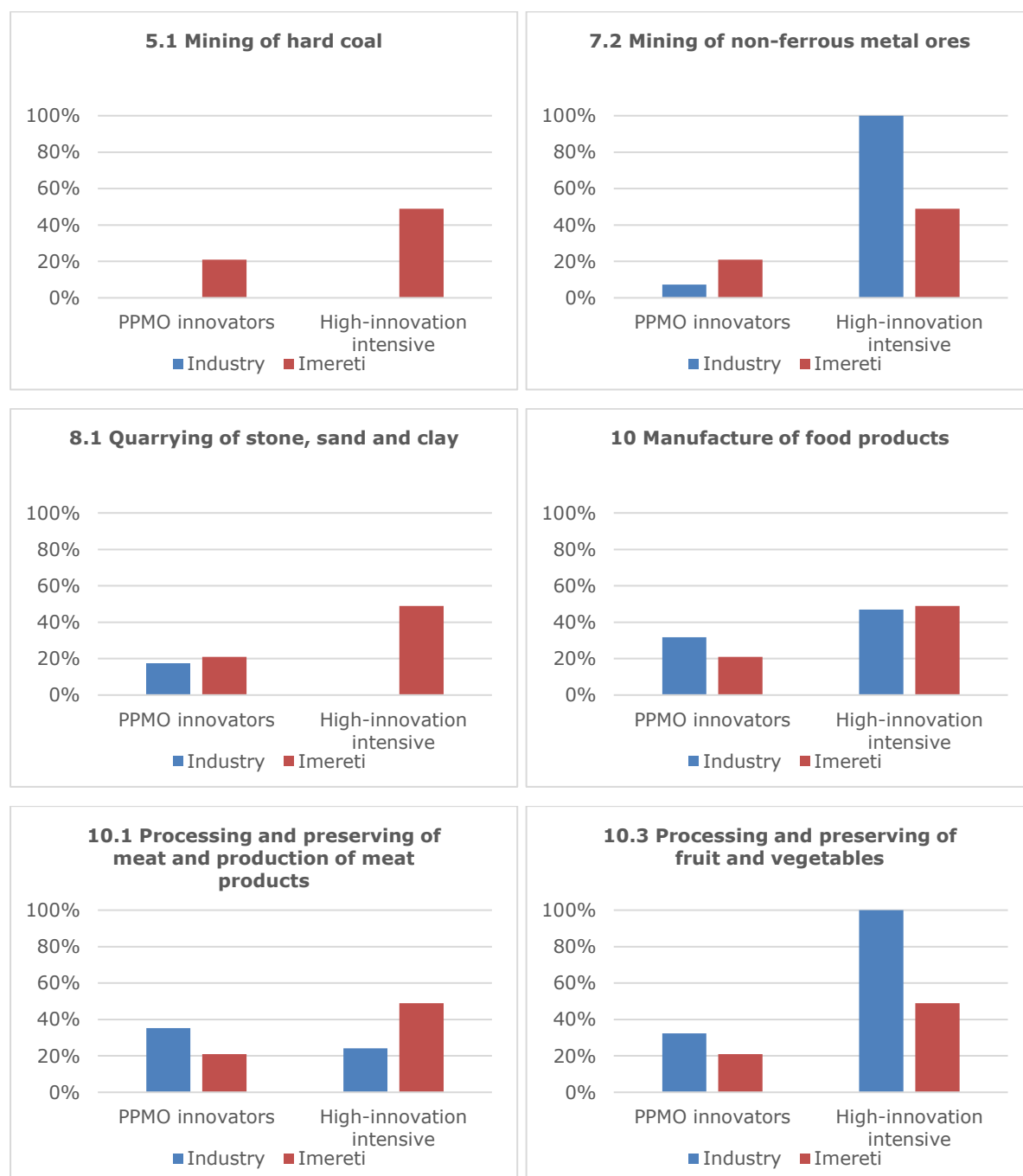
Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

Red line: relative to region threshold

Wages relative to industry

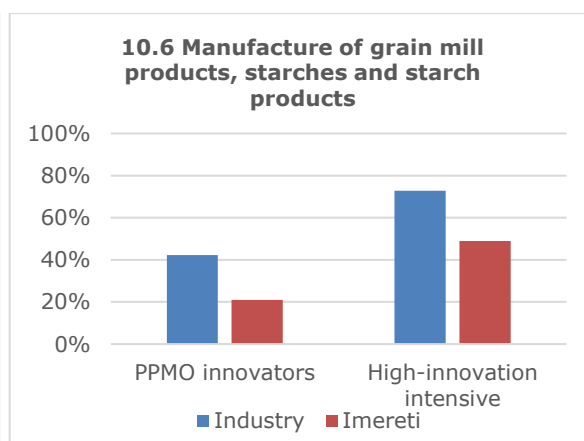Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
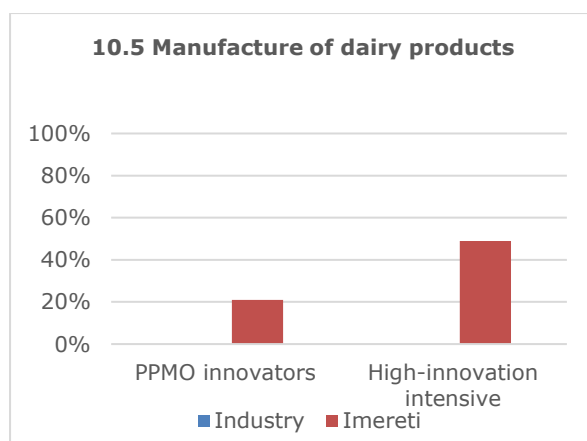Red line: regression line
Green columns: Imereti

Wages
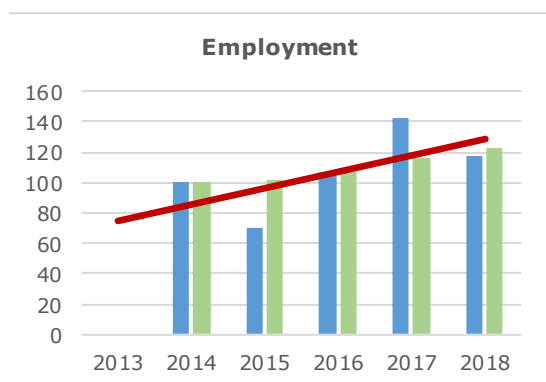
Two-year averages. Index values relative to 2014
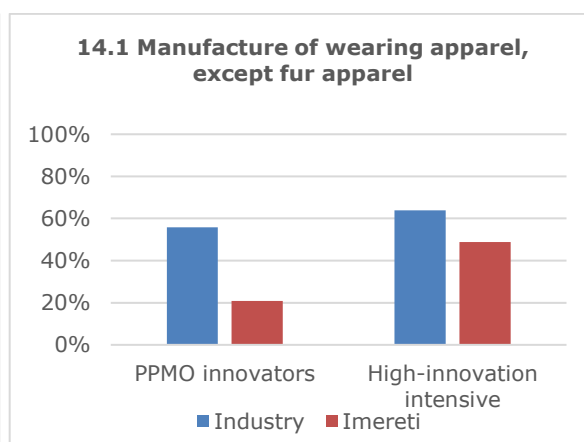Red line: regression line
Green columns: Imereti

92.6 Sporting activities

Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

Red line: relative to region threshold

Wages relative to industry

Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
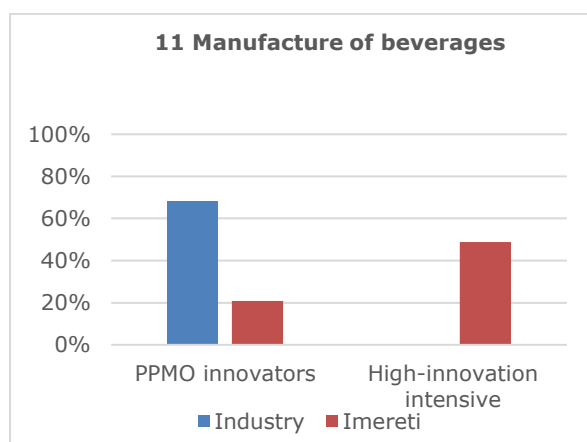Red line: regression line
Green columns: Imereti

Wages
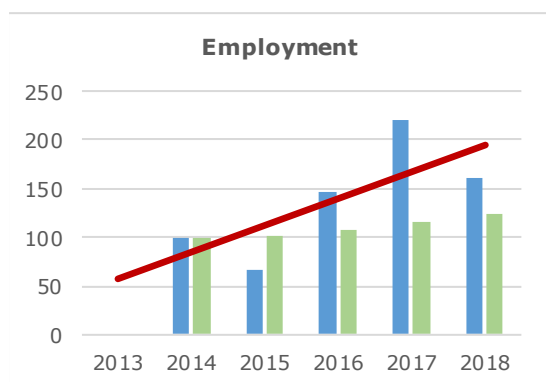
Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

NACE 92.6 has a static economic potential.

92.7 Other recreational activities

Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

Red line: relative to region threshold

Wages relative to industry

Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

Wages
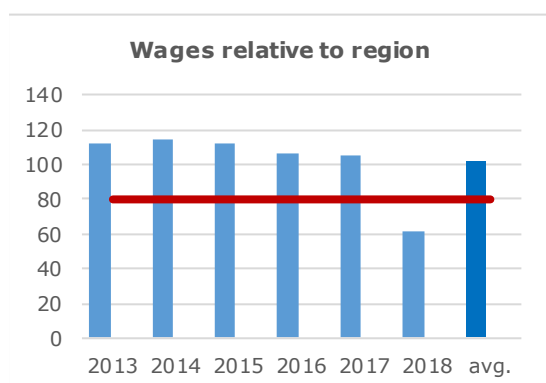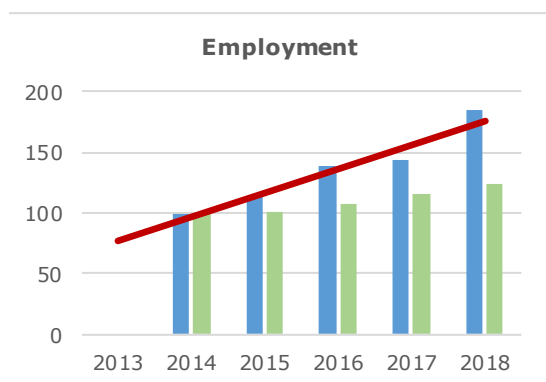
Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

93 Other service activities

Size

Red line: size threshold

Specialisation

Red line: specialisation threshold

Wages relative to region

Red line: relative to region threshold

Wages relative to industry

Red line: relative to industry threshold

Employment

Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

Wages
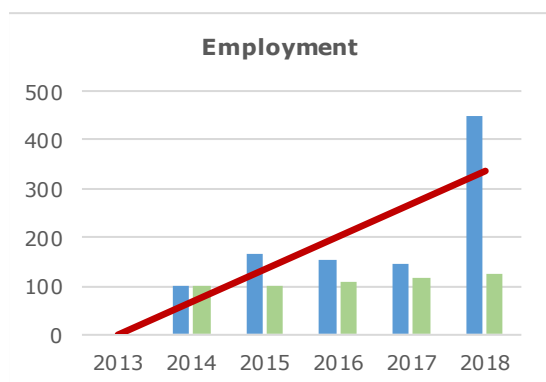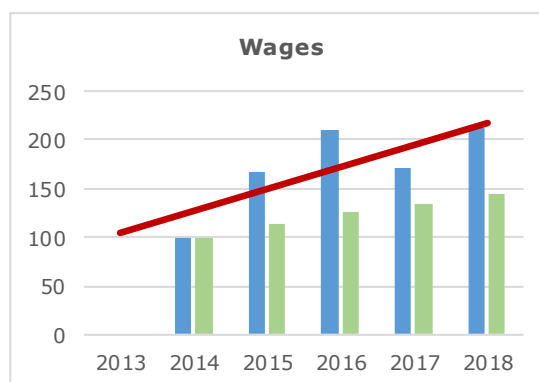
Two-year averages. Index values relative to 2014
Red line: regression line
Green columns: Imereti

Annex D Visualisation of innovation mapping for individual industries (NACE Rev. 2)

5.1 Mining of hard coal

7.2 Mining of non-ferrous metal ores

8.1 Quarrying of stone, sand and clay

10 Manufacture of food products

10.1 Processing and preserving of meat and production of meat products

10.3 Processing and preserving of fruit and vegetables

NACE 10.3 has an innovation potential.

10.5 Manufacture of dairy products
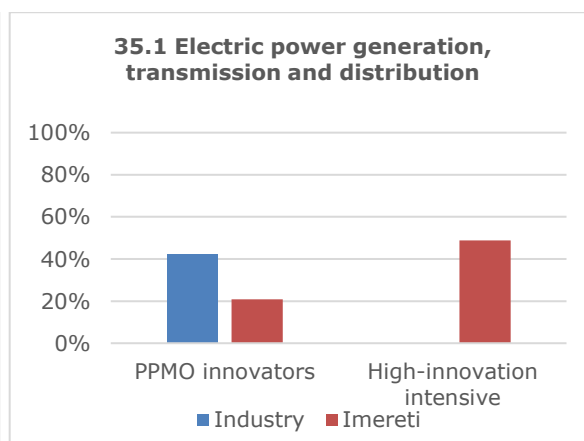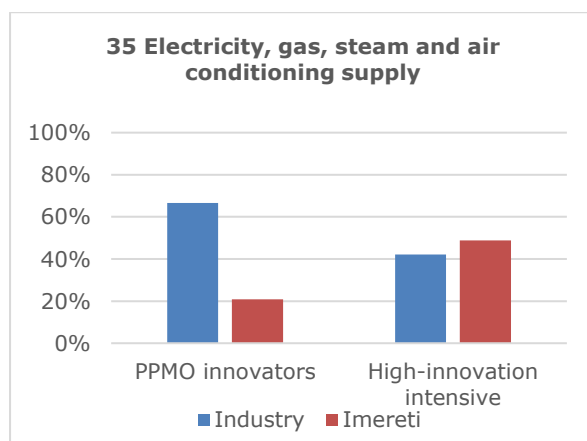

10.6 Manufacture of grain mill products, starches and starch products

NACE 10.6 has an innovation potential.

11 Manufacture of beverages

14.1 Manufacture of wearing apparel, except fur apparel

NACE 14.1 has an innovation potential.

16 Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials

16.1 Sawmilling and planing of wood
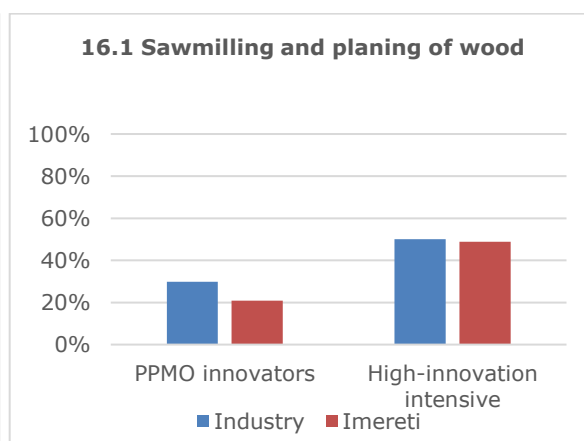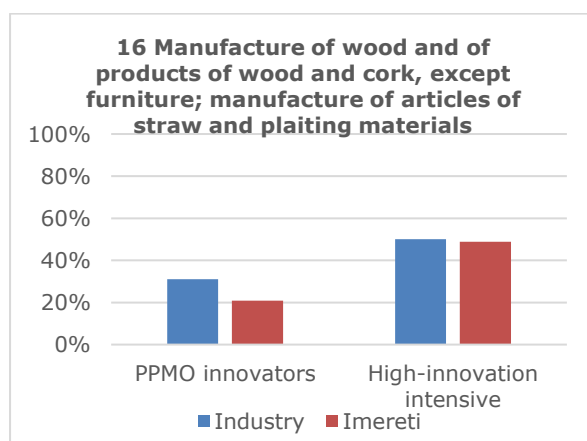
Excluded as NACE 16.1 and 16.2 are included.   NACE 16.1 has an innovation potential.

16.2 Manufacture of products of wood, cork, straw and plaiting materials
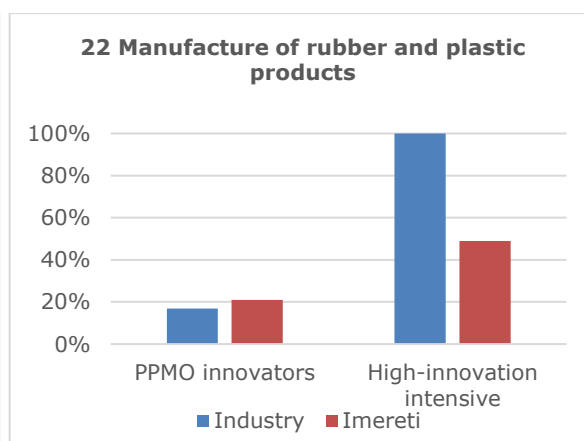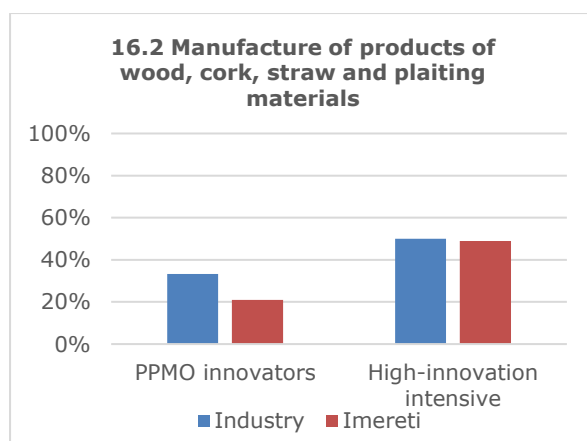
NACE 16.2 has an innovation potential.

22 Manufacture of rubber and plastic products

22.2 Manufacture of plastic products
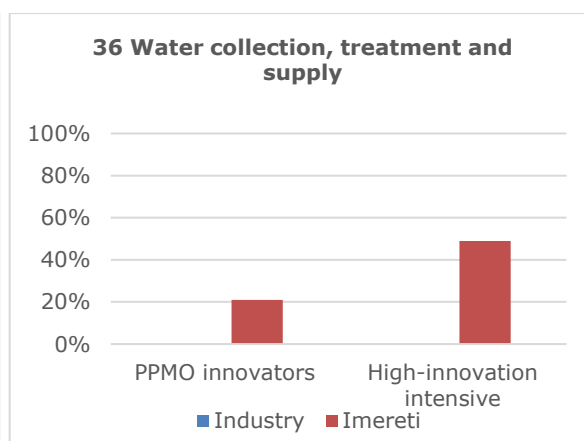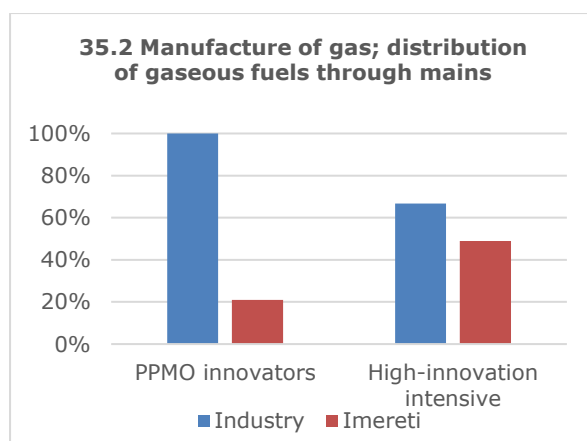

23 Manufacture of other non-metallic mineral products

NACE 23 has an innovation potential.
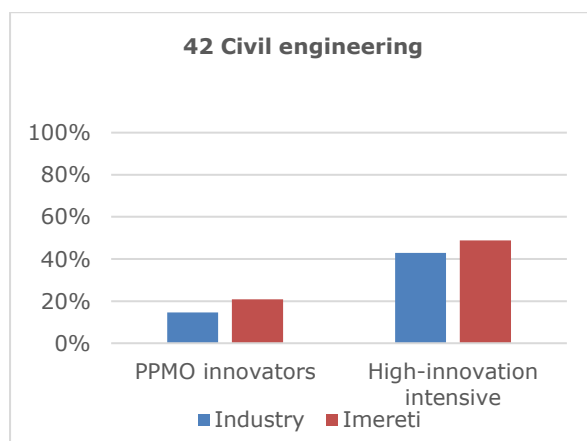
23.2 Manufacture of refractory products
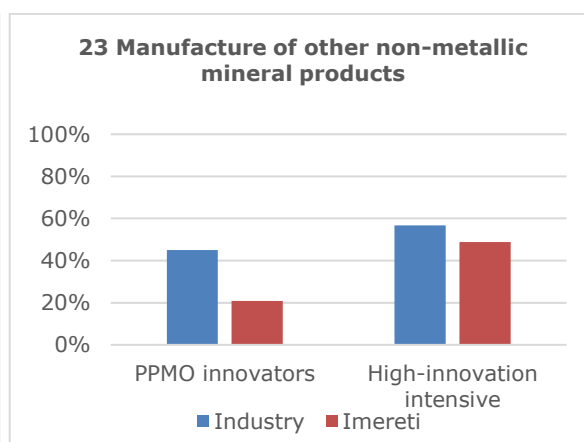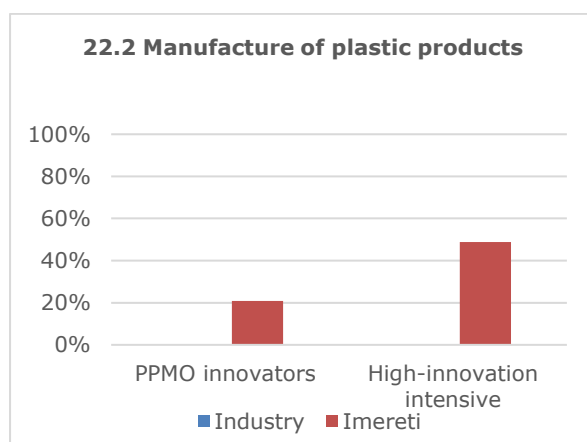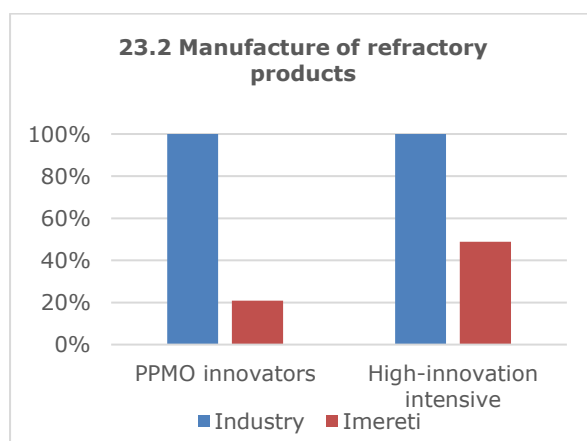
NACE 23.2 fails the size criterion.

23.6 Manufacture of articles of concrete, cement and plaster
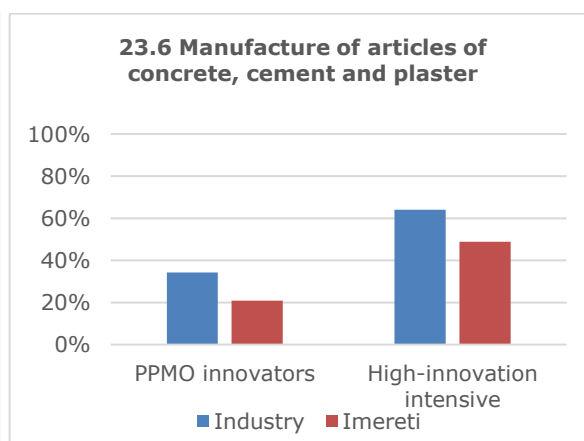
NACE 23.6 has an innovation potential.

24 Manufacture of basic metals

24.1 Manufacture of basic iron and steel and of ferro-alloys

24.5 Casting of metals

25 Manufacture of fabricated metal products, except machinery and equipment

25.1 Manufacture of structural metal products

27 Manufacture of electrical equipment

NACE 27 has an innovation potential.

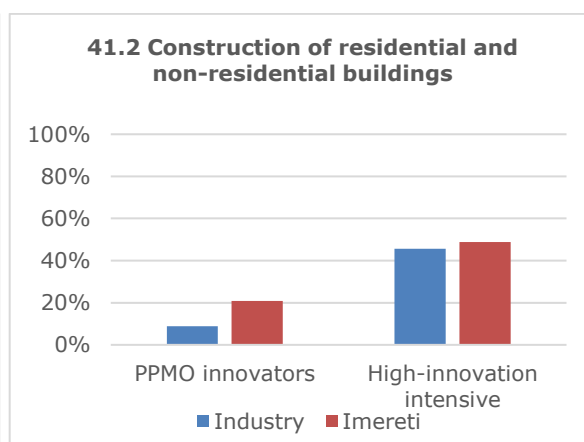**27.3 Manufacture of wiring and wiring devices**

27.5 Manufacture of domestic appliances
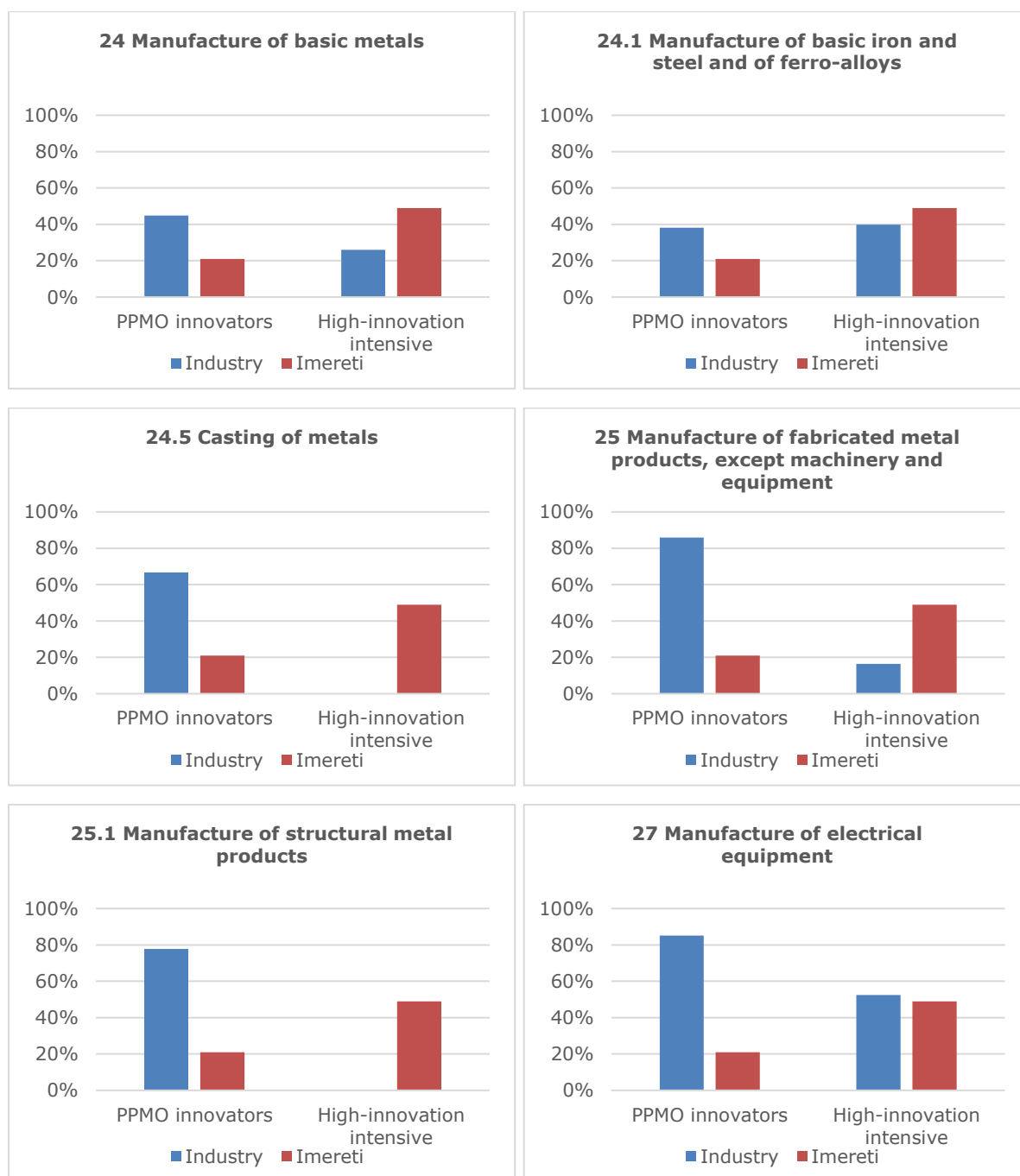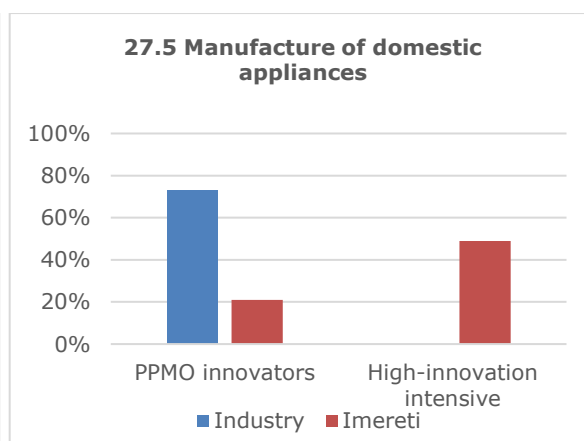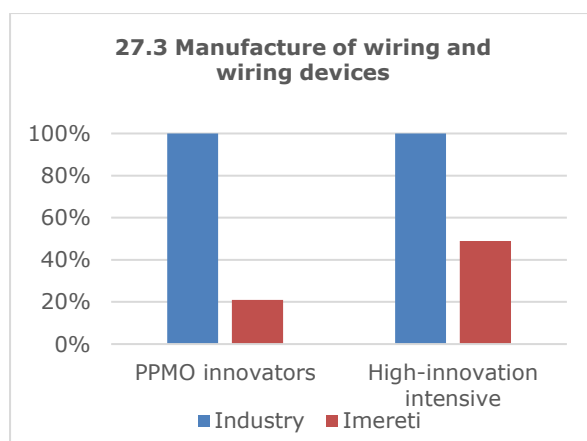
NACE 27.3 fails the size criterion.

28.9 Manufacture of other special-purpose machinery

31 Manufacture of furniture

35 Electricity, gas, steam and air conditioning supply

35.1 Electric power generation, transmission and distribution

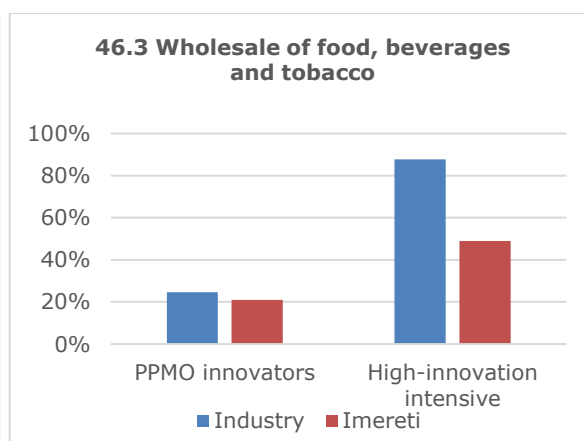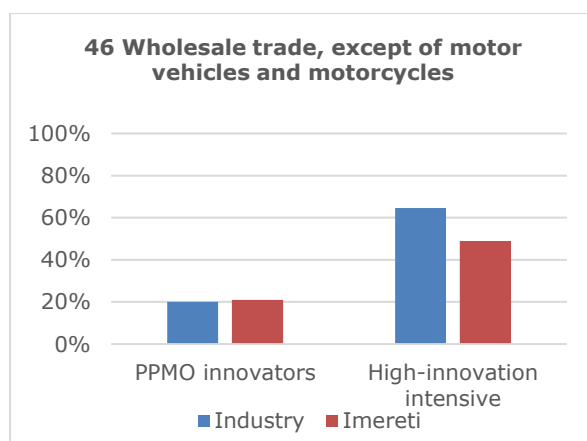**35.2 Manufacture of gas; distribution of gaseous fuels through mains**

36 Water collection, treatment and supply
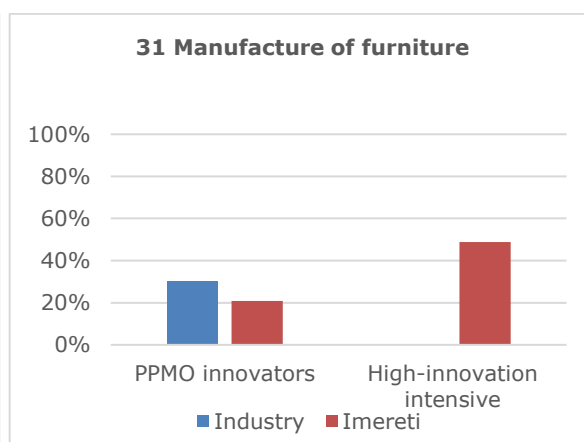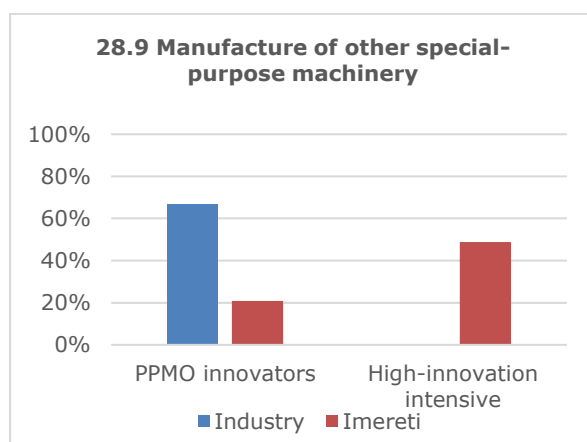
NACE 35.2 fails the size criterion.

38 Waste collection, treatment and disposal activities; materials recovery

41.2 Construction of residential and non-residential buildings

42 Civil engineering

42.1 Construction of roads and railways

42.2 Construction of utility projects

43 Specialised construction activities

43.2 Electrical, plumbing and other construction installation activities

43.9 Other specialised construction activities

45 Wholesale and retail trade and repair of motor vehicles and motorcycles
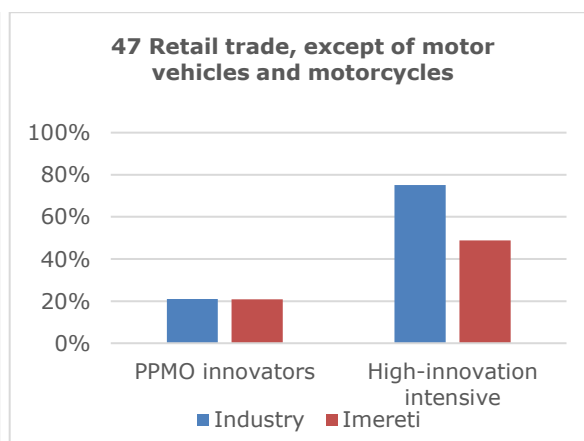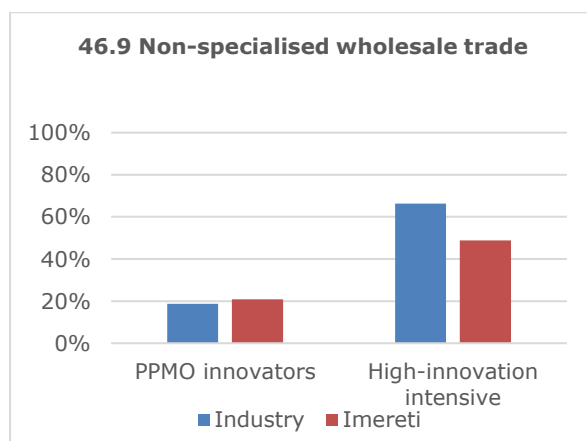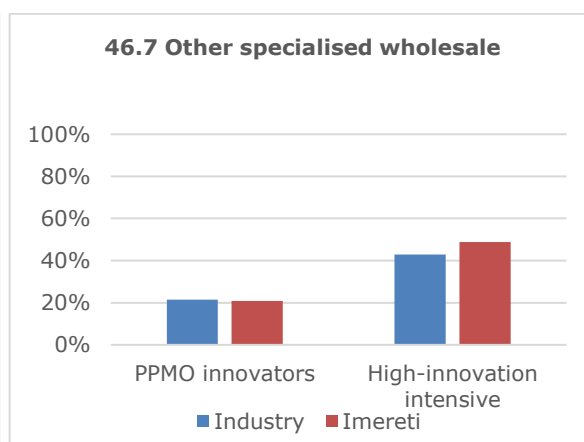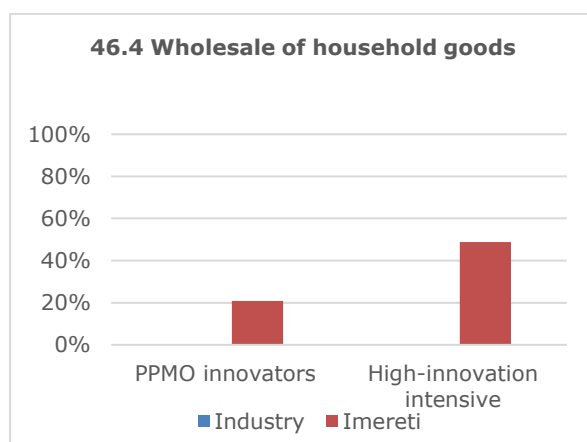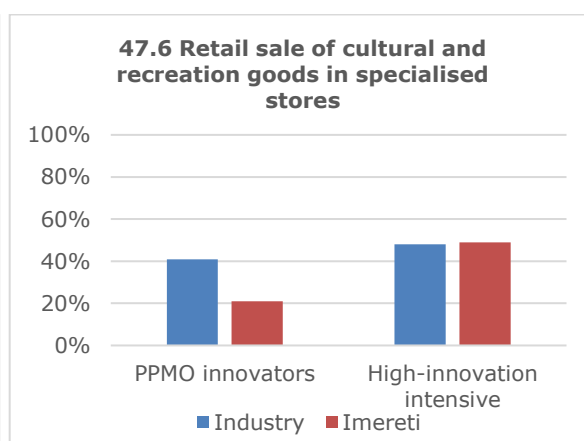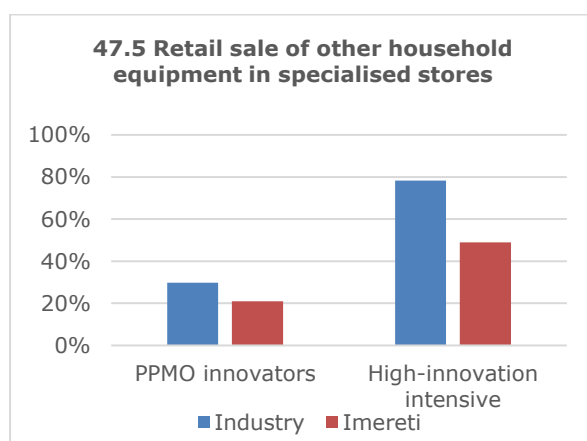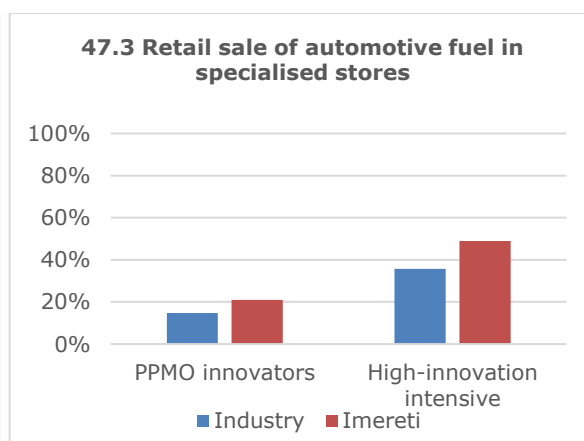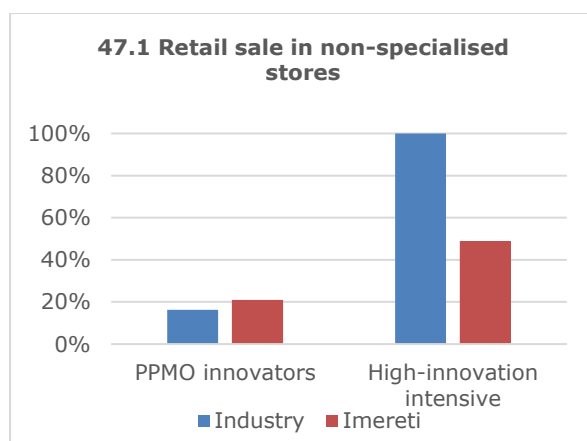
45.3 Sale of motor vehicle parts and accessories

NACE 45 has an innovation potential.

NACE 45.3 has an innovation potential.

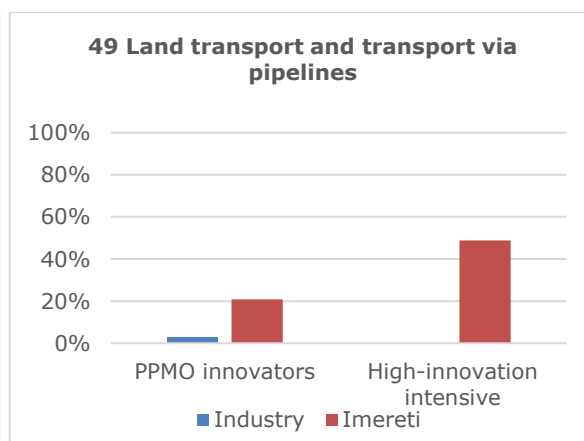**46 Wholesale trade, except of motor vehicles and motorcycles**

46.3 Wholesale of food, beverages and tobacco

NACE 46.3 has an innovation potential.

46.4 Wholesale of household goods

46.7 Other specialised wholesale

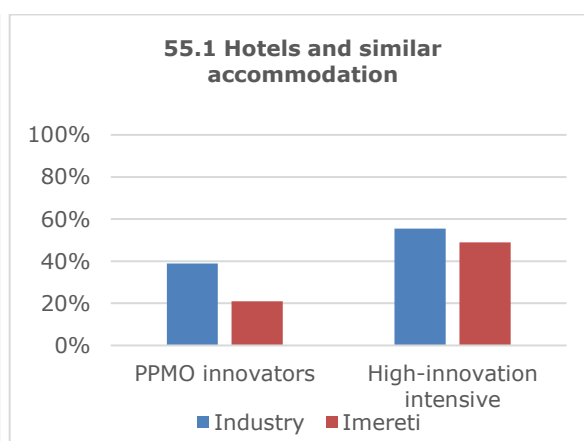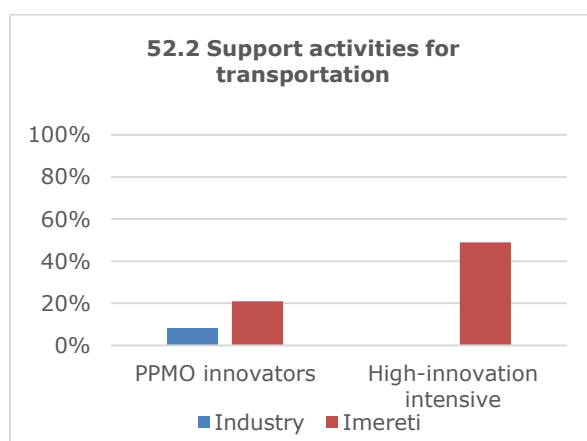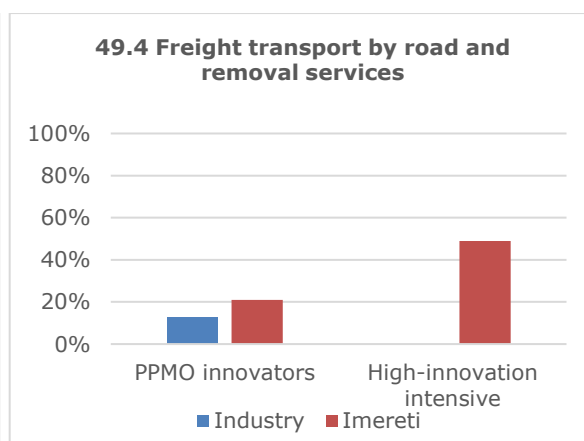**46.9 Non-specialised wholesale trade**

47 Retail trade, except of motor vehicles and motorcycles

NACE 47 has an innovation potential.

47.1 Retail sale in non-specialised stores

47.3 Retail sale of automotive fuel in specialised stores

47.5 Retail sale of other household equipment in specialised stores
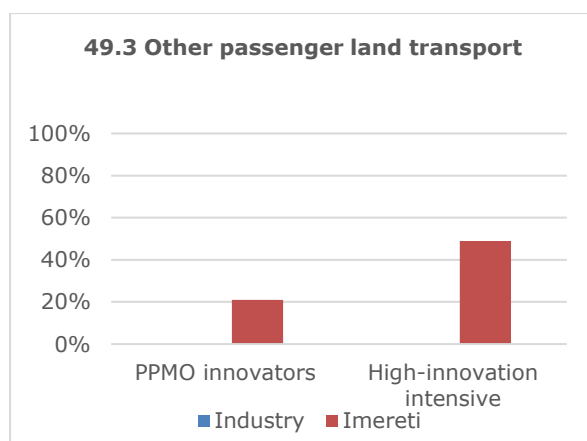
47.6 Retail sale of cultural and recreation goods in specialised stores

NACE 47.5 has an innovation potential.

47.7 Retail sale of other goods in specialised stores

49 Land transport and transport via pipelines

49.3 Other passenger land transport

49.4 Freight transport by road and removal services

52.2 Support activities for transportation

55.1 Hotels and similar accommodation

NACE 55.1 has an innovation potential.

56 Food and beverage service activities

56.1 Restaurants and mobile food service activities

56.3 Beverage serving activities

60.2 Television programming and broadcasting activities
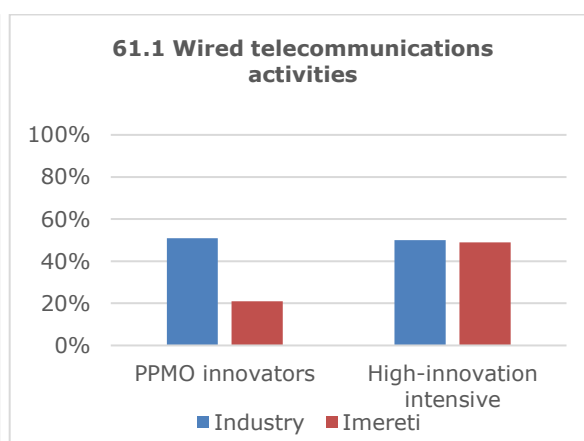

61 Telecommunications

61.1 Wired telecommunications activities

NACE 61 has an innovation potential.

NACE 61.1 fails the size criterion.

61.2 Wireless telecommunications activities
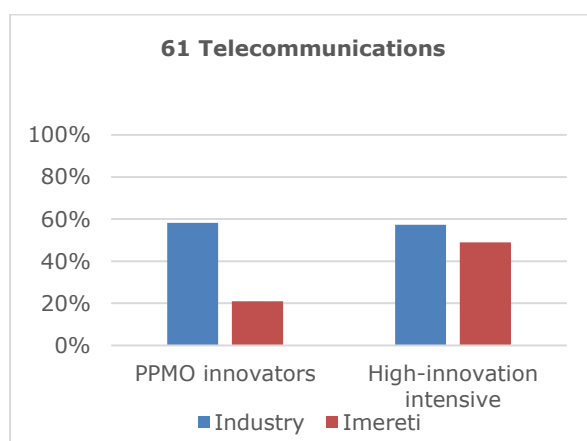

68.2 Rental and operating of own or leased real estate

NACE 61.2 has an innovation potential.

69 Legal and accounting activities

69.1 Legal activities

69.2 Accounting, bookkeeping and auditing activities; tax consultancy

71 Architectural and engineering activities; technical testing and analysis

71.1 Architectural and engineering activities and related technical consultancy

71.2 Technical testing and analysis

NACE 71.2 fails the size criterion.

77 Rental and leasing activities

77.3 Rental and leasing of other machinery, equipment and tangible goods

79.1 Travel agency and tour operator activities

80.1 Private security activities

81.2 Cleaning activities

82.9 Business support service activities n.e.c.

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