Statistics and Insights from the First Year of Real-Time Payroll Reporting (PAYE Modernisation)

PAYE Modernisation has been operational for all employers in the State since 1 January 2019. Under the new system, employers are required to report their employees' pay and deductions in real-time to Revenue each time they operate payroll. Information is provided to Revenue at individual payslip level, and includes significant amounts of data on pay, tax, pensions and other topics for each employee.

This report focuses on examining the first twelve months' (for the year 2019) data collected through real-time reporting, to provide statistics and insights on incomes, tax paid and related topics.

181,000	**2.95 million**	**€98 billion**	**€36 billion**
Employers making submissions (including pension providers)	Employees (including those in receipt of occupational pensions)	Gross Pay paid to Employees	Tax and Pension Related Deductions

€33,394	**62%**	**3.5%**
Average gross employee pay per annum	Share of employees with gross pay up to €36,000	Share of employees with gross pay over €100,000

87%	**10%**	**78%**	**53%/47%**
Share of employees between 19 and 65 years of age	Share of employees who are over 60 and in receipt of occupational pensions	Share of employees who are Irish nationals	Share of employees who are male/female

PAYE Modernisation data give additional insight on both contributions to pensions and those in receipt of pensions. **295,000 employees** are aged 60 and likely to be pension recipients. **775,000 people** are making pension contributions every month through employer payrolls (30% of all employees). Those who with higher incomes make greater pension contributions but the average share of income set aside as a pension contribution is consistent across the income ranges, typically 3 to 6%.
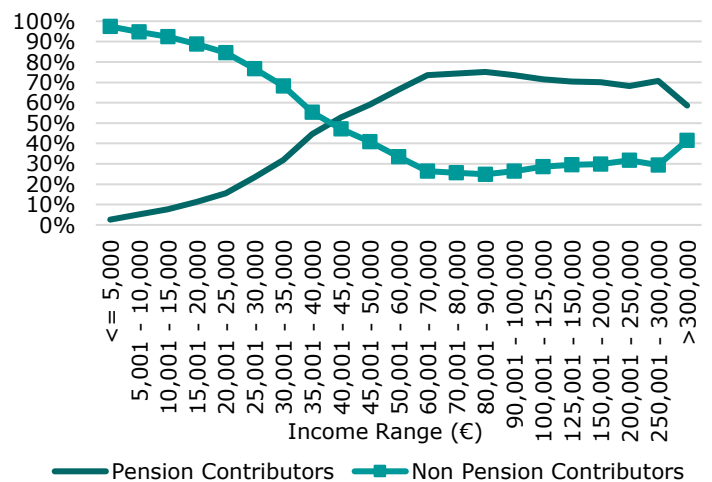
Donal McGrane and Philip O'Rourke
Strategy, Evaluation & Reporting Branch
✎ **Revenue Statistics** ✎ **Revenue Research** ✉ **statistics@revenue.ie**

Revenue
Cáin agus Custaim na hÉireann
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Table of Contents

List of Tables

List of Figures

Revenue
Cáin agus Custaim na hÉireann
Irish Tax and Customs

1 Introduction

Real-time reporting of payroll ("PAYE Modernisation") has been operational for all employers in the State since 1 January 2019. Employers are required to report their employees' pay and deductions in real-time to Revenue each time they operate payroll. Information is provided to Revenue at individual payslip level, and includes significant amounts of data on pay, tax, pensions and other topics for each employee.

PAYE Modernisation brings benefits for employees, employers and Revenue. Income Tax (including Universal Social Charge "USC") is the largest single taxhead with €22.9 billion paid to the Exchequer in 2019. As Figure 1 shows, PAYE Modernisation provides a more efficient and effective mechanism for the payment of €18.5 billion in Income Tax through the PAYE system.[1]

Figure 1: Income Tax and PAYE Receipts in 2019
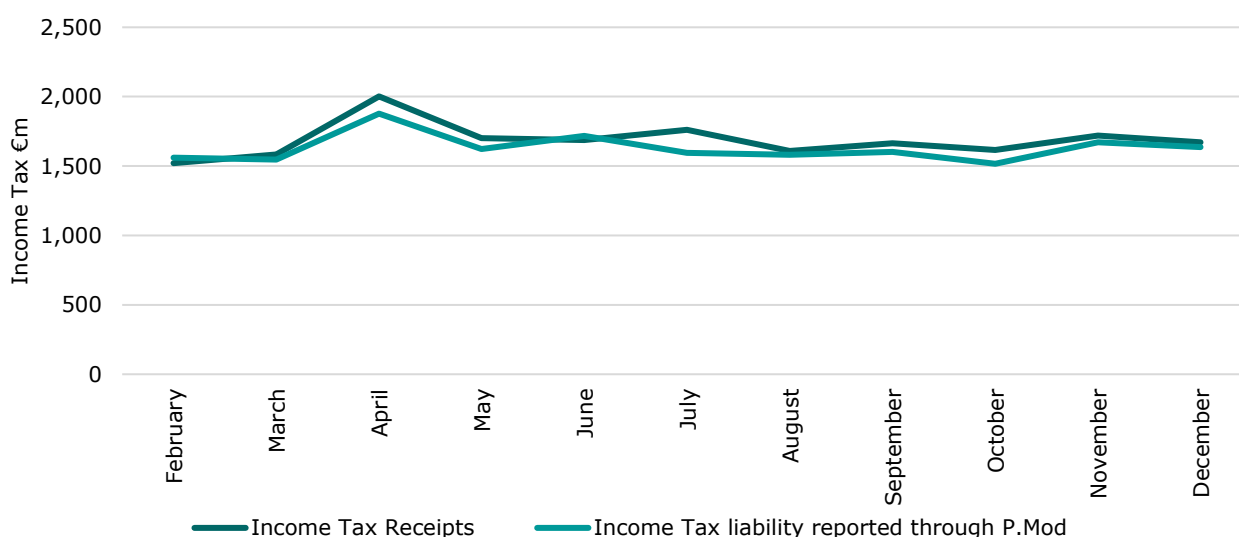
Source: Revenue analysis. Note: As submissions are filed the following month, January 2019 payments related to the pre-PAYE Modernisation.

This report focuses on examining the first twelve months' (for the year 2019) data collected through real-time reporting, to provide statistics and insights on incomes, tax paid and related topics. The following sections review employee and employer characteristics, gross pay and deductions, sectoral and geographic analysis, as well as reviewing the data specific to pensions and proprietary directors.

It is important to note that the information received through the real-time reporting system includes as employees retired workers in receipt of occupational pensions. In addition, the data cover PAYE income and deductions only (known as "Schedule E"), but income from self-employment ("Schedule D") or other types of non-earned income such as dividend income ("Schedule F") are not included.

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[1] Gross PAYE (excludes PAYE repayments) and PAYE USC. Excludes amounts collected in January 2019.

Revenue
Cáin agus Custaim na hÉireann
Irish Tax and Customs

2 Employee and Employer Characteristics

The following tables and figures provide information on the characteristics of employees and employers as reported to Revenue through real-time payroll reporting, in some cases combined with other data collected by Revenue.

2.1 Demographics

As can be seen in Table 1, the number of taxpayers reported in each month in 2019 is relatively steady, averaging at 2.7 million, with a maximum monthly variation of just under 114,000, or by approximately 4 per cent. The average monthly male to female ratio of 53:47.[2]

Table 1: PAYE Taxpayers by Month and Gender

Month	Male	Female	Total
Jan	1,410,328	1,270,071	2,680,399
Feb	1,403,210	1,262,226	2,665,436
Mar	1,410,875	1,269,249	2,680,124
Apr	1,417,920	1,275,781	2,693,701
May	1,429,337	1,286,081	2,715,418
Jun	1,441,449	1,295,325	2,736,774
Jul	1,452,202	1,301,090	2,753,292
Aug	1,455,442	1,305,461	2,760,903
Sep	1,455,957	1,309,776	2,765,733
Oct	1,457,221	1,312,554	2,769,775
Nov	1,461,050	1,318,041	2,779,091
Dec	1,458,440	1,316,758	2,775,198

Source: Revenue analysis.

Figure 2 provides an age breakdown of PAYE taxpayers in 2019. 87 per cent are between 19 and 65, with about 75,000 taxpayers 18 or under, and around 317,000 66 or over.

Figure 2: PAYE Taxpayers by Age

Age	
0-18	2.59%
19-25	13.36%
26-35	21.44%
36-45	22.70%
46-55	17.12%
56-65	11.98%
66-75	6.70%
>75	4.12%
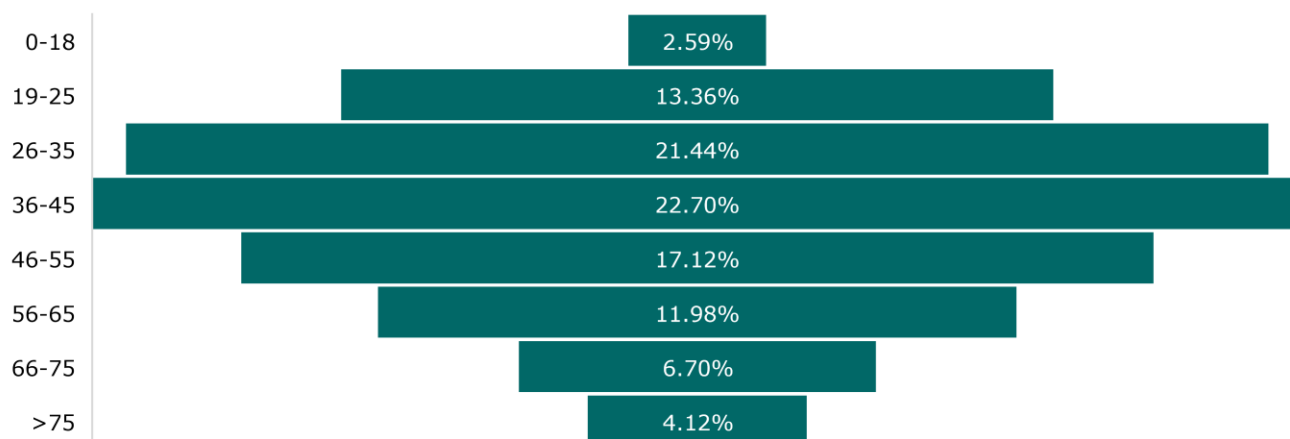
Source: Revenue analysis.

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[2] As gender is not recorded on a payslip, this information is based on Revenue's registration data.

Revenue
Cáin agus Custaim na hÉireann
Irish Tax and Customs

Figure 3 shows the personal status of PAYE taxpayers.[3] The majority have "single" status (51 per cent), followed by "married" (43 per cent) as the next largest category.[4]

Figure 3: PAYE Taxpayers by Personal Status
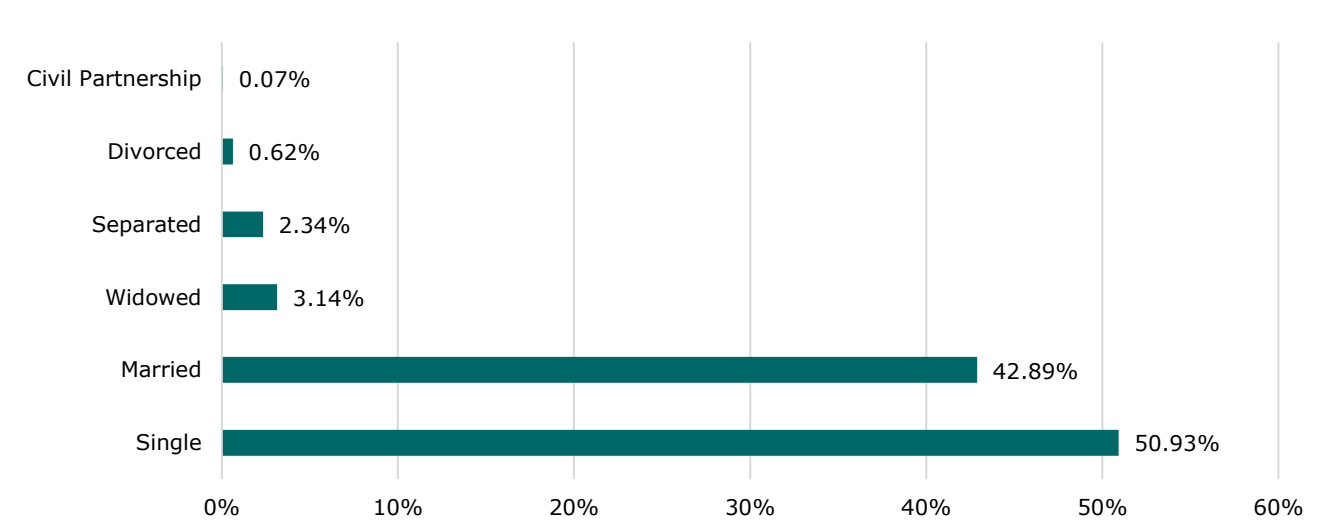
Source: Revenue analysis.

Table 2 shows the nationality of PAYE taxpayers in 2019.[5] As expected, Irish nationals account for the largest share, following by individuals from Poland and the Great Britain.

Table 2: Nationality of Employees

Nationality	% of Employees
Irish	78%
Polish	4%
British	3%
Romanian	2%
Brazilian	1%
Lithuanian	1%
Indian	1%
Italian	1%
Spanish	1%
Latvian	1%
Other	8%
Total	**100%**

Source: Revenue analysis. Only includes those where a nationality is identified (over 95% of employees are included).

Figure 4 shows the numbers of PAYE taxpayers who are registered for *MyAccount*, Revenue's single access point for secure online services. Over 1.7 million (61 per cent) taxpayers were registered in 2019.

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[3] These statistics are reported on an individualised basis, rather than a taxpayer unit basis (the latter would count married couples as jointly or singly assessed depending on their election).
[4] As personal status is not recorded on a payslip, this information is based on Revenue's registration data.
[5] As personal status is not recorded on a payslip, this information is based on a combination of Revenue's registration data and information from the Department of Employment Affairs & Social Protection.

Revenue
Cáin agus Custaim na hÉireann
Irish Tax and Customs

Figure 4: PAYE *MyAccount* Registrations
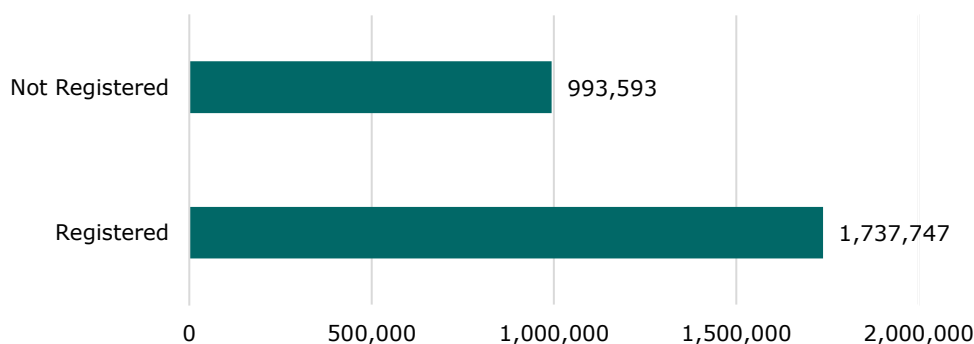
Source: Revenue analysis.

2.2 Employer Size

There were 180,927 employers making PAYE returns at some point in 2019. Table 3 sets out the number of employers submitting payroll information to Revenue in 2019, broken down by the Revenue Division to which the employer is assigned. Also shown is the number of employments classified by the employer's Division (an individual employee can have multiple employments – discussed further in Section 2.3). Table 4 provides the same distributions based on the number of employees of the employer.

Table 3: Employers by Revenue Division of the Employer

Revenue Division of Employer	Number of Employers	% of Employers	Number of Employments	% of Employments
Business	150,400	83%	1,118,300	28%
Large Cases – High Wealth Individuals	3,200	2%	824,000	21%
Large Corporates	100	0%	1,800	0%
Medium Enterprises	11,800	7%	1,768,300	45%
Personal	15,400	9%	231,100	6%
Total	**180,900**	**100%**	**3,943,400**	**100%**

Source: Revenue analysis.

Table 4: Employers by Number of Employees

Employee Range	Number of Employers	% of Employers	Number of Employments	% of Employments
1-9	139,200	77%	413,200	10%
10-49	32,800	18%	670,400	17%
50-249	7,300	4%	725,200	18%
250+	1,600	1%	2,134,500	54%
Total	**180,900**	**100%**	**3,943,400**	**100%**

Source: Revenue analysis.

As Figure 5 shows, the number of employers over the year is relatively stable, trending upwards slightly towards the summer months, before a minor fall off at the end of the year. While the total number of distinct employers in 2019 was 180,927, the average monthly number of employers was 158,635. Similarly, the number of employees given in Table 3 and Table 4 is the total number of individuals employed by those employers in 2019, and does not take account of length of employment, part time or full-time basis, or multiple employments.

Figure 5: Number of Employers by Month
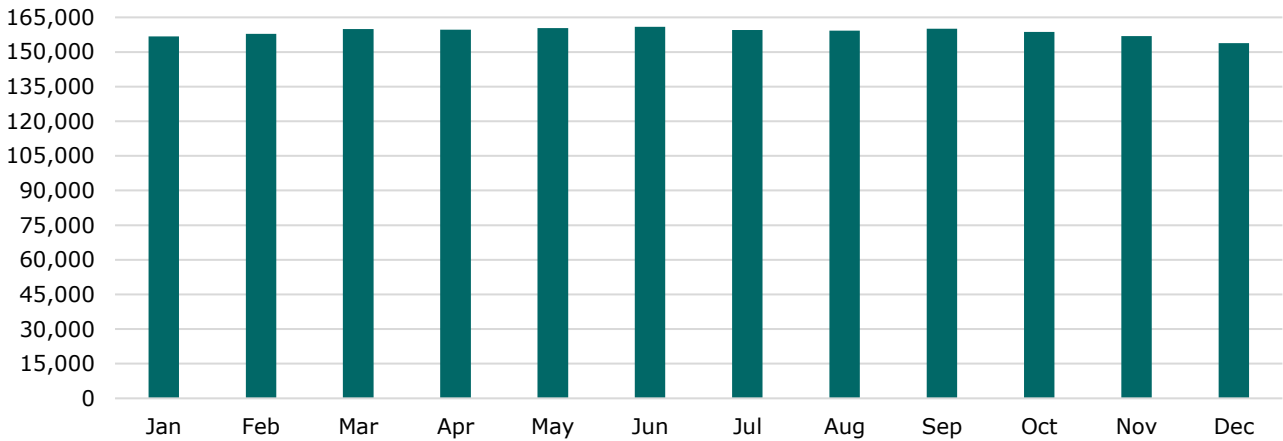
Source: Revenue analysis.

2.3 Multiple Employments

Figure 6 shows, by month, the number of employments and the number of distinct taxpayers. On average, there were 230,000 more employments per month than there were taxpayers. This difference can be explained by taxpayers being employed by more than one employer. About 1 in 10 taxpayers have more than one employment, on average in a month.

Figure 6: Number of Employments versus Distinct Taxpayers
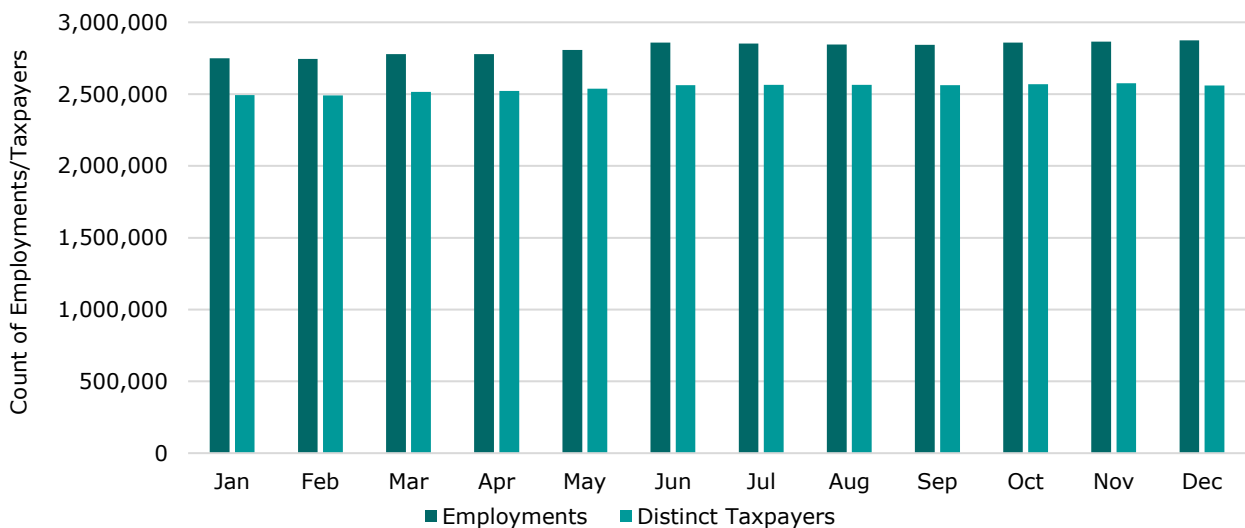
Source: Revenue analysis.

2.4 Employee Mobility and Labour Market Churn

Headline statistics on the labour market are regularly produced by the Central Statistics Office ("CSO") among others, but the introduction of real-time reporting for PAYE allows – for the first time – a comprehensive picture of labour market churn to be outlined. Many employers both hire and lay off workers within a short time period (e.g., from one month to the next). This means there is 'churn' within the labour market, which the net change in aggregate employment cannot capture. Examining job creation and job cessation provides an indication of labour market flexibility and volatility.

Churn is important to study for 2019, a year of healthy labour market growth, as it sets the benchmark for 2020, a year of contraction. This section reviews the number of continuing, new and ceased jobs on a monthly basis throughout 2019. The direct tax and PRSI associated with new and ceased cohorts are compared to determine whether the labour market churn is revenue-rich or revenue-poor from one month to the next.

The International Labour Organisation ("ILO") defines employment as work for pay or profit. This is the definition that the CSO follow in preparing labour market statistics. In this section, a job is identified from the payroll data when two conditions are met: the payslip does not refer to occupational pension income and the gross pay figure is positive.

Table 5 shows that June was the month with the highest level of net additional jobs compared to the previous month (41,000), which reflected the creation of 167,000 new jobs in June and the ceasing of 126,000 jobs in May. In general, job creation and job cessation will be several multiples higher than the net change in employment. July had the lowest level of net employment change (-25,000), which reflects seasonal work patterns. However, the most revenue-rich month on aggregate – apart from December - was March, when the labour market churn resulted in an additional €31 million in liabilities for income tax, USC and PRSI. The revenue figure for December is likely distorted by the application of emergency tax to seasonal workers and end of year bonus payments.[6] The increase in revenue in March is driven both by increased jobs and an increase in the average revenue per job. In other words, the new jobs created in March were better paid than the jobs lost in February.

Typically, about 5 per cent of jobs disappear from one month to the next. Comparing December to January (as opposed to a month-on-month comparison), 73 per cent of jobs continued from the start to the end of the year. Viewed from an employee perspective, this can be expressed as 1.7 million employees remaining with the same employer throughout the year. Of these, 1.3 million employees worked in the private sector and 0.4 million worked in the public sector.

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[6] This is borne out by the high level of revenue per ceased job in January 2020. Emergency tax, although expected to reduce under PAYE Modernisation, will continue to apply where employees do not have a PPS Number or are not registered for PAYE.

Revenue
Cáin agus Custaim na hÉireann
Irish Tax and Customs

Table 5: Job Churn

	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19
Total number of unique jobs ('000s)	**2,329**	**2,361**	**2,366**	**2,400**	**2,441**	**2,416**
of which: continuing ('000s)	2,212	2,237	2,252	2,266	2,274	2,278
of which: new ('000s)	117	124	115	135	167	139
Number of ceased jobs (didn't continue from previous month)	115	91	109	101	126	163
Net additional jobs ('000s)	**1**	**32**	**6**	**34**	**41**	**-25**
Proportion of continuing jobs this month (%)	95%	95%	95%	94%	93%	94%
Proportion of new jobs this month (%)	5%	5%	5%	6%	7%	6%
Proportion of ceased jobs last month (%)	5%	4%	5%	4%	5%	7%
Total tax paid by new jobs this month (€m)	68	81	64	71	84	79
Total tax paid by ceased jobs last month (€m)	62	50	78	66	69	86
Net tax effect from job churn (€m)	**6**	**31**	**-14**	**5**	**15**	**-7**
Average tax per new job (€)	583	655	560	530	503	567
Average tax per ceased job (€)	534	550	715	661	549	527
Difference in average tax (€)	49	105	-155	-130	-46	40

	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19
Total number of unique jobs ('000s)	**2,404**	**2,413**	**2,419**	**2,420**	**2,409**
of which: continuing ('000s)	2,278	2,256	2,273	2,295	2,288
of which: new ('000s)	127	157	146	125	121
Number of ceased jobs (didn't continue from previous month)	139	148	140	124	132
Net additional jobs ('000s)	**-12**	**9**	**6**	**1**	**-11**
Proportion of continuing jobs this month (%)	95%	94%	94%	95%	95%
Proportion of new jobs this month (%)	5%	6%	6%	5%	5%
Proportion of ceased jobs last month (%)	6%	6%	6%	5%	5%
Total tax paid by new jobs this month (€m)	69	82	87	71	130
Total tax paid by ceased jobs last month (€m)	73	79	76	77	81
Net tax effect from job churn (€m)	**-4**	**3**	**11**	**-6**	**48**
Average tax per new job (€)	544	524	593	572	1,075
Average tax per ceased job (€)	528	536	542	624	616
Difference in average tax (€)	16	-12	52	-52	458

Source: Revenue analysis. Note: each job is derived from the payroll data based on whether the gross pay on the payslip is positive and on whether the gross pay can be identified as pension income. Tax is the sum of income tax, USC, employee PRSI and employer PRSI.
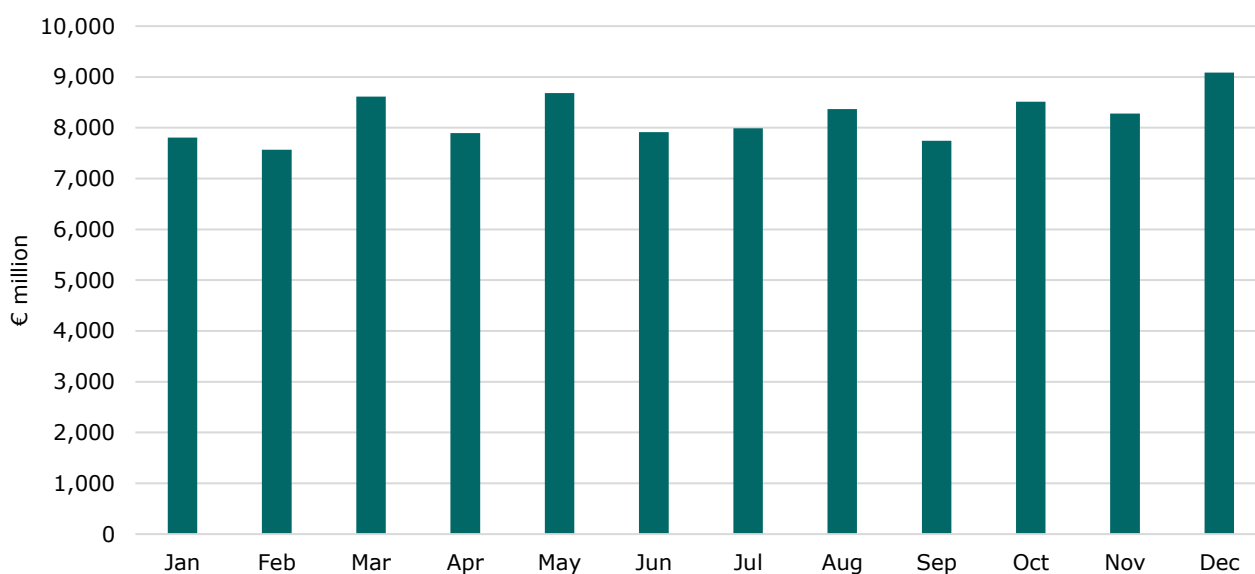
Revenue
Cáin agus Custaim na hÉireann
Irish Tax and Customs

3   Gross Pay and Deductions

This section sets out the amount of gross pay, total deductions of Income Tax, USC, PRSI and Local Property Tax ("LPT") as reported by employers in 2019.

3.1   Gross Pay

Employers paid €98.44 billion in gross pay to employees in 2019, around €8.2 billion per month (Figure 7). Gross pay in December is approximately €400 million higher than the next highest month (May), and €1 billion higher than the average aggregate gross pay for the first 11 months of the year. While bonus payments are not separately identified on submissions, it is reasonable to assume that some of this increase in aggregate gross pay in December relates to a combination of increased seasonal employment and bonus payments. There were approximately 58,000 extra employees in December 2019 compared to the average number of employees for the first 11 months of the year.

**Figure 7: Aggregate Gross Pay by Month**

Source: Revenue analysis.

The average (mean) gross pay per employee is €33,394 per annum, inclusive of all workers both full-time and part-time, and temporary workers. The equivalent median pay is €25,421.

Figure 8 shows the distribution of employees by their monthly gross pay. In an average month, about 62 per cent of taxpayers (1.55 million individuals) have monthly pay of €3,000 or less (€690 per week, €36,000 per annum), while 3.4 per cent (85,000 individuals) have a monthly pay of at least €9,000 (at least €2,071 per week, €108,000 per annum). Figure 9 shows the same information on an annual basis, alongside the distribution of annual gross pay in 2017 (on a taxpayer unit basis) based on P35 returns (prior to PAYE Modernisation), which shows that the

distribution of overall annual incomes under both systems are closely aligned, providing a level of reassurance on the data submitted by employers under a significantly revised reporting structure.

Figure 8: Distribution of Monthly Gross Pay
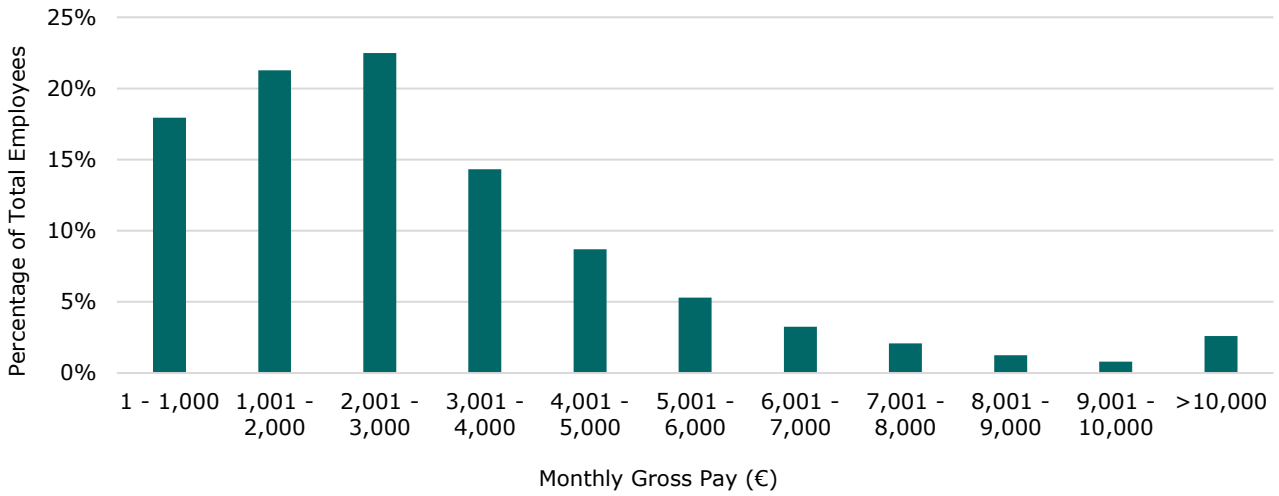
Source: Revenue analysis.

Figure 9: Distribution of Annual Gross Pay
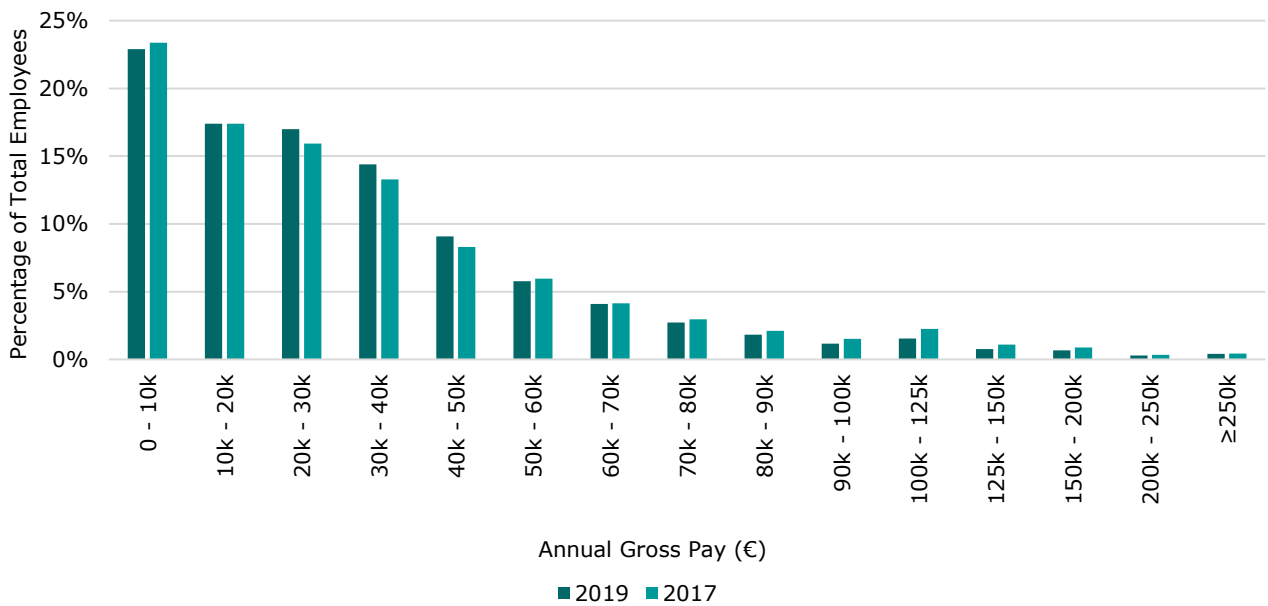
Source: Revenue analysis.

Figure 10 sets out the frequency of pay as reported by employers. Just under 40 per cent of taxpayers are paid monthly, with a further 38 per cent paid weekly.

Figure 10: Pay Frequency

Source: Revenue analysis.

The cumulative gross pay across all taxpayers can vary significantly month to month (Figure 7), for example the increase in gross pay from February to March 2019 was in excess of €1 billion. This is influenced by several factors, such as the variation in 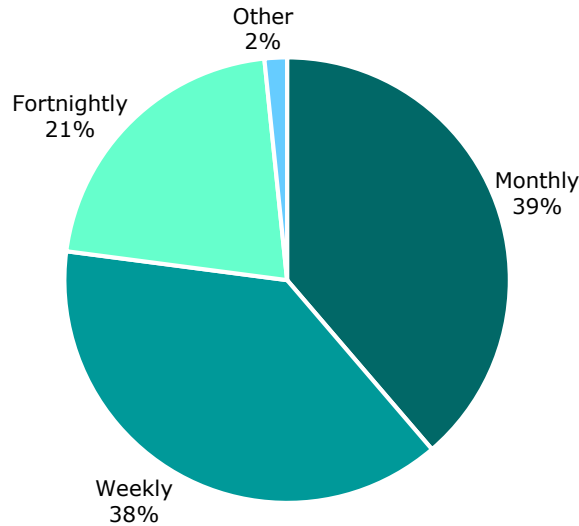the number of employers each month as well as the number of employees. Another consideration is the 21 per cent of taxpayers paid on a fortnightly basis (Figure 10). Depending on pay dates, the number of paydays in some months will be 3 rather than 2 for that cohort, which will affect the total gross pay that month.

3.2 Composition of Income

Gross pay as reported to Revenue is made up of many components, such as base pay, overtime pay, bonus pay, taxable benefits, share based remuneration. However, many of the components of gross pay fall on the employer to calculate and include in the gross pay they report to Revenue, with only a small number of sub-components separately recorded.

The components of gross pay separately recorded are taxable benefits, share based remuneration and lump sums. In 2019, these subcomponents amounted to, on average, approximately €240 million per month (less than €3 billion per year) or less than 3 per cent of the average monthly total gross pay. Of this, approximately 37 per cent is made up of taxable benefits, with a further 32 per cent by share based remuneration and the final 31 per cent relating to lump sum payments. Figure 11 sets out the composition of gross income for all employees in 2019, as recorded on employer returns.

Figure 11: Composition of Gross Income

Base Pay / Non-Base Pay

2.9%

97.1%
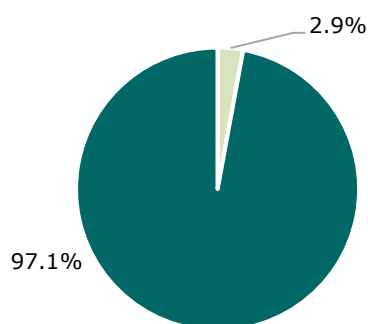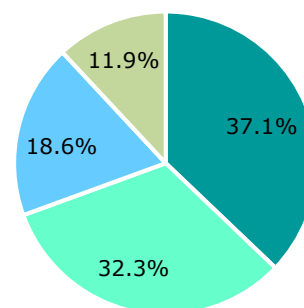
- Separately recorded non-base pay
- Base pay and other pay not separately recorded

Separately Recorded Non-Base Pay

11.9%

18.6%

37.1%

32.3%

- Taxable Benefits
- Share Based Remuneration
- Non Taxable Lumpsum
- Taxable Lumpsum

Source: Revenue analysis.

It is important to note that other incomes, such as some social welfare payments, which some employees may be in receipt of, are not reported by employers

3.3 Deductions

Table 6 shows the gross pay and Income Tax, USC, PRSI (employee and employer), LPT[7] and pension related deductions (employee and employer)[8] made from gross pay by employers. The total deducted in 2019 was €36.2 billion from gross pay of €98.4 billion.

Table 6: Deductions by Revenue Division of Employer

Revenue Division of Employer	Gross Pay €bn	Income Tax €bn	USC €bn	Employee PRSI €bn	Employer PRSI €bn	LPT €bn	Employee Pension €bn	Employer Pension €bn	Total Deductions €bn
Large Corporates	28.34	5.91	1.14	0.95	2.49	0.01	0.91	1.25	12.66
Medium Enterprises	47.89	7.65	1.53	1.56	4.22	0.03	1.41	0.50	16.90
Business	18.76	2.67	0.52	0.61	1.46	0.01	0.13	0.14	5.54
High Wealth Individuals	.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Personal	3.42	0.43	0.08	0.10	0.30	0.00	0.07	0.07	1.05
All Divisions	**98.44**	**16.67**	**3.27**	**3.23**	**8.48**	**0.06**	**2.51**	**1.96**	**36.17**

Source: Revenue analysis.

Table 6 shows that the distributions of Income Tax and USC deducted are broadly in-line with the gross pay for each Division (within 2-3 per cent variation), with the exception of Large Corporates Division ("LCD") employers. 35 per cent of both Income Tax and USC is collected by employers managed within LCD, compared to the 29 per cent of gross pay.

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[7] Only LPT deducted at source through salaries or pensions is included here. Around 15% of taxpayers pay their LPT by way of deduction at source (this includes cases where mandatory deduction at source is applied).
[8] Pensions are discussed in more detail in Section 4.

Revenue
Cáin agus Custaim na hÉireann
Irish Tax and Customs

Figure 12 sets out the average breakdown of gross pay in 2019. The average Income Tax deducted amounts to 17 per cent of gross pay, while USC, employee PRSI and employee pension contributions amount to approximately 3 per cent each. Not shown in the Figure (they are not deductions from gross pay, but are related to it) are employer PRSI and employer pension contributions that average to about 9 per cent and 2 per cent respectively.

Figure 12: Tax and Pensions Deductions to Gross Pay

Legend:
- Income Tax Paid
- USC Paid
- Employee PRSI Paid
- LPT Deducted
- Employee Pension
- Net Pay
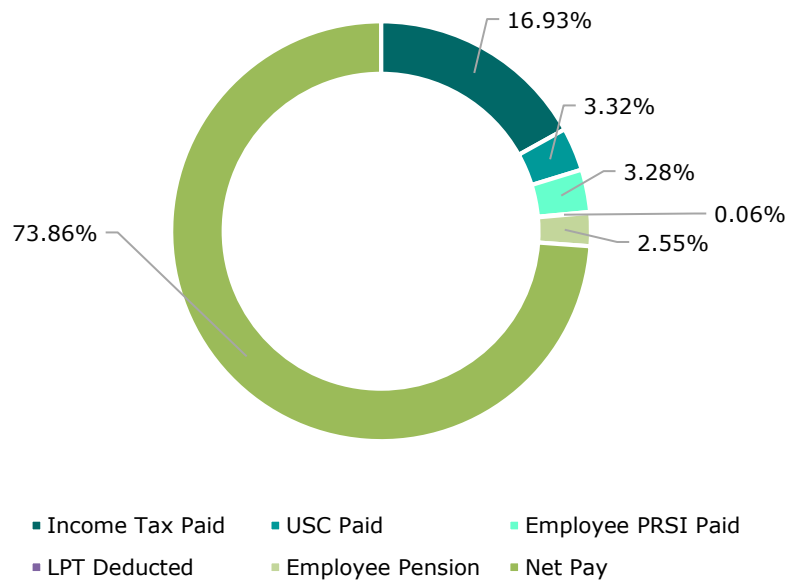
Source: Revenue analysis.

Based on employer returns, 10 per cent of employees do not pay Income Tax or USC through the PAYE system at any point in 2019. This is lower than the overall estimate by Revenue that a quarter per cent of taxpayers in receipt of PAYE income do not pay tax or USC once liabilities are finalised.[9] This difference points to the significant level of taxpayers who claim additional credits, reliefs or refunds of their tax and USC retrospectively after the year end.[10] Commonly claimed items include health expenses, tuition fees, EII relief, additional pension contribution relief (not operated through their employer).[11] In addition, the final liability for many cases will include PAYE and non-PAYE income sources.

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[9] See https://www.revenue.ie/en/corporate/information-about-revenue/statistics/income-distributions/income-earners-it.aspx.

[10] If the final liability is lower than the tax and USC already paid, a refund may be due.

[11] It is also important to note that the figure of 10% who do not pay Income Tax or USC is based on individuals, while the figure of 26% of taxpayers with no liability once tax returns are completed is based on a taxpayer unit basis. Those in a marriage or civil partnership who are jointly assessed or assessed via separate treatment, or who are eligible to be assessed in this way, may have a more beneficial final liability once retrospective changes are applied to their tax credits and bands.

Revenue
Cáin agus Custaim na hÉireann
Irish Tax and Customs

PAYE Modernisation data gives additional insight on both contributions to pensions and those in receipt of pensions.
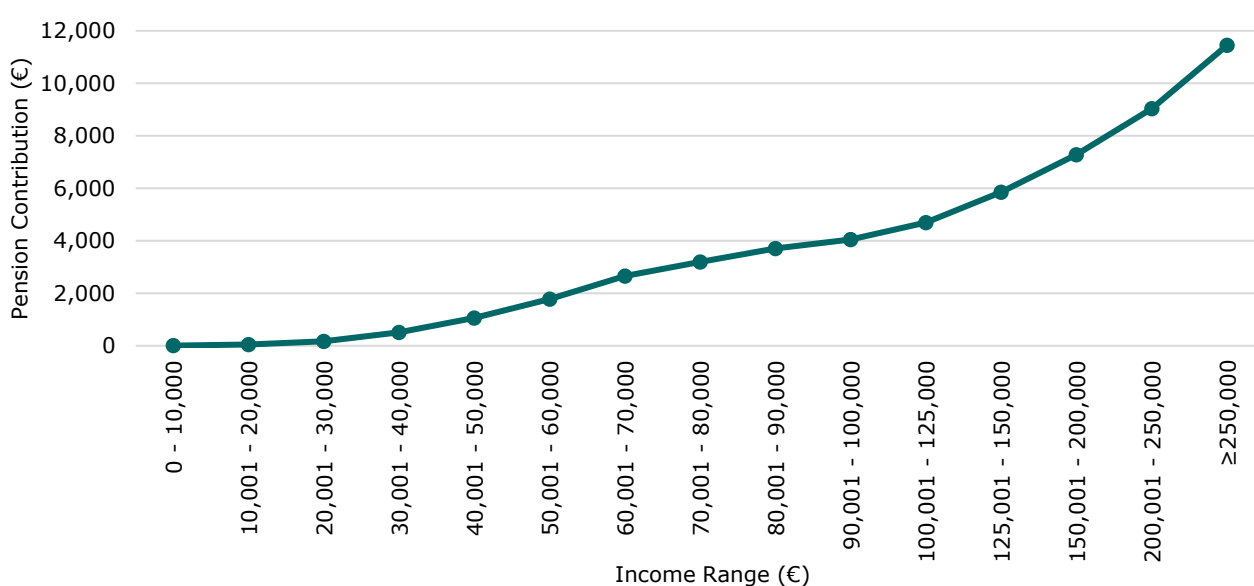
4.1 Pension Contributions

Prior to PAYE Modernisation, pension contributions were captured on the Form P35LF, where employers recorded the employee and employer contributions as a cumulative total across all their employees who made contributions, or for whom they made contributions. Under PAYE Modernisation, information relating to pension contributions is now captured at an individual payslip level, allowing taxpayers (employees) making these contributions to be profiled.

As noted in Section 3.3, pensions deductions by employees and employers total €2.5 billion and €2 billion respectively in 2019.[12] These include contributions to Occupational Pensions/Retirement Benefit Schemes ("RBS"), Additional Voluntary Contributions ("AVC"), contributions to a Personal Retirement Savings Accounts ("PRSA") and contributions to Retirement Annuity Contracts ("RAC"). On average, 775,000 people are making pension contributions every month through employer payrolls. This represents around 30 per cent of all employees on average. Just over 875,000 employees made pension contributions at some point in 2019.

Figure 13 plots the average pension contribution amount by income range, for all employees in 2019. This is based on cumulative pension contributions and cumulative income for the year. Those on greater incomes are paying, on average, a greater amount of pension contributions.

### Figure 13: Average Pension Contribution – All Employees

Source: Revenue analysis.

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[12] The employees for which the employers are contributing to a pension fund are not necessarily the same employees who are themselves making contributions to their pension fund.

As shown in Figure 14, of those taxpayers who make pension contributions, the clear majority of the contributions (77 per cent by value of total pension contributions) are paid to an RBS (also known as an Occupational Pension), with a further 18 per cent made by way of additional voluntary contributions.

Figure 14: Employee Pension Contribution Types

Employee AVC 18%
Employee PRSA 4%
Employee RAC 1%
Employee RBS 77%
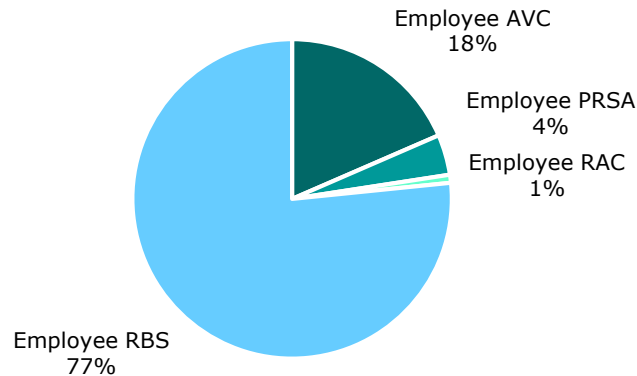
Source: Revenue analysis.

The number of individuals, total gross pay and total employee pension contributions of those who made a pension contribution at some point in 2019 is shown in Table 7.[13]

Table 7: Breakdown of Pension Contributors

Range of Gross Pay €	Number of individuals	Gross Pay €m	Pension Contributions €m
0 - 5,000	10,700	27.54	0.99
5,001 - 10,000	14,900	113.61	3.45
10,001 - 15,000	20,200	254.52	8.04
15,001 - 20,000	27,500	485.01	16.79
20,001 - 25,000	38,800	880.28	31.50
25,001 - 30,000	57,600	1,586.78	57.58
30,001 - 35,000	71,400	2,325.80	91.01
35,001 - 40,000	87,800	3,303.07	134.57
40,001 - 45,000	80,500	3,416.34	147.73
45,001 - 50,000	66,800	3,168.71	145.27
50,001 - 60,000	112,200	6,147.71	308.29
60,001 - 70,000	88,000	5,698.36	320.11
70,001 - 80,000	59,000	4,398.40	254.12
80,001 - 90,000	40,100	3,394.15	198.57
90,001 - 100,000	25,200	2,381.84	138.86
100,001 - 125,000	32,400	3,587.14	213.31
125,001 - 150,000	15,700	2,138.08	130.93
150,001 - 200,000	13,500	2,313.05	140.18
200,001 - 250,000	5,800	1,297.85	76.84
250,001 - 300,000	3,200	858.33	47.78
>300,000	4,200	2,308.35	87.60
Total	**875,400**	**50,084.91**	**2,553.51***

Source: Revenue analysis. Note: * Excludes ~2,800 cases who have a negative contribution in 2019, amounting to approximately €43m.

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[13] Includes public sector employees.

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Figure 15 shows the average pension contribution by income range for those employees who are making a pension contribution. Those who with higher incomes make greater contributions to their pension, but Figure 20 shows that the average share of income set aside as pension contribution is relatively consistent across the income ranges, typically 3 to 6 per cent.

Figure 15: Average Pension Contribution – Pension Contributors
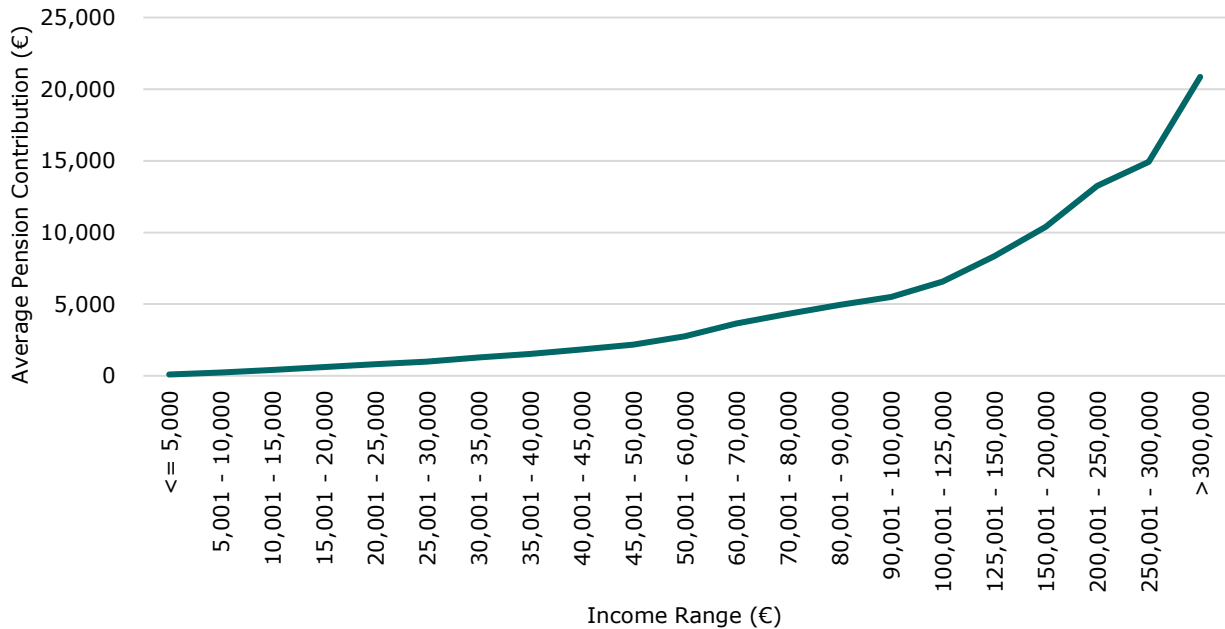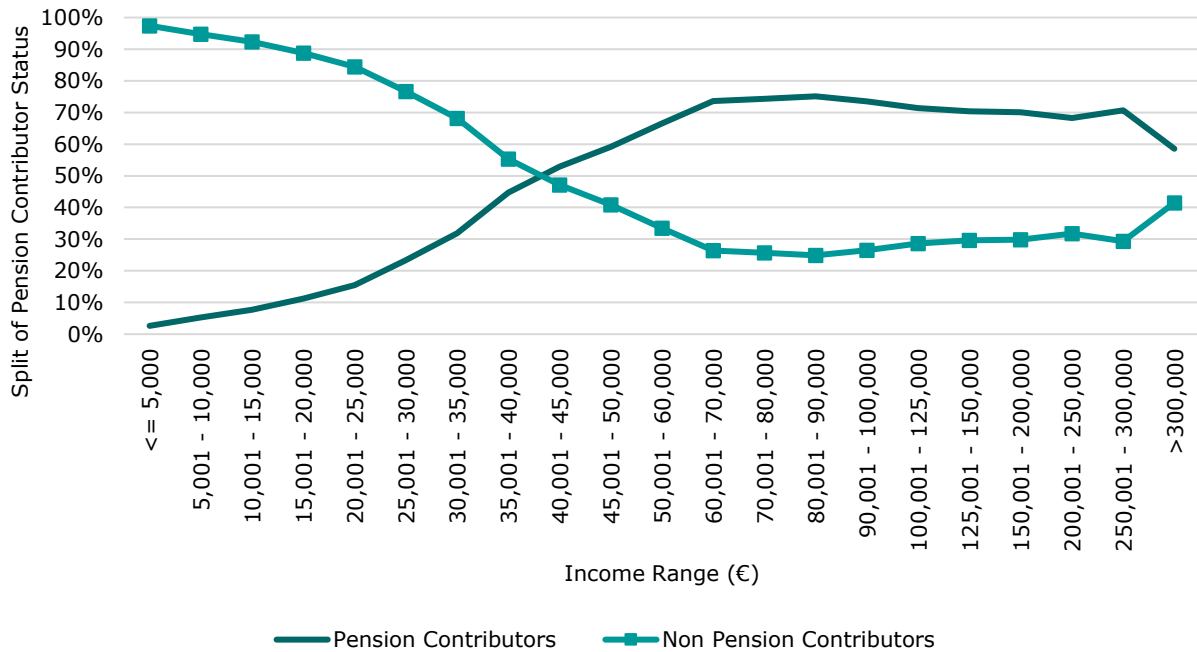

Source: Revenue analysis.

Figure 16: Average Pension Contribution as a share of gross pay

Source: Revenue analysis.
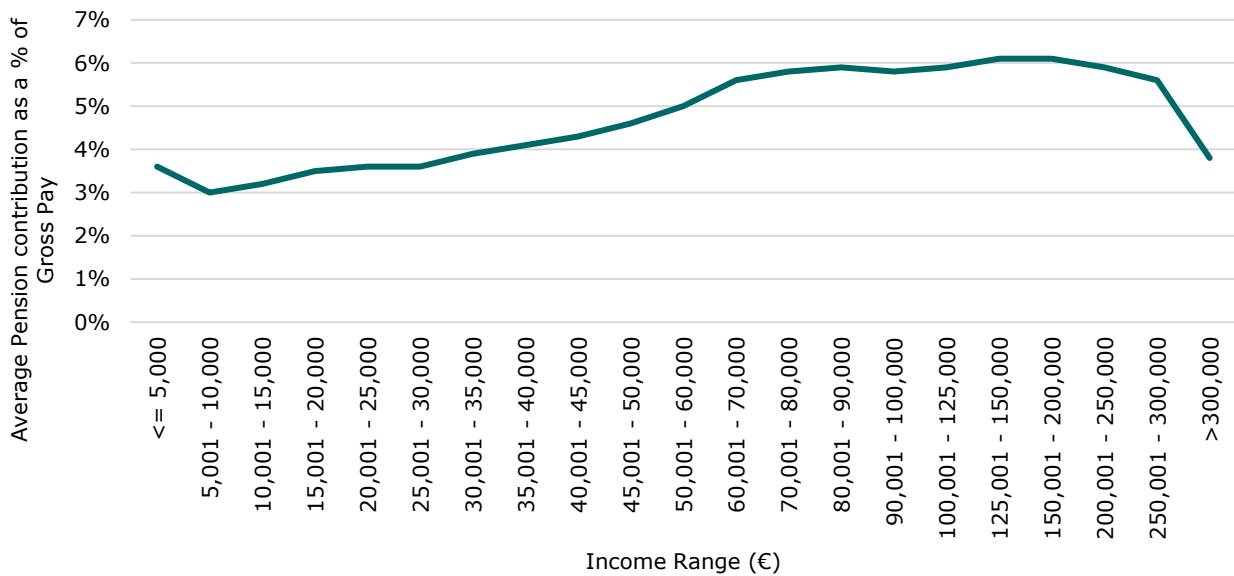
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Figure 17 and Figure 18 show, broken down by income range, the split of employees into pension contributors or non-pension contributors. Most employees on lower incomes do not make contributions to their pension.[14] The gross income point above which most employees are making pension contributions is in the €40,000 to €45,000 range.

Figure 17: Split of Pension Contributor Status by Income Range

Source: Revenue analysis.

Figure 18: Number of Employees by Income Range and Pension Contributor Status
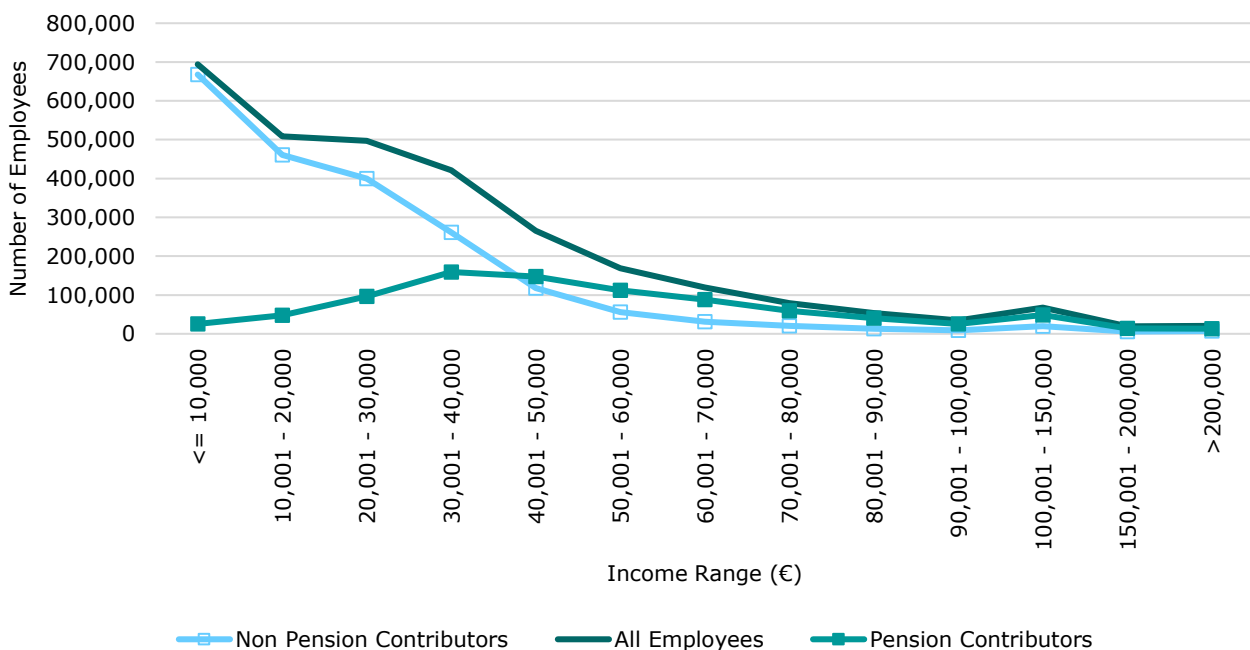
Source: Revenue analysis.

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[14] It should be noted that pension recipients are included in this analysis.

Looking further at those taxpayers who do not have a pension contribution deduction in 2019, Figure 19 shows that those without a contribution are, in general, younger in age than the taxpayer case base as a whole. It also shows a higher number of non-contributors in the older age brackets, but these can be accounted for by pension recipients in the case base, who would in general not be expected to make pension contributions by the time they are in receipt of one.

Figure 19: Share of Employees by Age Range and Pension Contribution Status
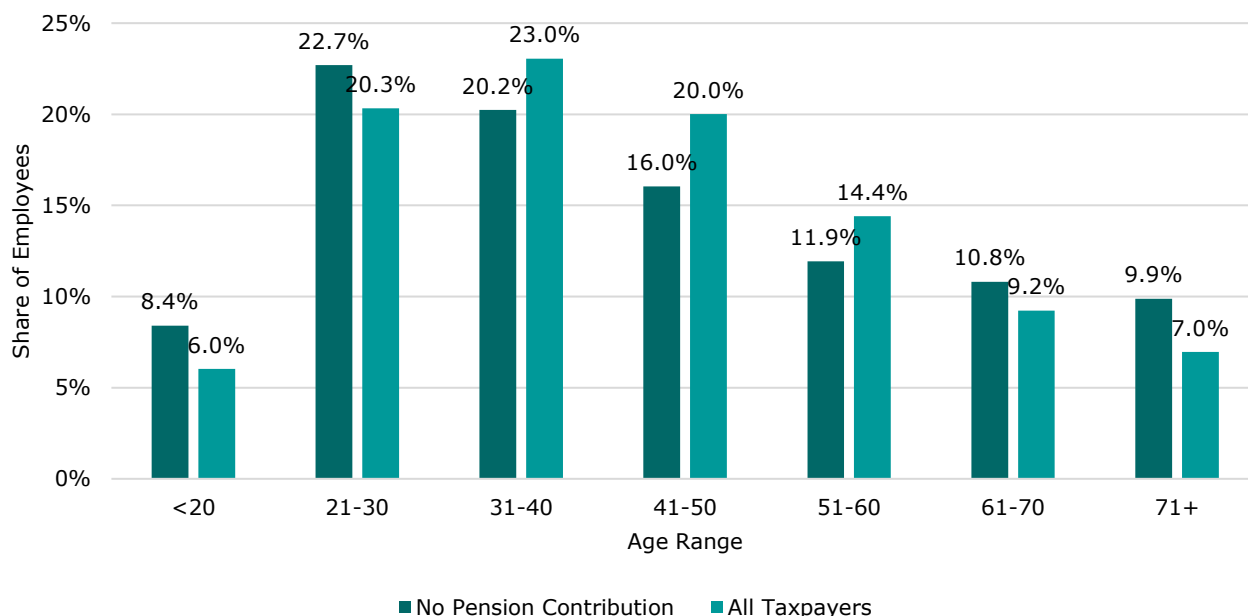
Source: Revenue analysis.

Table 8 sets out the average gross pay, broken down by age, of those employees who do not make a pension contribution. In all age ranges the average gross pay is less than the average gross pay for all employees in 2019 as set out in Section 3.1, which was €33,394.

Table 8: Average Gross Pay by Age of Non-Contributors

Age Range	Average Gross Pay €
<20	6,700
21-30	18,400
31-40	27,800
41-50	31,500
51-60	30,400
61-70	23,800
70+	18,400

Source: Revenue analysis.

4.2   Pension Recipients

Those in receipt of a private pension income are included in their pension provider's payroll, and as such are included in the PAYE data submitted to Revenue. The income source, such as a pension income or employment income, is not indicated on the payslip, and thus it is not possible to identify precisely those in receipt of pension income. In order to quantify the incomes and

deductions of those in receipt of pension incomes, it is necessary to make some approximations in order to try to identify this cohort of taxpayers as closely as practically possible.

A cohort of employees was identified as follows:
- PRSI class M – taxpayers with a PRSI class of M are those with no PRSI contribution liability, such as, primarily, those aged under 16 or aged 66 and over, and those in receipt of occupational pensions or lump-sum termination payments; and
- Aged 60 or over.

As an individual can have multiple employers in a year, employees can have more than one PRSI class in a year (operated by the employer). This analysis focuses on employees who had only a Class M classification throughout the year.

There were approximately 295,000 such employees in 2019, who were aged 60 or over (about 10 per cent of all PAYE taxpayers). It is reasonable to assume that this group of employees are in fact recipients of pensions.

The average monthly income of this cohort is €1,500 per month or €18,100 per annum (Figure 20). 65 per cent of this cohort have an annual income of €20,000 or less, with 91 per cent on incomes of €40,000 or less. It's important to note that these figures exclude income from taxable pensions from the Department of Employment Affairs & Social Protection, such incomes are taxed by way of reducing the tax credits and bands available to this cohort.

Figure 20: Distribution of Annual Gross Pay of Pension Recipients
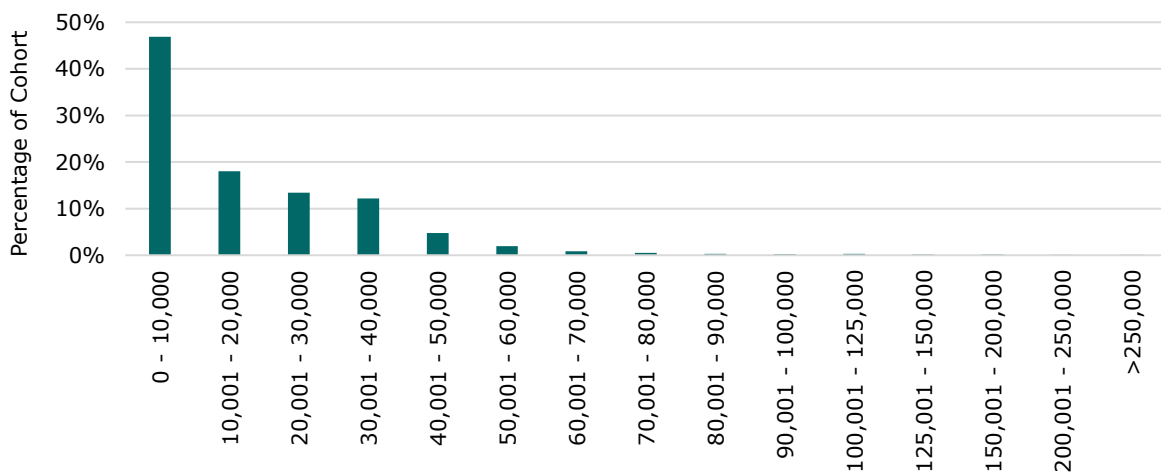
Source: Revenue analysis.

Table 9 and Figure 21 give the income and tax paid for presumed pension recipients (employees aged 60 or over with a PRSI class of M who are actively in employment), excluding those in receipt of incomes over €100,000.

Table 9: Income and Deductions to Gross Pay of Pension Recipients

Income €bn	Income Tax €bn	USC €bn
4.87	0.65	0.09

Source: Revenue analysis.

Figure 21: Income and Deductions to Gross Pay of Pension Recipients
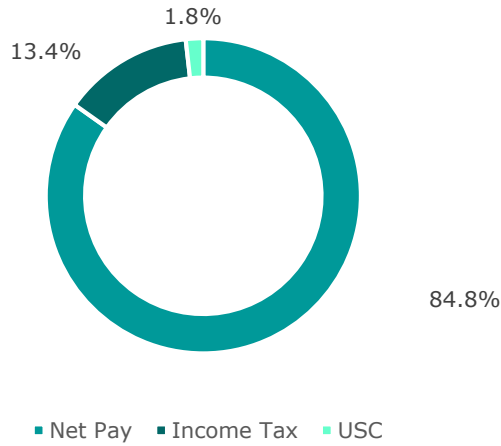
Source: Revenue analysis.

Highly paid employees in this category could unduly affect the tax and USC figures provided in Table 9. An analysis of the highest income earners in this cohort (over €100,000 in Figure 20) shows that only 0.9 per cent (around 2,500 individuals) have an income over €100,000, accounting for €0.46bn in gross pay, €0.12 billion in Income Tax and €0.03 billion in USC.

5 Sectoral and Geographic Analysis

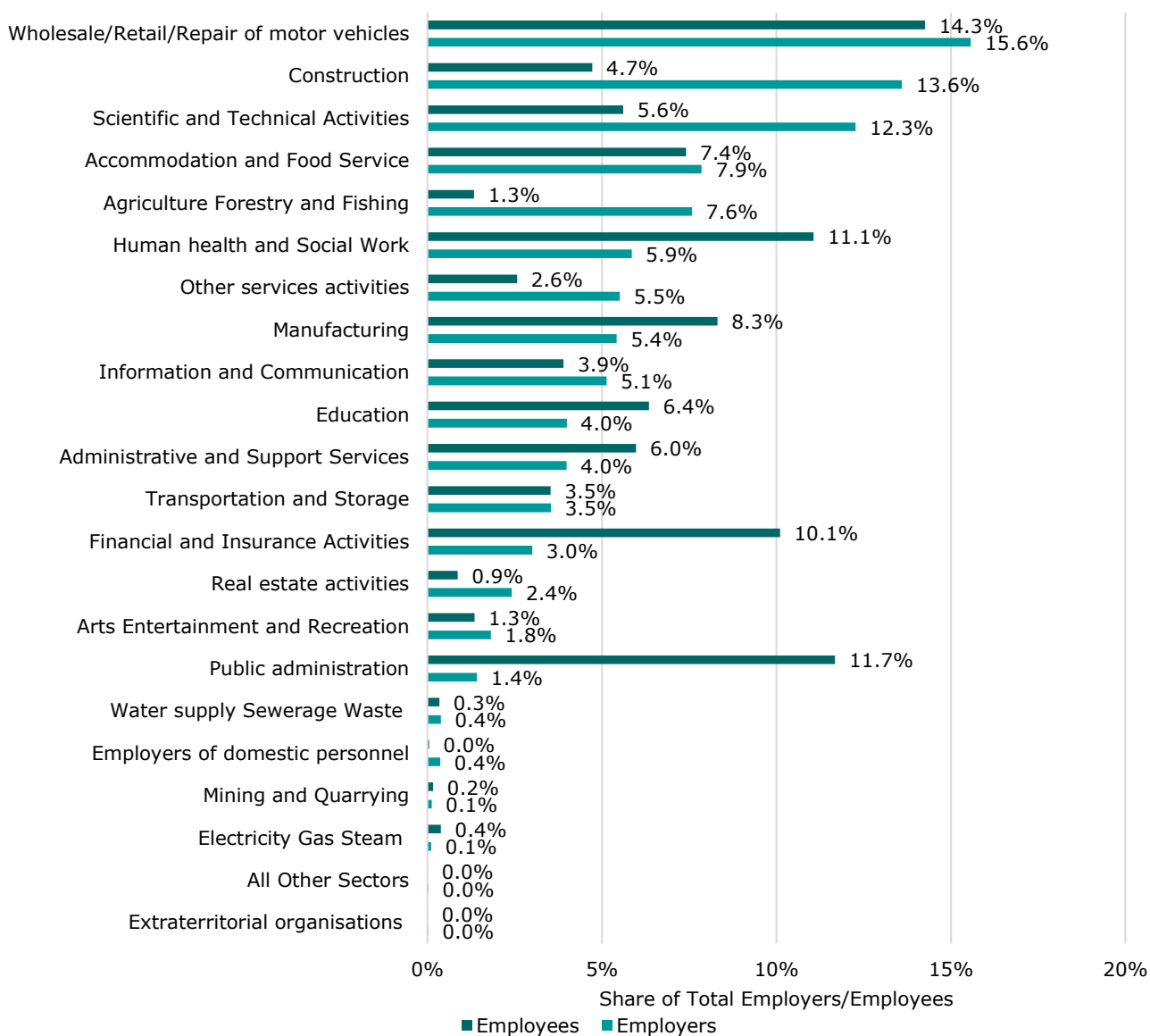## 5.1 Sector

Figure 22 sets out the share of number of employers and employees by sector.[15] The sector of the employees is based on the NACE code of their employer, i.e., the share of total employees in any given sector reflects the number of employees of the employers in that sector.

Figure 22: Sectoral Distribution of Employers and Employees

Source: Revenue analysis.

Figure 23 shows the average monthly gross pay per employee by sector. *Electricity, Gas & Steam*, *Mining & Quarrying* and *Financial & Insurance* Activities are the three highest average monthly pay sectors. *Employers of Domestic Personnel* and *Accommodation & Food Service* are

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[15] Revenue uses the NACE coding system for classifying business activities, more information on NACE can be found at http://www.cso.ie/px/u/NACECoder/NACEItems/searchnace.asp.

the sectors with the lowest average monthly gross pay, likely reflecting a higher share of part-time work in these sectors.

Figure 23: Average Monthly Gross Pay by Sector

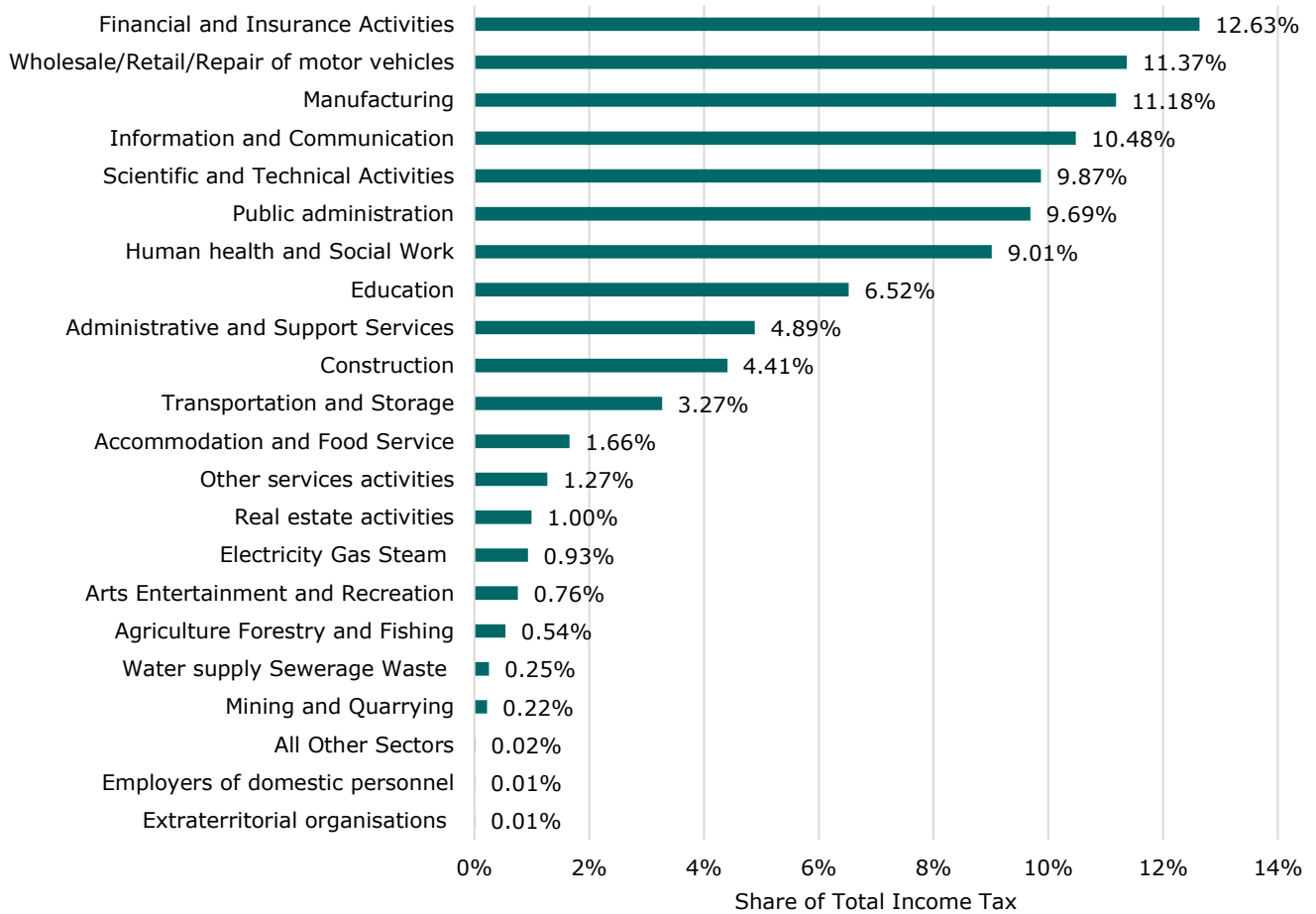| Sector	Monthly Pay (€)
Electricity Gas Steam	4,600
Mining and Quarrying	4,564
Financial and Insurance Activities	4,527
Information and Communication	4,106
Scientific and Technical Activities	3,584
Extraterritorial organisations	3,278
Manufacturing	3,000
Transportation and Storage	2,993
Administrative and Support Services	2,988
Real estate activities	2,855
Construction	2,706
Water supply Sewerage Waste	2,609
Public administration	2,607
Human health and Social Work	2,578
All Other Sectors	2,554
Wholesale/Retail/Repair of motor vehicles	2,553
Education	2,344
Other services activities	2,241
Arts Entertainment and Recreation	1,889
Agriculture Forestry and Fishing	1,812
Accommodation and Food Service	1,298
Employers of domestic personnel	1,084

Source: Revenue analysis.

Figure 24 gives the breakdown of the average monthly Income Tax paid by sector in 2019, with the *Financial & Insurance Activities*, *Wholesale/Retail/Repair of Motor vehicles* and the *Manufacturing* making up the 3 largest sectors from which Income Tax is paid.

Figure 25 gives the monthly breakdown of the top sectors with the highest aggregate Income Tax payments. This shows variations in Income Tax by month amongst the various sectors, for example it is clear that the spike in gross pay in March and December 2019 (Figure 7) can be largely attributed to employers in the *Financial & Insurance* activities sector.

Figure 24: Share of Average Monthly Income Tax Paid by Sector

Sector	Share
Financial and Insurance Activities	12.63%
Wholesale/Retail/Repair of motor vehicles	11.37%
Manufacturing	11.18%
Information and Communication	10.48%
Scientific and Technical Activities	9.87%
Public administration	9.69%
Human health and Social Work	9.01%
Education	6.52%
Administrative and Support Services	4.89%
Construction	4.41%
Transportation and Storage	3.27%
Accommodation and Food Service	1.66%
Other services activities	1.27%
Real estate activities	1.00%
Electricity Gas Steam	0.93%
Arts Entertainment and Recreation	0.76%
Agriculture Forestry and Fishing	0.54%
Water supply Sewerage Waste	0.25%
Mining and Quarrying	0.22%
All Other Sectors	0.02%
Employers of domestic personnel	0.01%
Extraterritorial organisations	0.01%

Share of Total Income Tax

Source: Revenue analysis.

Figure 25: Share of Income Tax by Sector by Month

Legend: Public administration ■ Manufacturing ■ Wholesale/Retail/Repair of motor vehicles ■ Financial and Insurance Activities
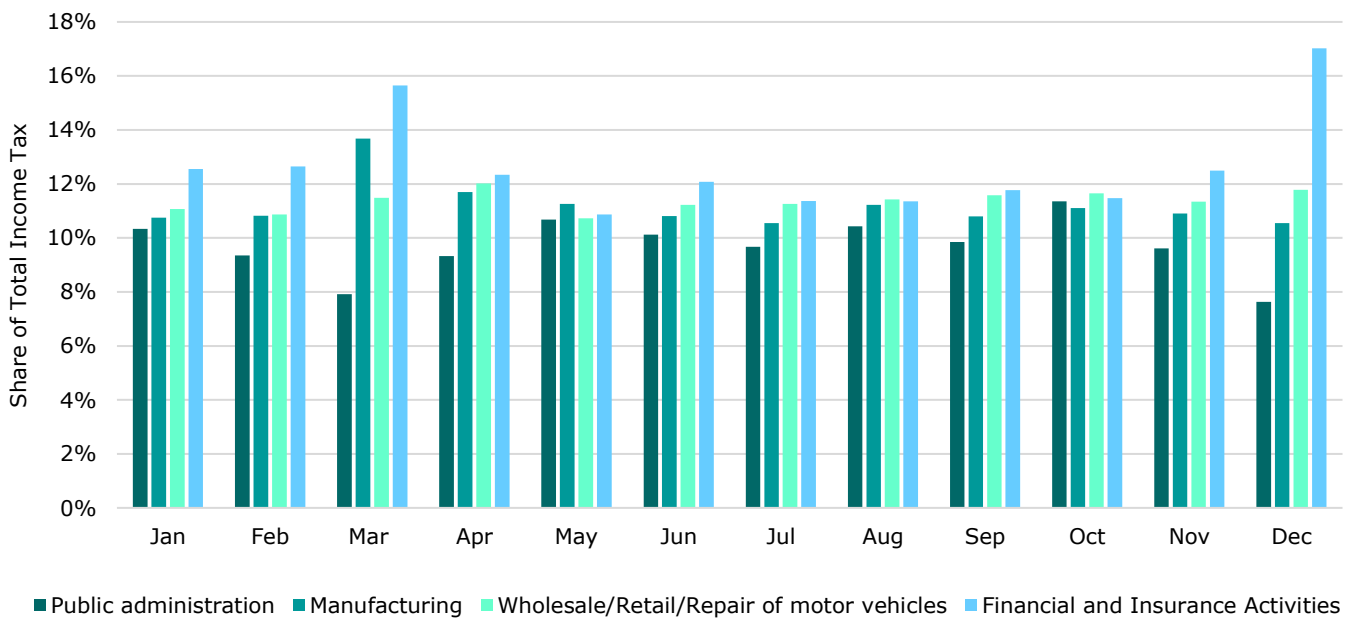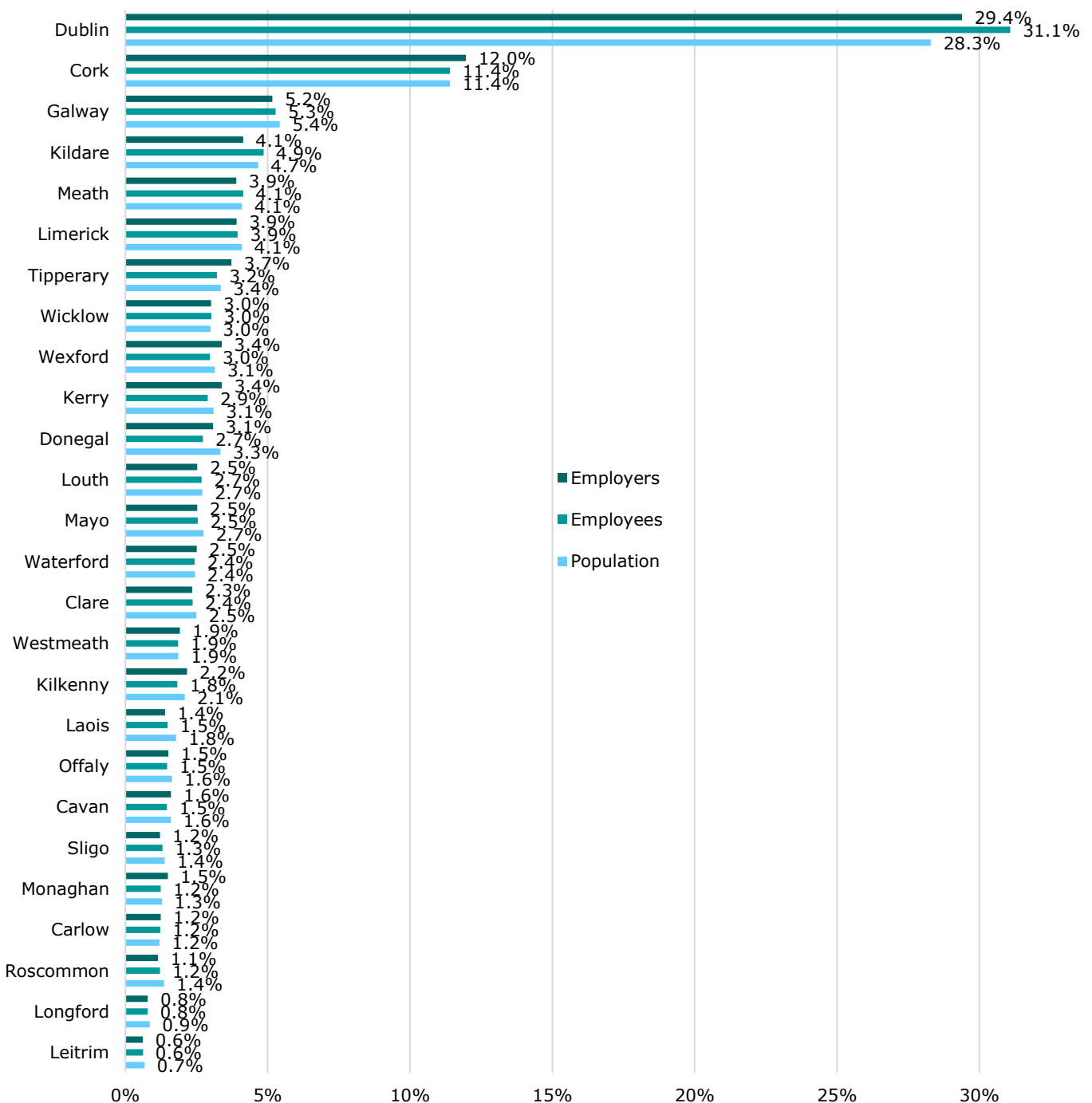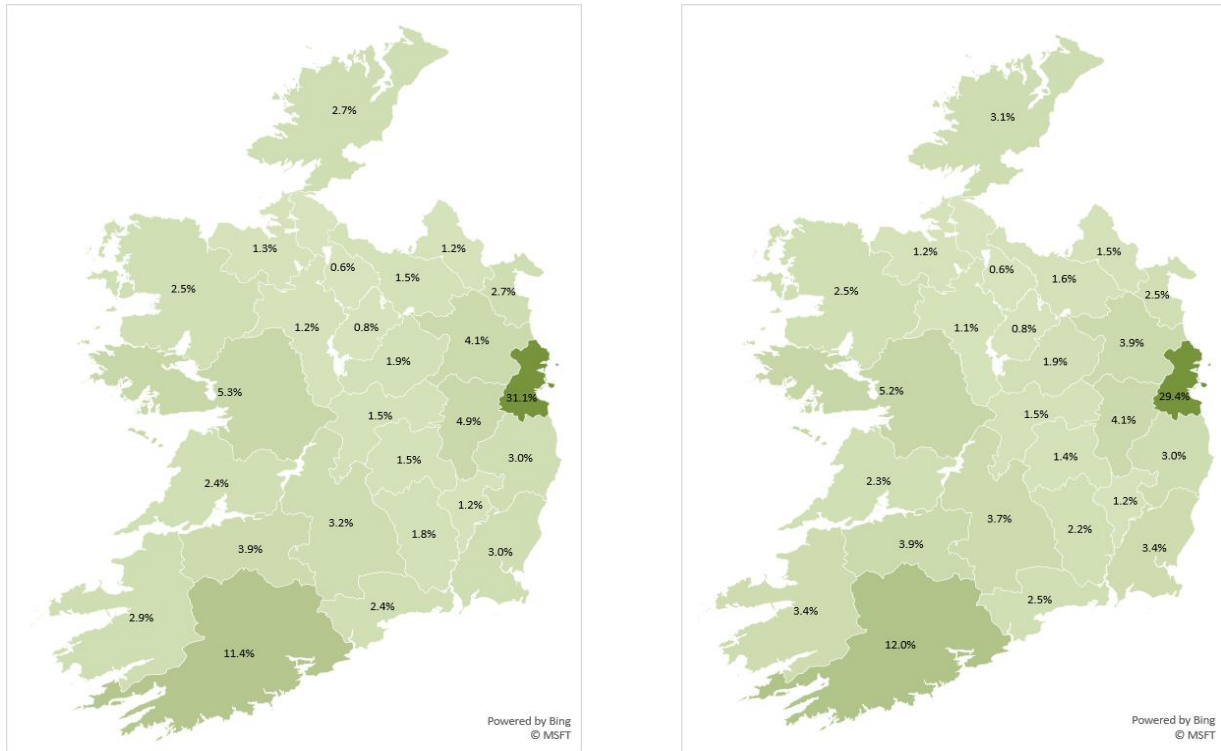
Source: Revenue analysis.

5.2 Location

Figure 26 sets out the share of the number of employers and employees, as well as the share of the population of the state, by county. Just under 30 per cent of employers, and just over 30 per cent of employees, are based in Dublin, with a further 12 per cent of both based in Cork. The breakdown of the share of employees by county is also closely aligned with the share of population of the state by county, showing that the share of population in employment in a given county is broadly consistent in the State. Figure 27 gives the county breakdown of the share of employees and employers in graphical form.

Figure 26: County Distribution of Employers and Employees

Source: Revenue analysis of Revenue and CSO data.

Figure 27: County Mapping of Employees and Employers
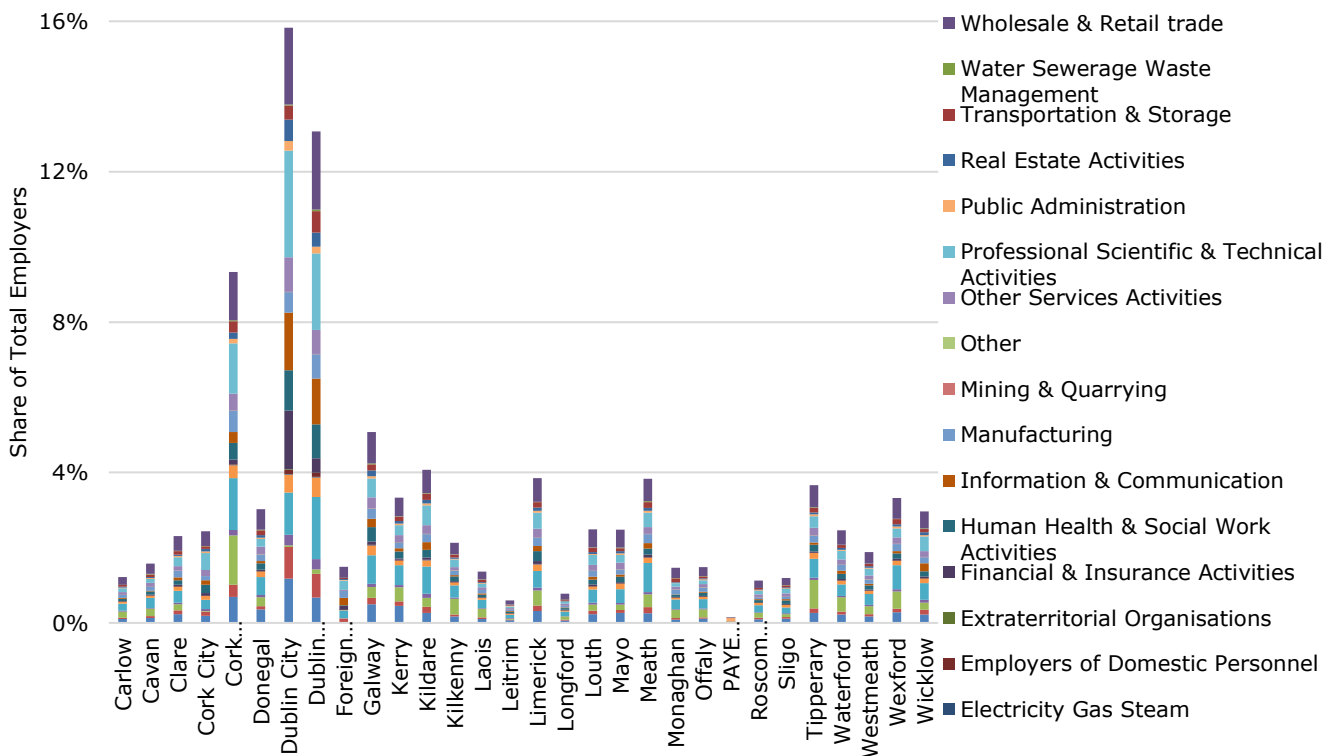
Employees

Employers

Source: Revenue analysis.

5.3   Sector and Location

Figure 28 breaks down the employers by location (county), and then within each location, the sectoral breakdown is provided.

Figure 28: Employers by County and Sector

Source: Revenue analysis.

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This section profiles proprietary directors as featured in PAYE Modernisation data, as well as looking at their pay and tax, including comparisons with non-director taxpayers.[16]

In 2019 there were an average of 77,100 directors reported to Revenue each month through the PAYE system. Of these, 60,200 are proprietary directors while 16,700 are non-proprietary directors, and 300 were both proprietary and non-proprietary directors. Figure 29 shows that while Directors make up 3 per cent of all employees on average, they feature on 29 per cent of employer returns on average each month, approximately 45,300 employers.

Figure 29: Director Frequency
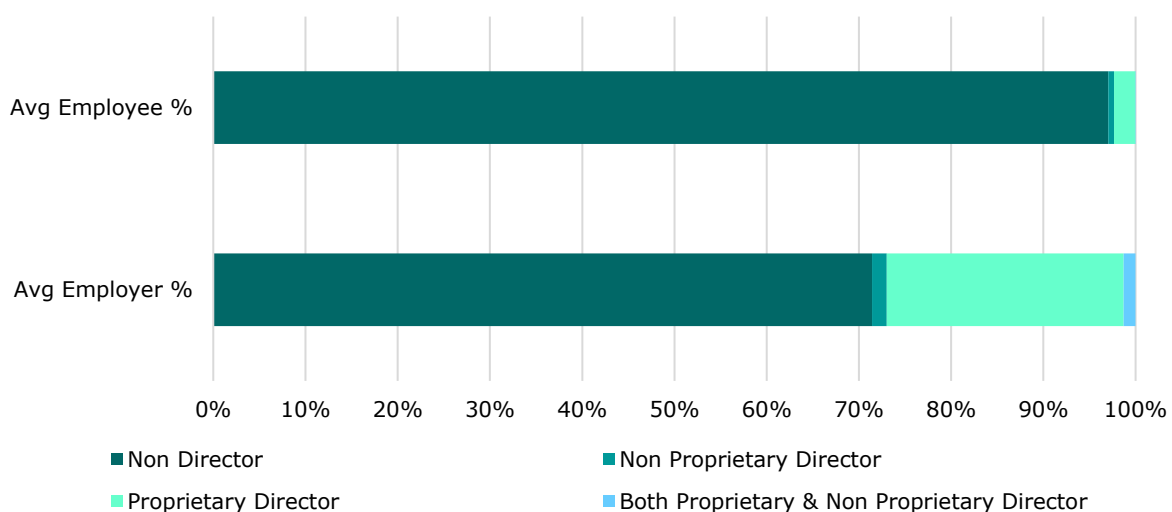
Source: Revenue analysis.

Figure 30 gives the age profile of directors. Directors are, in general, older than that of all non-director taxpayers. There are less directors in the 0-18, 19-25 and 26-35 age ranges compared to non-directors. There are also less directors in the over 75 age range compared to non-directors, the steeper decrease in the number of directors in this age group likely relates to the number of taxpayers in this age category in receipt of pension income, rather than employment income.

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[16] A proprietary director is a director who can control, either directly or indirectly, more than 15% of the share capital of a company. All proprietary directors are 'chargeable persons' and must file a self-assessment return. The PAYE system applies to both proprietary and non-proprietary directors as it does to any other employee.

Figure 30: Age Profile of Directors
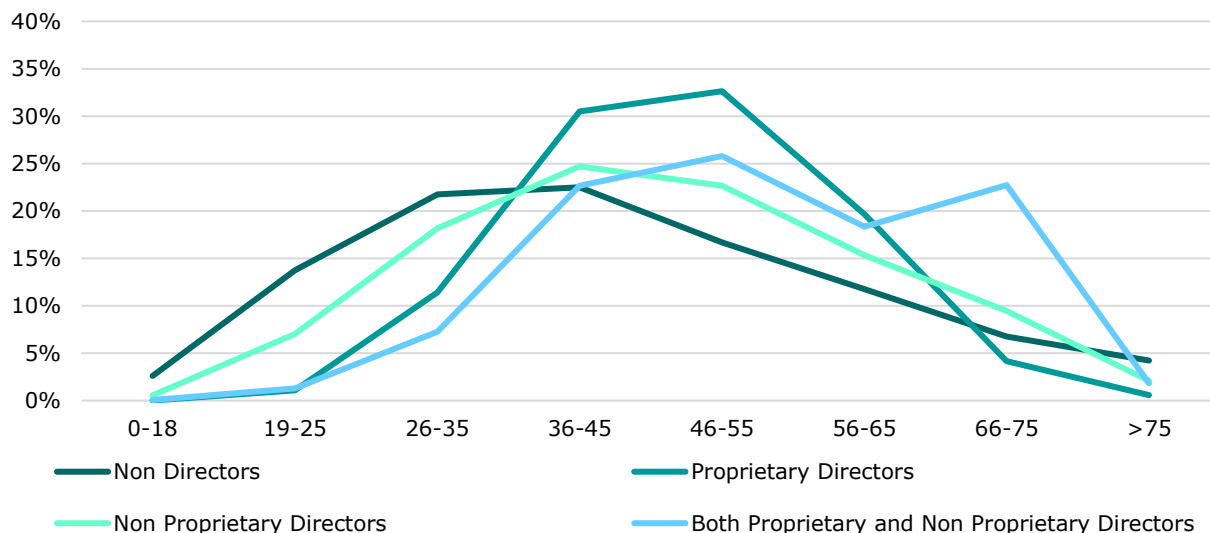
Source: Revenue analysis.

Figure 31 shows the breakdown of the share of gross pay, tax paid (Income Tax, USC and employee PRSI) and pension contributions (employee and employer) for each taxpayer type. The tax paid by directors is proportionally larger than other taxpayers when compared to their relative gross pay details, as is the level of pension contributions by non-proprietary directors. However, the level of employee pension contributions paid by proprietary directors, proportionally, is significantly lower than other taxpayer types, while the level of employer pension contributions paid to proprietary directors is proportionally larger than for other director types.

Figure 31: Pay, Tax and Pension Contributions by Taxpayer Type
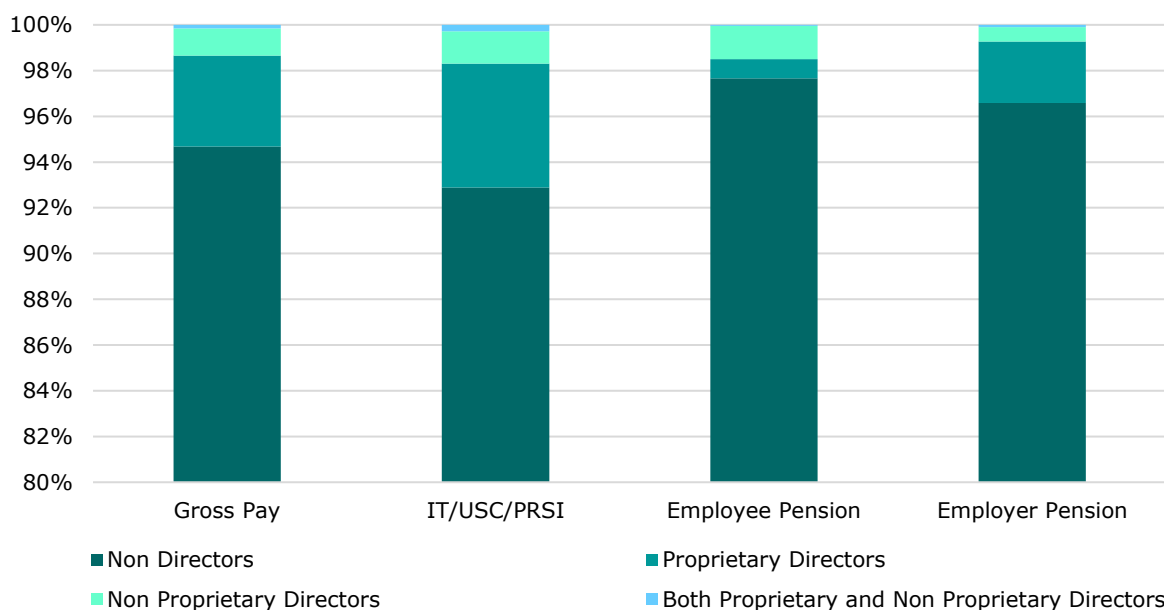
Source: Revenue analysis.

Table 10 sets out the pay and deductions of directors, broken down by director type. While directors only account for 3 per cent of taxpayers, they account for 5 per cent of gross pay and 7 per cent of tax (Income Tax, USC and employee PRSI).

Table 10: Breakdown of Pay and Deductions for Directors

Taxpayer Type	Gross Pay €m	Income Tax €m	USC €m	Employee PRSI €m	Employer PRSI €m	Employee Pension Contributions €m	Employer Pension Contributions €m
Proprietary Directors	3,929.0	941.5	171.1	148.2	53.7	21.3	53.0
Non Proprietary Directors	1,166.0	245.3	47.7	35.3	90.0	36.5	12.5
Both Proprietary and Non Proprietary Directors	158.5	49.7	9.6	5.0	4.4	1.1	2.0
Total	**5,253.5**	**1,236.5**	**228.5**	**188.4**	**148.2**	**58.9**	**67.5**

Source: Revenue analysis.

While there was an average of 77,100 directors per month, the total number of taxpayers who were recorded as a director at any point in 2019 was 99,000, accounting for 105,000 employments in which the taxpayer was a director, amongst 56,700 employers. Figure 32 gives a breakdown, by director type, of the Revenue division of their employer, for each employment. As shown, most directors are employed in companies managed by Revenue's Business Division.

Figure 32: Directors by Revenue Division
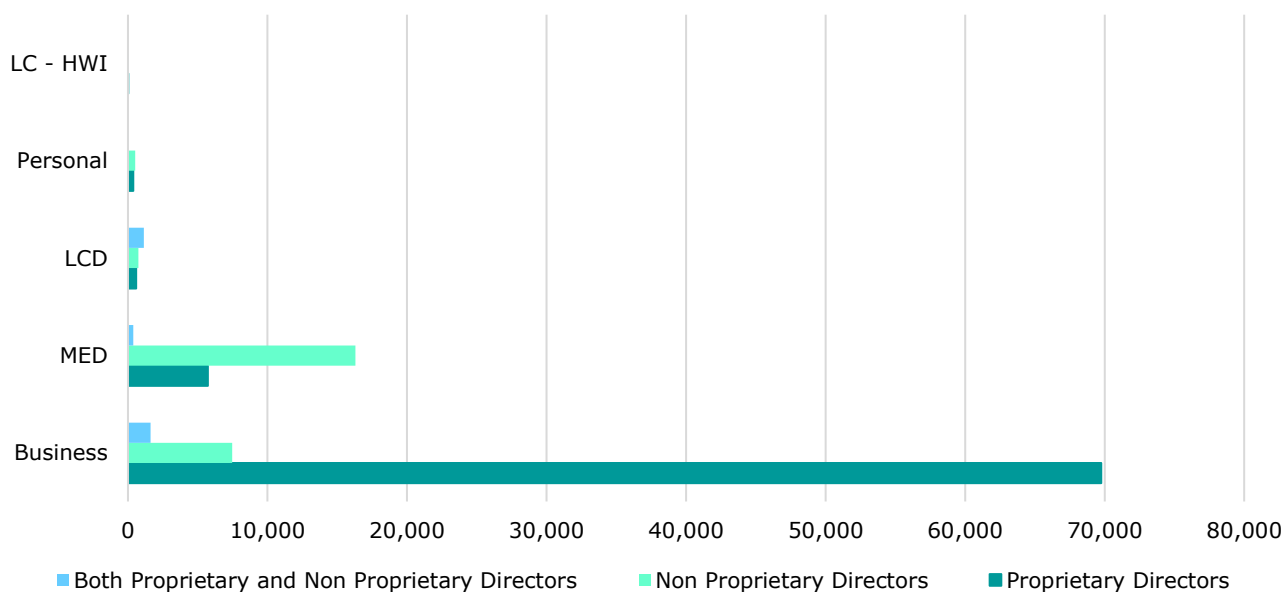
Source: Revenue analysis.

7   Conclusion

PAYE Modernisation, with real-time payroll reporting, has been operational for all employers in the State since 1 January 2019. Under the new system, employers are required to report their employees' pay and deductions in real-time to Revenue each time they operate payroll. Information is provided to Revenue at individual payslip level, and includes significant amounts of data on pay, tax, pensions and other topics for each employee.

This report focuses on examining the first twelve months' (for the year 2019) data collected through real-time reporting, to provide statistics and insights on incomes, tax paid and related topics. Characteristics of both employees and employers are reviewed. Gross pay and deductions are analysed. Important segments of taxpayers (pension recipients and contributors as well proprietary directors) are separately examined.

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