#### ANGUS COUNCIL

#### POLICY AND RESOURCES COMMITTEE – 5 JUNE 2018

#### ECONOMIC BRIEFING 2 – WAGES

This is the second in a series of regular briefing notes that will accompany Economic Development's Information report. These briefing notes will focus on a topic and present some statistics and analysis around the topic. The aim is to increase understanding of the economic situation in Angus, and to provide a summary of recent economic trends.

This briefing follows on from the previous briefing about People and the labour market. The topic for this paper is Wages. Wage rates are obviously very important to the workers earning them, the wage rate can have a big impact on worker morale and productivity. The challenge for most companies is to set consistent pay levels that give value for money while rewarding workers fairly.<sup>1</sup>

Wage rates also have a wider impact on the local area. Higher levels of Gross Disposable Household Income (GDHI) can help to support the local economy by having a positive impact on employment rates, business survival rates, unemployment rates and tackling issues such as community capacity, and town centre vibrancy.

Wage rates are a factor in attracting inward investment to an area. Lower wages can be attractive to companies, but they are normally taken into account in combination with other factors such as skill levels. Low wages rates can attract companies to outsource labour to low wages areas, however this work tends to be low skilled and intensive. Areas with high wage rates attract can investment of a different sort, the industry and work tends to be of a higher quality/skilled nature.

There are two main ways of looking at wages:

- residence based (those living in a council area, regardless of the council area in which they work); and,
- workplace based (those that work in a council area, regardless of the council area in which they live).

These statistics can be used to assess the relative prosperity of an area, as well as the extent to which people living in one council area are reliant on jobs in other areas. It also assists in the assessment of the value of local economies and the demand for skills by the local business base. Breaking this data down into council area assists in the understanding of sub regions and travel to work areas that do not always coincide with political or administrative boundaries.<sup>2</sup>

As highlighted in the Local Outcome Improvement Plan the median earnings for Angus are below the Scottish average. In addition, two of the Ambitions in the

<sup>1</sup> ACAS, Pay

<sup>2</sup> SLAED Report 2016/17, Gross Weekly Earnings (2016), p.41

'Economy' thread are to be in the top five Scottish local authority areas for gross weekly pay amongst local residents and those working in Angus (tackling residence based and workplace based differences).

The tables below show the residence based and work place based gross median weekly wages for all full time workers. They also show the difference between the Angus and Scotland amounts, and the Angus amount as a percentage of the Scotland figure.<sup>3</sup>

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Angus	£460.00	£461.40	£460.30	£457.10	£473.10	£473.10	£469.30	£526.00	£527.90	£543.80
Scotland	£462.90	£471.20	£486.60	£487.20	£498.30	£507.90	£518.60	£527.00	£536.00	£547.70
Difference	-£2.90	-£9.80	-£26.30	-£30.10	-£25.20	-£34.80	-£49.30	-£1.00	-£8.10	-£3.90
Angus as a % of Scotland	99.4	97.9	94.6	93.8	94.9	93.1	90.5	99.8	98.5	99.3

## Residence based, Gross Median Weekly pay for all full time workers

### Work place based, Gross Median Weekly pay for all full time workers

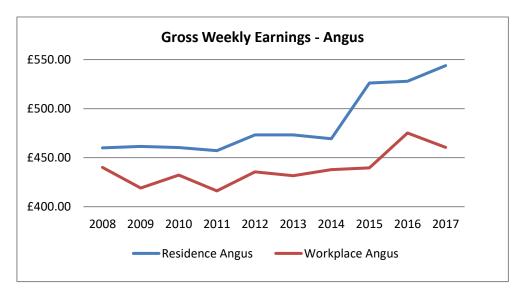
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Angus	£440.00	£419.00	£432.30	£416.10	£435.50	£431.50	£437.70	£439.50	£475.10	£460.40
Scotland	£462.60	£472.80	£488.00	£485.00	£497.70	£508.70	£519.60	£527.00	£534.50	£547.30
Difference	-£22.60	-£53.80	-£55.70	-£68.90	-£62.20	-£77.20	-£81.90	-£87.50	-£59.40	-£86.90
Angus as a % of Scotland	95.1	88.6	88.6	85.8	87.5	84.8	84.2	83.4	88.9	84.1

The graphs below show this visually. The graphs cover the period 2008 to 2017.

<sup>3</sup> All the statistics used here have been extracted from the Office of National Statistics Annual Survey of Hours and Earnings (ASHE).

Graph 1

This graph shows the difference between residence and work placed wage rates in Angus. Residence based rates are higher at all times than workplace based. The gap between the two is not consistent and is widening over time. This is partly due to a decline in workplace based wages in Angus since 2016.



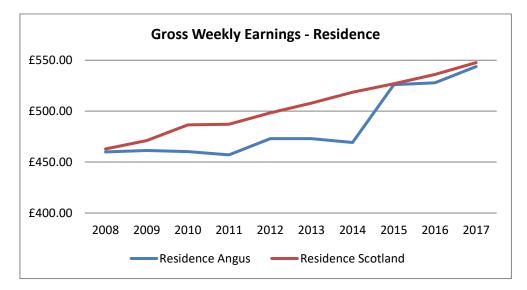
## Graph 2

This graph shows the similarity between residence and work placed wage rates in Scotland. It shows a different picture than the Angus graph. It can be seen that both measures are very similar and the overall rate is increasing over time.



# Graph 3

This graph shows residence based wages in Angus and Scotland. Both Angus and Scotland have different patterns but both increase over time. In Angus the rate stayed relatively stable between 2008 and 2014, increased sharply in 2014/15, remained stable in 2015/16 and increased in 2016/17. In Scotland there was a more stable increase over the period. Both rates started off at similar rates in 2008 and have ended at similar rates in 2017 although the trend has been different. This graph shows that whether you live in Angus, not taking account of where you work, you can expect to receive a wage below the national average, but that this has increased over the last 3 years to a similar level.



## Graph 4

This graph shows workplace based wages in Angus and Scotland. It is perhaps the most significant of the four graphs. It shows that between 2008 and 2017 work place based wages in Angus have been significantly lower than the national average. The rate for Scotland has grown year on year while in Angus there have been fluctuations culminating in a decline in 2016/17. It shows that if you work in Angus the rate of pay that you can expect to receive is lower than if you work outwith Angus.



The table below shows only the figures for Angus. This can be seen graphically in the first graph above.

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Residence	£460.00	£461.40	£460.30	£457.10	£473.10	£473.10	£469.30	£526.00	£527.90	£543.80
Workplace	£440.00	£419.00	£432.30	£416.10	£435.50	£431.50	£437.70	£439.50	£475.10	£460.40
Difference	£20.00	£42.40	£28.00	£41.00	£37.60	£41.60	£31.60	£86.50	£52.80	£83.40

The difference between residence based and workplace based wages in 2008 was  $\pounds 20$  per week. By 2017 this difference had increased to  $\pounds 83.40$ , an increase of 317%. In terms of the Scotland statistics below, the difference between the two measures has increased by 10p from 2008 to 2017, not  $\pounds 63.40$ .

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Residence	£462.90	£471.20	£486.60	£487.20	£498.30	£507.90	£518.60	£527.00	£536.00	£547.70
Workplace	£462.60	£472.80	£488.00	£485.00	£497.70	£508.70	£519.60	£527.00	£534.50	£547.30
Difference	£0.30	-£1.60	-£1.40	£2.20	£0.60	-£0.80	-£1.00	£0.00	£1.50	£0.40

#### The higher average earnings of full time workers living in Angus compared to those whose job in based in Angus suggests that many out commuters from Angus are travelling to higher paying jobs located elsewhere.

Measures to rectify this can be difficult to implement. Wages paid in other areas are difficult to influence and inward investment campaigns can only help to redress the balance some extent. The underlying cause of the differences is due to the sectoral structure of the local economy. In Angus, factors to be taken into account are the high levels of seasonal work present in the agricultural and food processing industries, and the high prevalence of work in the traditionally lower paid manufacturing and retail sectors.

Some industries pay more than others. They may require a more skillful work, a low degree of possible automation, or a highly specialised/qualified workforce.

The mining and quarrying industry (which includes the offshore oil and gas sector) has the highest median hourly rate. It also saw the second highest increase in pay between 2016 and 2017 (8.4% in real terms). The Other Service industry category saw the largest increase (9.5%). Other services include membership organisations, the repair of computers and personal and household goods and a variety of personal service activities such as hairdressing or funeral related activities.

The accommodation and food services industry has the lowest rate despite seeing an above inflation increase in earnings over the year of 0.9% in real terms. Accommodation and food is the only industry to have a median wage below the living wage rate at the moment, of £8.45 an hour.

The table below shows the number of employee jobs by industry in Angus and the sectoral structure of both the Angus and Scottish economies.

# Employee jobs (2016)

Employee jobs by industry	Angus (No)	Angus (%)	Scotland (%)
Wholesale and retail trade; repair of motor vehicles and motorcycles	6,000	18.2	14.5
Manufacturing	5,000	15.2	7.2
Human health and social work activities	5,000	15.2	16.5
Education	2,500	7.6	7.7
Accommodation and food service activities	2,250	6.8	7.4
Professional, scientific and technical activities	2,250	6.8	6.9
Construction	2,000	6.1	5.5
Arts, entertainment and recreation	1,750	5.3	3.1
Administrative and support service activities	1,500	4.5	7.5
Transportation and storage	1,250	3.8	4.3
Public administration and defence; compulsory social security	1,250	3.8	6.3
Other service activities	600	1.8	2.1
Real estate activities	400	1.2	1.4
Water supply; sewerage, waste management and remediation activities	350	1.1	0.7
Information and communication	300	0.9	3.0
Financial and insurance activities	250	0.8	3.5
Mining and quarrying	125	0.4	1.3
Electricity, gas, steam and air conditioning supply	75	0.2	0.8

Source: ONS Business Register and Employment Survey via Nomis

It can be seen that 48.6% of employee jobs in Angus<sup>4</sup> come from the G, C and Q sectors. This is compared to 38.2% for Scotland. This is important because it shows that the labour market in Angus is of a narrower range. The sectors in which Angus is over represented are highlighted in blue.

The table below shows how annual salaries breakdown across the sectors in Angus and Scotland. It also shows the earnings in Angus expressed as a percentage of the Scottish average. The biggest difference is in the primary industries. A high proportion of seasonal work contributes to the gap. Angus has a high percentage of intensive crops, including an estimated 530 ha of soft fruits. Attracting labour is a long-standing issue. Oil, image and the loss of the small farm labour pool has made it difficult to find young people who want to work on farms. Mechanisation and East European labour has filled the gap. The fact that (despite the best efforts of many farmers in the past) thousands of seasonal jobs in Angus are not taken up by young people from Angus and the wider local area is a major issue.<sup>5</sup>

<sup>4</sup> Employee jobs excludes self-employed, government-supported trainees and HM Forces. The percentage is a proportion of total employee jobs excluding farm-based agriculture.

<sup>5</sup> The North East Scotland Agriculture Advisory Group (NESAAG), (2016), The Land Based Sector in NE Scotland, p.11 & 31

	Angus	Scotland	Earnings in Angus as a % of the Scottish Average
Primary industries	£22,600	£56,600	40%
Manufacturing	£30,600	£29,900	102%
Construction	£23,400	£25,600	91%
Wholesale, retail & repairs	£15,300	£14,700	105%
Transport & storage	£21,300	£28,100	76%
Accommodation & food services	£6,800	£9,200	74%
Information & communication	£19,700	£30,500	65%
Real estate activities	£21,000	£18,700	112%
Professional, scientific & technical	£23,400	£31,700	74%
Administrative & support services	£19,200	£20,100	95%
Public services	£16,500	£18,100	91%
Arts, entertainment & recreation	£11,000	£14,300	77%
Other services	£17,600	£15,600	113%

# Gross Wages & Salaries per Head by Sector 2015

Source: Scottish Annual Business Statistics, Local Authority areas by Section 2015

The table below shows a breakdown of hourly pay by industry in Scotland. It can be seen that:

- The wholesale and retail have the second lowest rate of pay, although there has been a small increase in hourly pay;
- The manufacturing and construction sectors are both in the middle section of the table. The construction sector has seen an increase in wages in real terms since 2016, but this has not been mirrored in the manufacturing sector, which has seen a decrease of 1.4%;
- The arts, entertainment and recreation sector is the third lowest paid sector and has seen a decrease in hourly wages in real terms of 0.3% since 2016; and
- The water supply; sewerage, waste management and remediation activities is ranked between construction and manufacturing in the middle section of the chart, and has seen a 2% decrease in hourly pay.

	Median (£)	Annual % change
Mining and quarrying	21.43	11.0
Electricity & gas	17.72	2.3
Financial and insurance activities	17.28	5.0
Professional, scientific and technical activities	16.49	8.1
Public administration and defence	15.94	6.5
Information and communication	15.42	1.6
Education	15.09	2.8
Construction	13.00	4.2
Water supply	12.94	-2.0
Manufacturing	12.91	-1.4
Human health and social work	12.90	0.4
Real estate activities	12.85	-0.6
Transportation and storage	11.87	-0.8
Agriculture, forestry and fishing	10.28	-3.4
Other service activities	10.08	12.1
Administrative and support service activities	9.79	4.9
Arts, entertainment and recreation	9.55	-0.3
Wholesale and retail trade	8.94	3.1
Accommodation and food	7.70	3.5

### Hourly pay excluding overtime by industry in Scotland – 2017

Source: Office of National Statistics, Annual Survey of Hours and Earnings, SIC2007 Table 5.6a Hourly pay - Excluding overtime  $(\pounds)$  - For all employee jobs: United Kingdom, 2017

The structure of the local economy can also have an impact on the type of jobs that are available by occupation level. The tables below show this. The first table shows employment by occupation in Angus and Scotland. The cells highlighted in blue show the areas in which Angus is over-represented. The second table shows the hourly pay by occupation for Scotland. It can be seen that although in the first table it looks positive that Angus has a higher number of Managers, directors and senior officials these roles are actually lower paid (on average) than those classed as professional occupations, in which Angus has less than the national average. The remainder of the occupations (excluding skilled occupations) that are over represented in Angus are at the lower end of the second table.

## Employment by occupation (Jan 2017-Dec 2017)

Angus (numbers)	Angus (%)	Scotland (%)
19,700	36.3	43.0
5,000	9.2	8.5
8,700	15.9	20.7
6,000	11.1	13.6
13,400	24.8	21.2
4,900	9.1	10.2
8,500	15.6	10.9
9,900	18.3	18.1
6,000	11.0	9.8
4,000	7.3	8.2
11,200	20.6	17.7
4,800	8.9	6.6
6,400	11.7	11.0
	(numbers) 19,700 5,000 8,700 6,000 13,400 4,900 8,500 9,900 6,000 4,000 11,200 4,800	(numbers)(%)19,70036.35,0009.28,70015.96,00011.113,40024.84,9009.18,50015.69,90018.36,00011.04,0007.311,20020.64,8008.9

Source: Nomis, Employment by occupation

# Hourly pay excluding overtime by occupation in Scotland – 2016

	Median (£)
Professional occupations	19.39
Managers, directors and senior officials	18.37
Associate professional and technical occupations	14.62
Skilled trades occupations	11.65
Administrative and secretarial occupations	10.53
Process, plant and machine operatives	10.13
Caring, leisure and other service occupations	9.24
Sales and customer service occupations	8.16
Elementary occupations	7.99

Source: ONS, ASHE, Hourly Pay Excluding Overtime By Occupation

It can be seen from the information presented above that the significance of the sectoral structure on wages cannot be dismissed. The mixture of industries and occupations present in a local economy have a direct impact on the wage rates there.

For a local labour market to function effectively all the factors involved in the demand and supply of labour must function.

Labour Demand	Labour Supply
Relative prices of labour to capital.	Number of individuals in the labour force.
Demand for the product/service produced.	Number of hours of labour that each individual chooses to make available.
Productivity level of workers.	Productivity of the output of each of these hours.
Level of wages (higher wages linked to lower demand).	Levels of remuneration available.

Source: Glasgow University, The Economic Research Unit (2004), Local Economic Development – Dynamics of the Labour Market.

The future of the world of work is hotly debated. Some countries/areas have introduced a universal basic income, one of the main reasons for doing so being the threat to the employment of humans posed by automation/robotics.

The UK wide labour market is in an uncertain position until the BREXIT negotiations are concluded and the impact strikes.

The increasing prominence of knowledge based and service sector industries means that lower numbers of graduates in the workforce may become increasingly problematic for future business development in Angus. Knowledge, particularly tacit knowledge is a key source of competitive advantage in the economy of developed countries. Knowledge, innovation and technology are increasingly important. Consequently this means that as the importance of technology declines, to some extent, the importance of the physical location of a business, and access to higher levels of qualified and trained labour become increasingly important. Wage rates are a key part of this.

In order to achieve the ambitions set out in the LOIP, actions will need to be taken to close the wage gap between Angus and other areas. Inward investment campaigns, measures to promote the key economic sectors such as food and drink, tourism, manufacturing etc, attracting external funding for local businesses and community groups, supporting the development of a strong rural economy, and working with local businesses to create the right economic environment for inclusive growth are all key to this.