Ibec submission to the commission on public service pay

26 January 2017

Key findings

1. **Low inflation environment means little cost of living pressure –** When it comes to the drivers of pay demands it is clear that Government must address the underlying issues, such as housing and insurance costs where they arise. The overall cost of living environment is, however, at its most benign level in almost thirty years. In addition, only around 6% of workers in the total public s service live and rent in the high rent areas whilst also earning less than the €45,000 threshold which would mean average rent in those regions is more than 30% of gross earnings. In this context it is difficult to see how housing costs could justify across the board pay increases for public service workers

2. **Existing agreement is already outstripping private sector trends–** The cumulative existing pay increase for the average public service workers between January 2016 and January 2019 would be in the region of 9.4% an average increase of 3% per annum. Both last year and this the average public service worker will receive pay increases between 0.5 and 1.5 percentage points higher than their private sector counterpart.

3. **Existing agreement is generous in a historical context -** The scale of the current agreement already in place along with the low or negligible levels of inflation mean that the current pay agreements are the most generous (adjusted for inflation) in the last two decades. Adjusted for inflation real public pay will increase by 2% per annum on average between 2016 and 2018. In the years 2000 to 2008 that average amounted to only 0.6% per annum.

4. **Econometric analysis suggests that accounting for other characteristics there is still a public pay premium of around 12% -** Our models paint a pretty consistent picture. The annual pay differential between public dominated sectors and the private sector, adjusted for education, responsibilities, demographics and location is between 7% and 8%. On the other hand when these results are adjusted for hours worked the differential rises to between 11% and 12%. While the premium has fallen at all levels between 2009 and 2013 it remains strikingly high among workers in the bottom half of the wage distribution (those earning around €40,000 or less). Among workers at the top 10% the premium disappears and infact private sector workers on average earn more than their counterparts if hours worked are not adjusted for. This suggests that issues with retention, where they emerge as a result of domestic competition, only arise for those workers in higher level roles.

5. **New Eurostat data shows that Irish public service workers are still very well paid in a European context** - The public administration sector has the top pay in Europe across four of six relevant occupation categories and the highest overall. The average cost of living adjusted premia for Irish public service workers over their European colleagues is between 15% and 36% depending on the sector.

6. **While many Irish public service workers do now make significant pension contributions (If the PRD is included) contributions remain modest when compared to benefits.** The average employer contribution equivalent in the public service at 20.5% of gross pay is over 13.8 percentage points higher than for their private sector counterparts. This is not sustainable in the long run. A new analysis of public service pensions must be performed in light of falling market yields and difficulty financing pensions. The existing long-term projections found in the C&AG report (2009) are worrying. Current contributions, inclusive of the PRD, amount to around 70% of pension outgoings with the state in effect funding the remainder. Discounting the PRD that figure falls to only 29%. By 2058 those figures will stand at 50% and 18% respectively leaving an unsustainable bill for the State.

Key messages for the commission on public service pay

1. **The assessment of public service pay must be evidenced based –** It is in everyone's interest to have a coordinated approach to public service pay determination and the competing demands for resources. The economy has improved faster than envisaged, but new uncertainties have emerged; not least the risks that Brexit presents. In this context it is important that any pay increases, where they arise, are grounded in a substantial evidence base. Any review of pay must fully take into account the value of enhanced job security and pension entitlements in the public service, relative to the private sector.

2. **Wages comparisons must be against the private sector average rather than the top of the private sector -** Wages comparisons with the private sector must be made on the basis of average private sector pay rather than cherry picking the highest paying roles/sectors. Previous benchmarking analysis focused on the highest deciles of private sector pay dominated by the MNE sector. Quite simply this paints an unrealistic picture of the Irish economy, which is characterised by its dual nature, and will crowd out SMEs.

3. **Public service workers are currently getting a good deal –** At a standstill public service workers have an adjusted pay premium of somewhere around 7%. In addition, their pay increase in 2017 at 3.7% is outstripping private sector pay by 1.5 percentage points. Moving further will not only mean less services and higher taxes for other workers but it they will be difficult to unwind and will put the state in a higher risk fiscal position at a time of great uncertainty.

4. **Public pension provision must form part of the conversation –** No conversation on public services pay could possibly be complete without referencing pension disparities. The most recent (2009) estimates of the total accrued liability in respect of public service occupational pensions is now estimated at €98 billion. Given changes in market conditions since it is quite possible that this has increased to over €130 billion. Within a generation this will be unsustainable for the state. This while the notional employer contribution to today's public service pensions remains almost 14 percentage points higher than that of their private sector counterparts. In our view it is imperative that the PRD become a permanent contribution by public service workers toward their pensions and that this be held in a reserve by the state over time.

5. **Reform must be ongoing -** Reform fatigue has clearly taken hold; but the drive to improve public services should not begin and end in times of fiscal rectitude. Good business practice requires keeping an eye on how to improve, re-imagine and transform services in good times and bad. We need to challenge the traditional ways in which the public sector has operated and continually respond to the needs of service user. The net result must be more efficient and effective services, ultimately benefiting Irish citizens.

6. **Competitiveness gains in the public service must be maintained –**Irish public service wages are high by comparison to our international competitors. This has spillover effects on the private sector and increases costs in the provision of key services. Given the competitive and demographic pressures the economy faces it is crucial that the public sector is able to maximise service delivery within a given budget. This is crucial not only in terms of the cost of funding vital services but also in the efficiency of delivery to the final user.

7. **Ibec view on the way forward –** Given the factors above Ibec is of the view that no public service pay acceleration should take place in excess of that which has already been agreed. Public service workers have an existing pay and pension's premium and have significant pay increases under the existing agreement. We agree that cuts to public pay should be unwound over time but this cannot be completed in a short space of time. It must be phased over a number of years to avoid crowding out the private sector, undermining the public finances and depleting scarce resources for investment and service delivery.

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1. Introduction

Ibec welcomes the opportunity to input to the Commission on Public Service Pay. Moves by government to bring forward the terms of the Lansdowne Road Agreement are understandable in the context of better than expected economic performance and the importance of maintaining industrial peace and a collective approach to pay in the public service. However, we must caution that pay trends must reflect what is affordable, given the competing demand for resources.

It is in everyone's interest to have a coordinated approach to public service pay determination and the competing demands for resources. The economy has improved faster than envisaged, but new uncertainties have emerged; not least the risks that Brexit presents. Any review of pay must fully take into account the value of enhanced job security and pension entitlements in the public service, relative to the private sector.

A new arrangement must also reflect the needs of business and the wider economy, not just public service workers, and must include taxation reform and new investment in infrastructure and public services. Government must address the underlying issues driving pay demands, such as housing and childcare costs, rather than using the blunt and expensive instrument of accelerated compensation to offset very specific cost of living expenses. At a headline level, there is currently no inflation in the economy. Targeting specific cost of living factors at source is the best way to protect competitiveness.

2. Methodology for pay comparisons

The Public Sector Pay Commission is to provide analysis on pay levels for staff groupings across the public sector; compare public service and private sector pay rates; and assess public sector pay rates in Ireland with international equivalents. It is important that we get the methodology for these three over-arching areas right. The methodology used should include but not be limited to the following:

- Pay level assessments must address issues such as grade, function, location, length of service/experience, specialist skills etc.

- Analysis of private sector pay rates must reflect the economy as a whole with all business types and geographically spread across the country.

- Wages comparisons with the private sector must be made on the basis of average private sector pay rather than cherry picking the highest paying roles/sectors. Previous benchmarking analysis focused on the highest deciles of private sector pay dominated by the MNE sector. Quite simply this paints an unrealistic picture the Irish economy which is characterised by its dual nature and will crowd SMEs

- Specific sectoral approaches (e.g. health, education etc) should be adopted and avoid a one-size-fits-all approach to public service pay policy.

- The broadest possible comparators with the private sector should be used and insulate decisions from short-term spikes in private sector pay.

- Conduct a comprehensive qualification of all pay and non-pay benefits within the public service (e.g. total pension package, full leave entitlement, working hours, job security, incidence and value of variable pay, car parking etc).

- Account for international trends, approaches and methodologies in addressing public sector pay policies.

3. Comparisons

Knowing Ireland's constrained fiscal position it is clear that public service pay demands can only be resolved subject to a trade-off involving service volumes and capital spending. In recognition of the pressures on services and capital spending we begin from the point of view that public service wage growth could only be justified where there are particular well evidenced staffing issues due to a disparity with the private sector or with similar roles internationally.

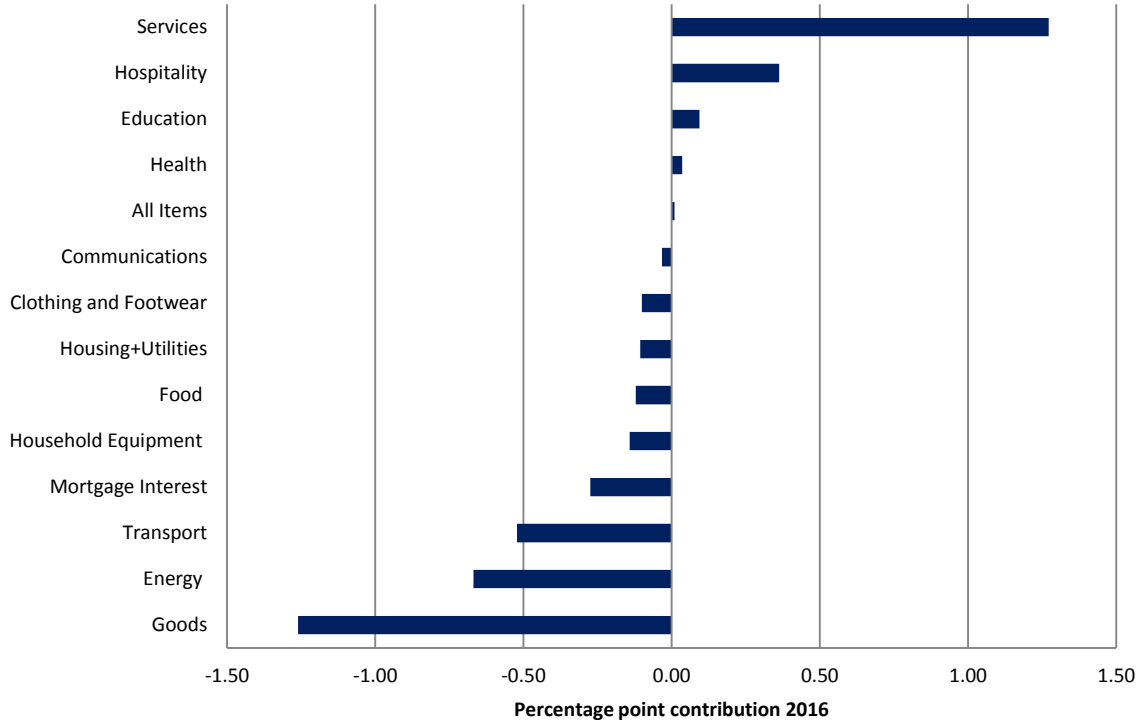
In the following section we look firstly at the drivers of cost of living growth, the overall level of it and its impact on public service cohorts. We then consider public service pay in the context of growth and level comparisons with the private sector as well as through international comparison.

3.1 Drivers of pay pressure

3.1.1 Inflation outlook

So far this year there has been no inflation as average prices are at exactly the same level they were at last year. Infact the overall basket of goods and services as measured by the CSO remains 0.8% below its pre-crisis peak (2008). There are, however, two differing trends underlying this. Services caused inflation to rise by 1.3% but as the price of goods fell by the exact same amount, the two netted each other out. As some prices are rising while others are falling, certain consumers may feel that prices are rising depending on their household spending. There is, however, no price inflation for the average household. This weak inflationary environment is expected to continue next year. Ibec forecasts inflation of 0.6% in 2017. While oil prices may make a slight recovery due to the new OPEC agreement to cut output, the weak sterling will put downward pressure on import prices which will keep overall inflation low.

Figure 1: Contribution to inflation



Price perceptions

Since 2005 respondents to the European Commission's Eurobarometer survey have been asked for the biggest issues facing the country and their household across a number of categories such as unemployment, the economy, health, housing and the cost of living. In 2005 35% of respondents saw the cost of living or price inflation as one of the top two issues facing the country. This has fallen to less than 14% in 2016. On the other hand health and housing have risen from 8.6% and 2.5% respectively in 2012 to 37.3% and 44.9% today. When it comes to the drivers of pay demands it is clear that Government must address the underlying issues, such as housing and insurance costs.

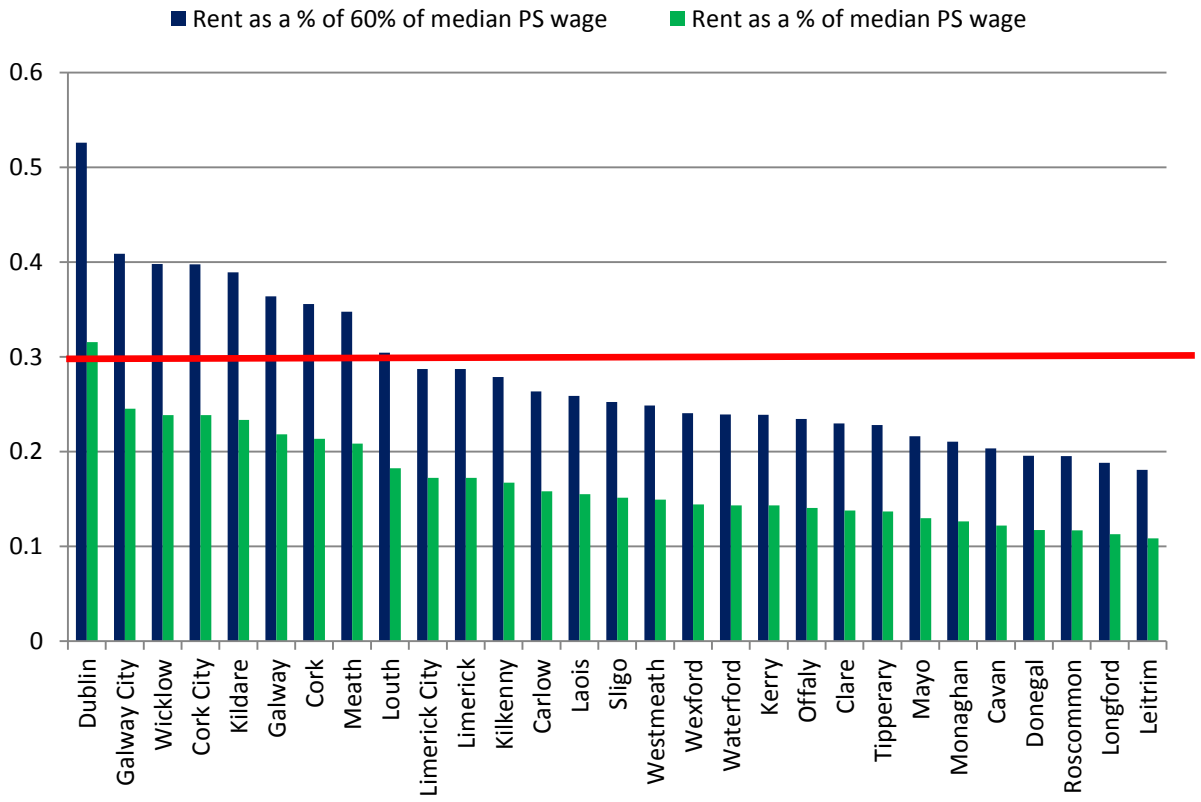
3.1.2 Housing costs

Public commentary has suggested that issues around the cost of rental are a particular issue for public service workers. From the outset it is worth re-stating that public service workers are not alone in rental challenges and that targeting specific cost of living factors at source (i.e. through public policy intervention) is the best way to protect competitiveness and public services. Indeed, given limited supply it is likely that using income increases or supports to address difficulties in rent affordability in the public service would increase prices for both public service and private sector workers pushing renters from the private sector out of the market.

It is still worth examining the claim that rental prices are a major driver of the pay needs of public service workers. Average pay for public service workers lies around €51,389 (DPER databank total pay divided by work numbers) while figures from SILC 2013 suggest mean pay for full-time public service workers of around €48,000. Taking the Eurostat definition of 'relative low pay' (60% of median earnings) as a benchmark, a relatively low paid civil

servant would earn somewhere around €29,838. Comparing these figures to the PRTB average rent report it is clear that only in Dublin are rents above the oft-used 30% of gross earnings affordability metric for the median public service worker. Even for relatively low paid PS workers rent only surpasses earnings in the Greater Dublin Area (GDA), Cork city and Galway city.

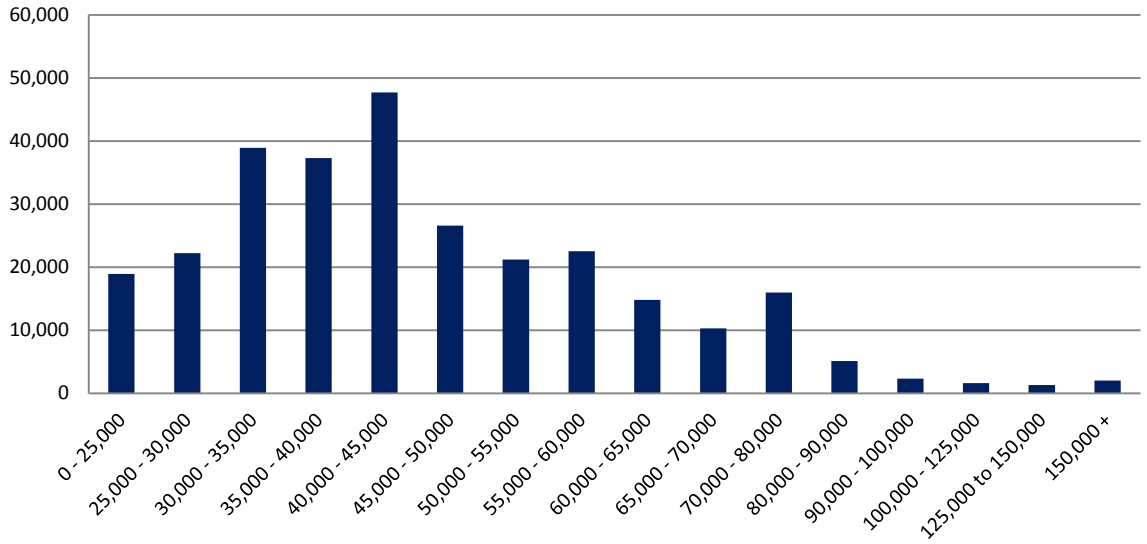
Figure 2: Housing costs and public service wages



The question then becomes what proportion of public service workers live and rent in those three areas. Unfortunately detailed country breakdowns of the residence of public service workers are not available. We can, however, make some informed observations using published Census 2011 data. We use three broad industrial groups (Education, Health and Social Care and Public administration) as an indicator for public service employment. The figures do involve some private sector workers but geographically their spread should not be particularly different.

Census 2011 figures suggest around 43% of the employees in these three sectors live in the areas above the rental affordability threshold. However, only 25% of the population in these areas lives in private rental accommodation. If public service employees broadly conform the tenure trends seen in the overall population then only 10% or so of public service workers live and rent in high rent zones. Although it is not publicly available it should be possible for the CSO to produce an absolutely accurate number on this for the commission if they so wish.

Figure 3: Distribution of public service workers by pay grade



Within this 10% cohort of public service workers it again is only those for whom rent is more than 30% of earnings that rental costs should reasonably put pressure on pay demands. There again is no figure on the distribution on the average public service pay by region but if the distribution is uniform across the country then only around 6% of workers in the total public service live and rent in the high rent areas whilst also earning less than the €45,000 threshold which would mean average rent in those regions is more than 30% of gross earnings. In this context it is difficult to see how housing costs could justify across the board pay increases for public service workers.

3.2 Public and private pay – levels and growth

3.2.1 Developments in public and private pay

Private pay

There are a number of sources of data on private sector pay including industry surveys and the CSOs Earnings Hours and Employment Costs Survey (EHECS). Here we use our own HR update survey which is the most comprehensive private survey of pay intentions in the Irish economy. The advantage of this approach is that it looks at the distribution of enterprise level pay awards whereas much of the underlying change in average wages as shown by the EHECS can be driven by compositional shifts, such as hiring younger workers during an upturn or last-in-first out resulting in rising measured wages during a downturn. In addition the HR update survey has the advantage of a forward looking element which is useful in discussing public service pay trends over the coming years.

During October Ibec completed a HR survey of 392 member companies on pay trends for 2016 and 2017. Our survey of 2016 pay rates indicates that pay awards remained relatively modest with a median increase of 2.2%. The proportion of respondents that increased pay in 2016 is 64%. As expected, there is some variation across sectors in terms of the delivery of pay increases. The high-tech manufacturing sector is more likely to have provided pay increases in 2016 than the traditional manufacturing sector. The services sector is the least likely to have provided pay increases in 2016, with just over half the respondents from this sector providing increases.

For 2017, 71% of companies are expecting to give pay increases and the median increase where one is expected is 2%. Some 29% of respondents expect basic pay rates to stay the same in 2017. However, some sectors of the economy are performing better than others. Firms in high-tech manufacturing were most likely to award a pay increase (88%) while services firms were least likely (63%). Pay trends also vary depending on the size of the firm. Over 80% of firms employing more than 250 employees were planning on increasing pay. This compares with only 61% of firms with less than 50 employees.

Public pay

Of the €3.7 billion reduction in the exchequer pay bill since its peak FEMPI accounted for €2.2 billion or 59%. This was made up of €1.21 billion in pay reductions, €900 million by the Pension Levy and €135 million by the Public Service Pension Reduction (PSPR). The balance of the savings is attributable to reductions in numbers, and to productivity measures underpinned by Public Service Agreements.

Unwinding this at a cost of €2.2 billion per annum is not realistic over one budget. Provisions of the Lansdowne road agreement (LRA) mean that public service workers received €267 million in pre-increment pay increases in 2016 or just under €900 per worker. The remainder of the pay agreements under the LRA are increases of €290m in 2017 and €287m in 2018. On top of this €120 million has now been agreed for acceleration of pay increases in 2017.

Figures from the DPER databank suggest average public service pay (total wage bill divided by numbers) is in the region of €51,389. As such the increases in 2016 under Lansdowne

road were equivalent to a 1.7% increase in pay levels in the public service (before the application of increments).

In contrast to the vast majority of private sector workers most public service workers also have set pay scales written into their contract. This in effect means a large proportion of public service workers receive annual pay increases in excess of those agreed under Lansdowne road and other pay agreements. The following are some examples of increments paid to different types of public service workers

- The average annual increment over 25 years for a secondary teacher is 3%. The top of the scale is reached after 25 years.
- The average annual increment for a Clerical Officer is 3.6%. The top of the pay scale is reached after 16 years.
- The average annual increment for an Assistant Principal is 3%. The top of the pay scale is reached at 12 years.

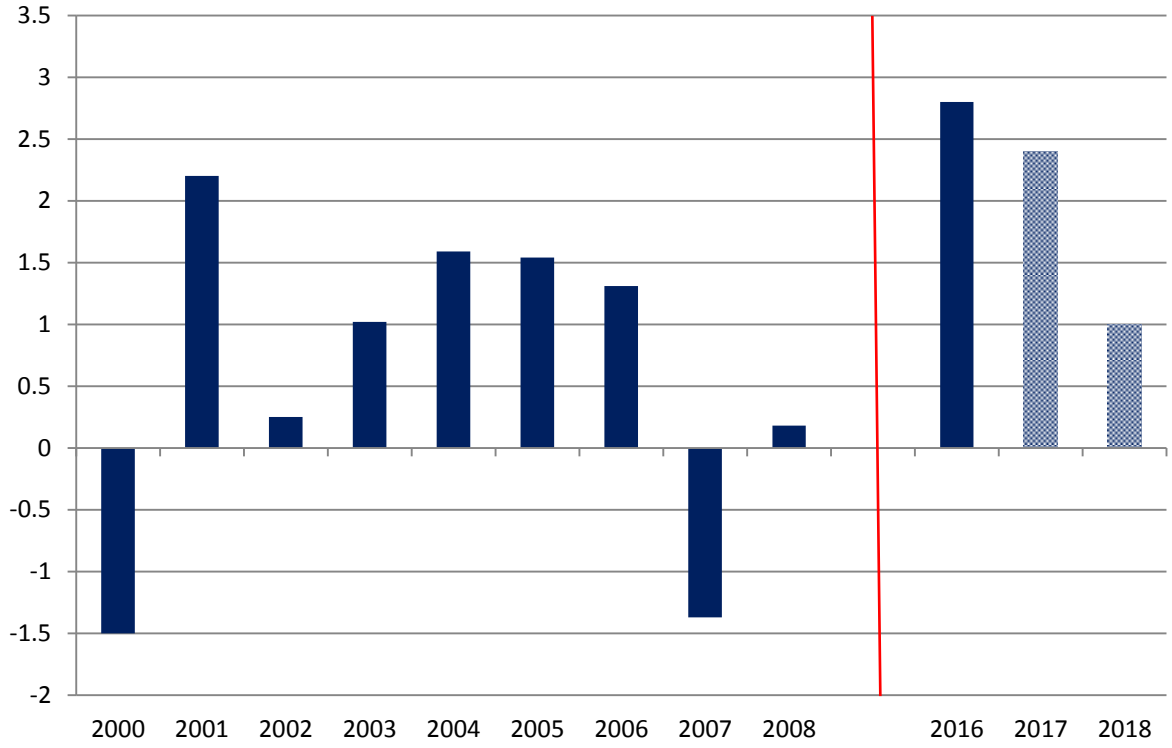
Previous replies to PQs suggest that there is around €150 million a year paid in increments across the public service. Adding this to the existing €290 million budgeted for 2017 under Lansdowne road and the €120 million earmarked for pay acceleration means the average public servant will receive pay increases totalling around a 3.7% this year. This will be followed by 2.8% in 2018. The cumulative existing pay increase for the average public service workers between the January 2016 and the January 2019 would be in the region of 9.4%, an average increase of 3% per annum.

Table 1: Public service pay estimates 2016 to 2018

	2016	2017	2018
LRA (€mn)	267	290	287
Garda pay agreement (€mn)	0	50	50
Increment cost, (€mn) Est	150	150	150
Pay acceleration	0	120	0
Total	417	610	487
Employment (Assuming 2% headcount growth avg over past 3 years)	304,000	310,080	316,282
Avg pay increase (€)	1,372	1,967	1,540
Avg wage (€)	51,389	52,761	54,728
Avg wage increase, %	2.7	3.7	2.8

Table 1 contains the working for our estimates of average public service pay increases between 2016 and 2018. It is worth nothing that both last year and this the average public service worker will receive pay increase between 0.5 and 1.5 percentage points higher than their private sector counterpart.

Figure 4: Public pay agreement increases by agreement year in real terms (adjusted for inflation)



It is important to note that the scale of the current agreement already in place along with the low or negligible levels of inflation will result in the largest real (inflation adjusted) public pay increases to take place under normal economic circumstances in the last two decades between 2016 to 2018. Adjusted for Department of Finance inflation forecasts, which are likely to be on the high side, real public pay will increase by 2% per annum on average between 2016 and 2018. In the years 2000 to 2008 that average amounted to only 0.6% per annum

3.2.2 Public and private pay levels

Raw comparisons of public and private pay which are based on published aggregate data may be misleading for a variety of reasons. In particular they fail to account for differences in education levels, experience and responsibilities. Using micro-data we can account for these differences and arrive at estimates of the adjusted public pay premium. The most comprehensive study of recent years looking at the public service pay gap was done by the CSO using data from the 2009 and 2010 National Employment Survey.

The main findings of this research were that there is a significant pay gap. They also found that the gap was higher at the lower end of the earnings distribution- those in the bottom 10% of earners were paid 27.6% more than their private sector equivalents, while those in the top 8% were earning 0.3% less. In the following section we extend the evidence base available to the commission by updating this analysis using data from the Survey on Income and Living conditions (2013).

Data

The data used in this analysis is taken from the Survey on Income and Living Conditions (SILC). This is a household survey covering a broad range of issues in relation to income and living conditions. It is the official source of data on household and individual income and also provides a number of key national poverty indicators, such as the 'at risk of poverty' rate, the consistent poverty rate and rates of enforced deprivation[1].

SILC 2013 contains data on 12,663 individuals taken from a representative sample of the population. In order to create a comparable sample of public and private workers we limit our analysis to adult employees, working in the public and private sector for 30 hours a week or over (our proxy for full time status). This leaves us with a sample of 1,997 adults. The summary statistics for this group are presented below.

[1] For more info please see http://www.cso.ie/en/media/csoie/eusilc/documents/Standard_Report_-_SILC_2014_National_Report.pdf

Table 2 displays a summary of the variables and measures utilised in this analysis.

Table 2 : Measures of variables used

Variable	Measure
Public service employment status	Binary measure of employment where 1 = employed in either NACE sectors L (Public administration and defence), M (Education) or N (Health)
Demographic Characteristics	
Gender	Binary indicator 1=Male 0= Female
Age	Age group of the person
Education	Education level of the individual
Occupation	ISCO code occupation
Location	
Urban	Binary indicator of whether the individuals resides in an urban or rural area
Employment	
Managerial positon	Whether the persons role involves supervisory responsibilities or not
Size of the local unit	Categorical variable indication the number of persons employed at that persons place of work

When it comes to our main variable of interest, the average wage of workers in our sample is €48,816 with the median €40,545. 31% of the sample work in the public service while 38% have a third level degree. 66% are in an urban location, 56% are male and 39% have some supervisory responsibility in their work. Most work in relatively small local units with 81.3% of the sample working in a local unit with less than 50 employees and only 18.8% work in what could be considered a medium sized or large unit.

Table 3: Summary statistics of sample

Variable	Mean
Wage	48,816
Public service employment status	31%
Demographic Characteristics	
Gender (Male)	56%
Education (3rd level)	61%
Education degree	38%
Location	
Urban	66%
Employment	
Managerial positon	39%
Size of the local unit:	
Less than 11 people	8%
11-19 persons	14.8%
20-49 people	58.4%
50 persons or more	18.8%

Econometric analysis

In order to gauge the public service pay differential and its impact along pay grades we employed a two part strategy. In our first step we run an OLS regression to assess the public/private pay differential. When estimating this model we control for levels of education, socio-economic characteristics, job responsibilities and other personal characteristics such as age and gender.

A simple representation of our baseline model is presented in eqn. (1):

$$\mathrm{Y_i} = \propto_0 + \beta \mathrm{PS_i} + \vartheta \mathrm{E_i} + \sigma \mathrm{Z_i} + \varepsilon_\mathrm{i} \quad \text{(Equation 1)}$$

Where Y is the income from employment of individual *i*, PSi is a measure of individual *i's* is a public service worker or not, E_i represents that persons education levels, Zi is a vector of control variables including demographics and jobs responsibilities. ε is the error term.

Results

This section presents the results of our analysis. Table 4 shows the results of 4 models:

- Model 1 looks at the annual public pay differential without adjusting for the size of the local unit
- Model 2 looks at the hourly public pay differential without adjusting for the size of the local unit
- Model 3 looks at the annual public pay differential while adjusting for the size of the local unit
- Model 4 looks at the hourly public pay differential while adjusting for the size of the local unit

Table 4: OLS estimation of the full sample

Variable	Model 1	Model 2	Model 3	Model 4
Gender : Male	.22*** (.02)	.15*** (.02)	.21*** (.02)	.15*** (.02)
Urban	.05*** (.01)	.05** (.02)	.04** (.02)	.04** (.02)
Education (Some 3rd level)	.16 *** (.02)	.16 *** (.02)	.17 *** (.02)	.17 *** (.02)
Education (Degree)	.37 *** (.02)	.35 *** (.02)	.36 *** (.03)	.34 *** (.02)
Age 25 - 49	.46 *** (.05)	.45 *** (.05)	.45 *** (.05)	.43 *** (.05)
Age 50 -65	.64*** (.05)	.62*** (.05)	.63*** (.05)	.61*** (.05)
Age 65 +	.62 *** (.15)	.63 *** (.15)	.63 *** (.15)	.65 *** (.14)
Occupation (Manager or administrator)	.29 *** (.04)	.23 *** (.03)	.30 *** (.03)	.23 *** (.03)
Occupation (Professional)	.37 *** (.02)	.22 *** (.03)	.21 *** (.02)	.21 *** (.02)
Managerial responsibility	.19*** (.02)	.15*** (.02)	.18*** (.02)	.15*** (.02)
Public service worker	.08 *** (.02)	.12 *** (.02)	.07 *** (.02)	.11*** (.02)
Size of the local unit: 11-19	. 	. 	.00 (.04)	.02 (.04)
Size of the local unit: 20-49	. 	. 	.07 ** (.03)	.08 ** (.03)
Size of the local unit: >50	. 	. 	.22 *** (.02)	.21 *** (.02)
Obs	1,997	1,997	1,997	1,997
Prob>Chi2	0.000	0.000	0.000	0.000
R2	0.39	0.37	0.42	0.40

All four models paint a pretty consistent picture. The annual pay differential between public dominated sectors and the private sector, adjusted for education, responsibilities, demographics and location is between 7% and 8%. On the other hand when these results are adjusted for hours worked the differential rises to between 11% and 12% on average.

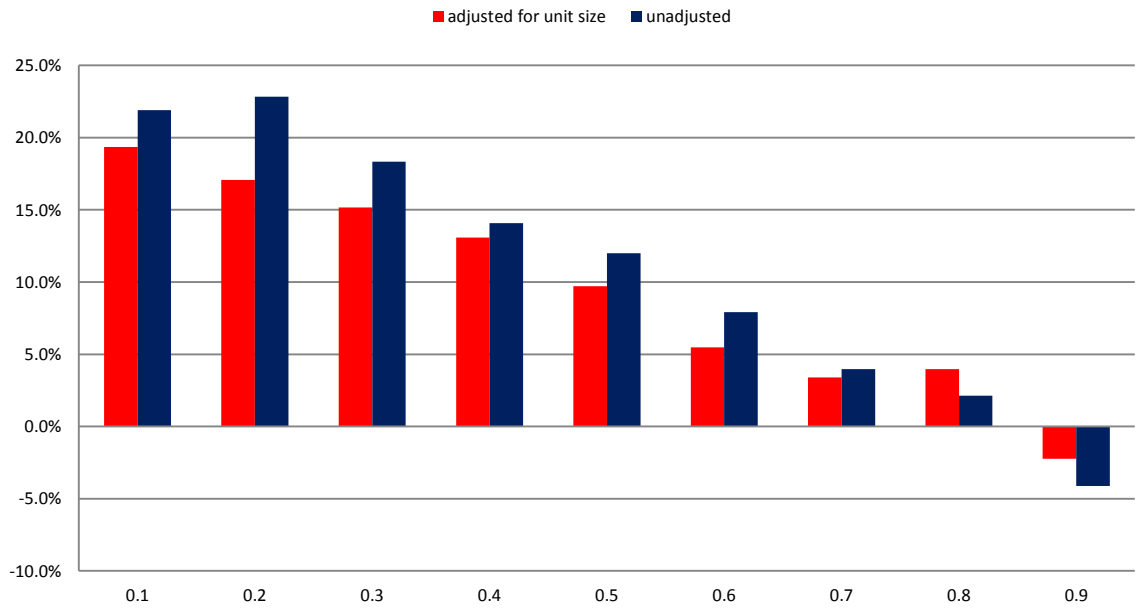
The standard errors on these estimates are small signifying that there is a great degree of accuracy to the results. Whilst our data is not likely to be absolutely accurate due to a minority of private sector workers in health and education sectors the results are likely to be accurate to reality. If there is some bias in our estimates it is likely to be downward given that average private pay in those sectors tends to be lower than its public equivalent despite most workers being tied to similar wage scales.

Given the data we used is the latest available to us (2013) there is likely to have been some movement since. The relative growth in average hourly private sector pay ahead of public service pay over the intervening period as reported by EHECS would suggest that a 12% gap in hourly wages between public and private in 2013 could have been closed to around 7% by the end of 2016. This, however, is conditional on the profile of the other variables at play remaining the same. This gap is set to widen again over the coming years. While there is some level of uncertainty our estimates provide the most accurate guide available. More timely data should be a priority for the Commission.

In our second step we undertake a decile regression of the same specification. The OLS method estimates the conditional mean public service pay gap adjusted for control variables such as education and demographics. The decile regression performs the same process but additionally estimates the conditional public service pay gap at different deciles of earnings. In previous analysis based on 2009 data the CSO used the same method to estimates that those in the bottom 10% of earners were paid 27.6% more than their private sector equivalents, while those in the top 8% were earning 0.3% less.

Our figures show a similar pattern although at different levels. Adjusted for the size of their local unit our estimates suggest a public pay premium of 19.4% amongst the bottom 10% of workers falling to 4% by the 8th decile. The top 10% of workers in the public service, however, earn 2.2% less than their private sector counterparts. Putting unit size aside the same figures are 21.9% in the bottom decile 2.1% in the 8th decile and -4.1% in for the top 10% of public service workers.

Figure 5: Public pay premium by decile (decile regression)



Similar to previous CSO work this suggests a public service premium of quite a large scale (more than 10%) for those earning less than €40,000. It also suggests a private sector premium emerging for those in the top decile of the income distribution for full-time workers or just above €80,000.When adjusted by reported hours worked however, this premium at the top disappears somewhat with a premium of 3% for public service workers in the top decile once working time is taken into account.

Table 5: Public pay differential Quantile regression different specifications

	Bottom	2	3	4	5	6	7	8	Top
Annual adjusted for unit size	19.4%	17.1%	15.2%	13.1%	9.7%	5.5%	3.4%	4.0%	-2.2%
Hourly adjusted for unit size	17.3%	20.6%	18.9%	15.6%	13.1%	10.6%	7.8%	4.3%	3.7%
Annual unadjusted	21.9%	22.8%	18.3%	14.1%	12.0%	7.9%	4.0%	2.1%	-4.1%
Hourly unadjusted	21.0%	23.6%	22.2%	17.4%	15.4%	10.9%	7.6%	5.1%	3.0%

The takeaway of our analysis in many ways is quite similar to that by both the ESRI and the CSO. A public service pay premium exists which is unexplained by education, responsibility, occupation or any other demographic characteristic. This premium stood at about 12% per hour in 2013 and is likely to have fallen marginally toward 7% in the intervening period for two average comparable workers.

There is also a striking similarity in findings between our own research and that of the CSO. Our work suggests that while the premium has fallen at all levels between 2009 and 2013 it remains strikingly high among workers in the bottom half of the wage distribution (those earning around €40,000 or less). Among workers at the top 10% the premium disappears

and infact private sector workers on average earn more than their counterparts if hours worked are not adjusted for. This suggests that issues with retention, where they emerge as a result of domestic competition, arising only for those workers in higher end managerial roles.

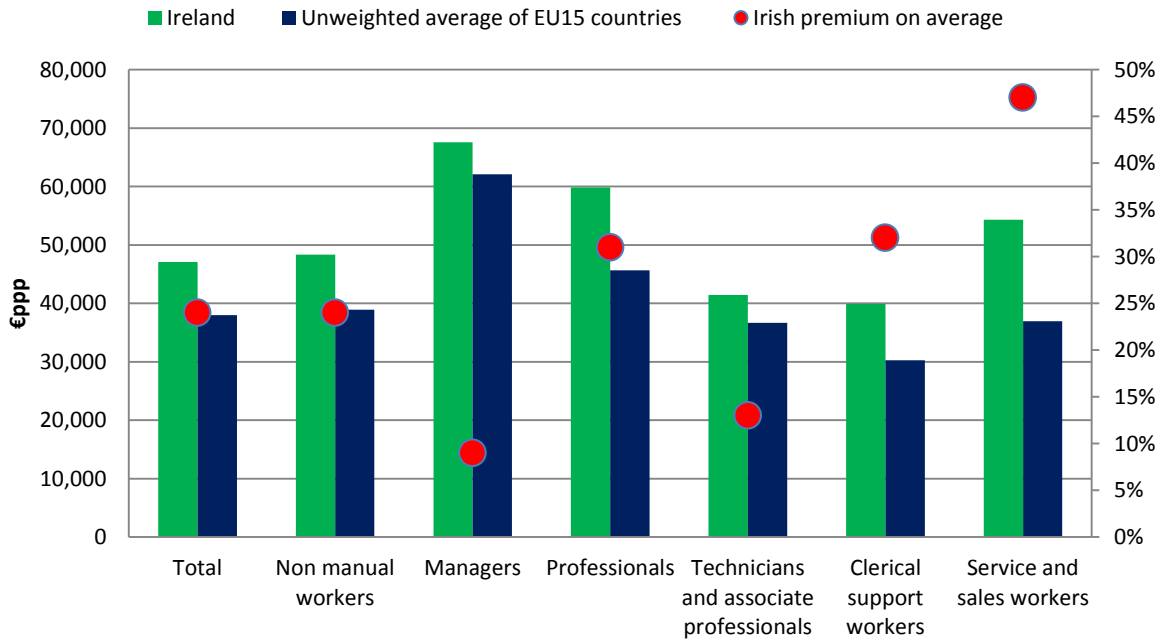
3.3 International comparisons of public service pay

The most contemporary source of data providing comparisons of pay in public service professions across Europe is Eurostat's 2014 structure of earnings survey. This survey covers average gross earnings across all sectors of the economy and is also delineated by ISCO code covering separate occupations within those sectors. As such it is possible to compare the pay of Irish public service workers by sector and occupation in a European context.

In this section we provide a collection of data from that survey putting pay in the Irish public dominated sectors in context. All figures are reported in purchasing power parities to adjust for differences in the cost of living between countries. The full data is available in Appendix 1.

The public administration sector has the top pay in Europe across four of six relevant occupation categories and the highest overall. The average cost of living adjusted premia for Irish public administration workers over their European colleagues is 24%. Premia are smallest among managers (9%) whilst they are highest amongst clerical (32%) and services and sales workers (47%).

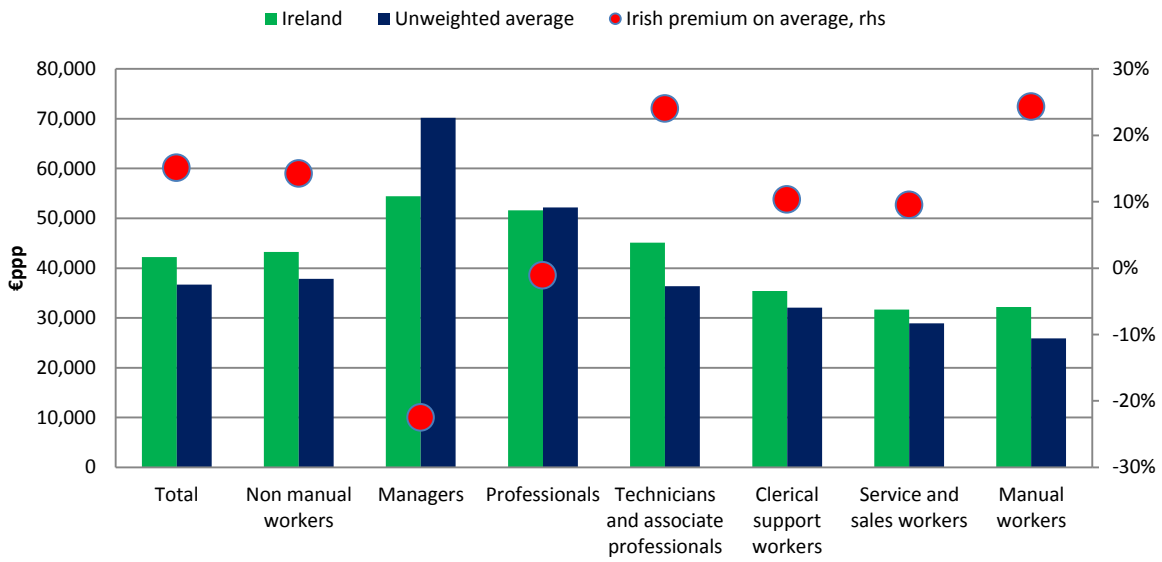
Figure 6: Public administration and defence wages



Comparator countries: Denmark, Finland, France, Germany, Italy, Netherlands, Spain, Sweden, and United Kingdom

In the Health sector a slightly different picture emerges. Irish workers in lower skilled occupations enjoy smaller but still substantial premiums on their EU15 counterparts. For workers with high skills levels, however, Ireland is below the EU average. For professionals in the health service Irish workers remain 3rd in the EU but with a small premium on the unweighted EU15 average (which is weighted upward by Italy). For managers in the Irish health sector they are 6th of 13 comparator countries but their pay remains 22.5% below the average. These together suggest that remuneration has a role to play in the widely reported retention challenges for high skilled health workers in the sector.

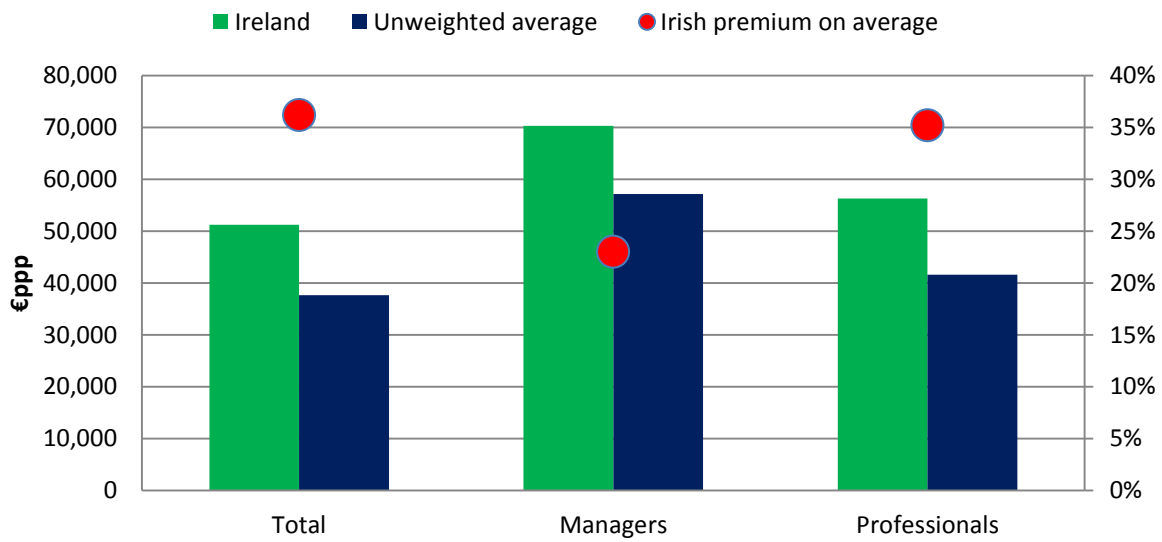
Figure 7: Health wages comparison



Comparator countries: Austria, Belgium, Denmark, Finland, France, Germany, Italy, Netherlands, Portugal, Spain, Sweden, and United Kingdom

Finally, in the education sector Irish wages (in purchasing power parity terms) are the highest of the 13 comparator countries for all level of workers. Average wages in the sector are 36% higher than the unweighted average of other EU countries with a slightly smaller premium (23%) for those with management responsibilities. Again this is adjusted to purchasing power parity to net out differences in the cost of living. As such the Irish education sector appears to be relatively well paid by comparison on average. That is not to say there aren't specific groups within a large and diverse sector where retention challenges exist.

Figure 8: Education wages comparison



Comparator countries: Austria, Belgium, Denmark, Finland, France, Germany, Italy, Netherlands, Portugal, Spain, Sweden, and United Kingdom

4. Public service pensions

Ireland's record of pension's coverage is demonstrably poor. In recent years our favourable demographics, when compared to most developed countries, has allowed us to put our pension's problems on the long finger while we attended to a now recovering economy. This grace period is now, however, coming to an end. If this issue remains unresolved into the medium term it risks doing serious damage to our consumer economy leaving a generation with substandard pensions coverage and an unsustainable bill for the state.

In this sense it is crucial that both public and private workers obtain adequate pensions provision. It is important, however, that the level of provision is equitable and where this is not the case that it is reflected in discussions of relative pay. Reform of public service pensions must be on the table both in discussions on pay but also on the introduction of a Universal pension scheme for Irish workers. In its absence both processes will be seen as inequitable by workers in the private sector.

Whilst a review of the terms of the Lansdowne Road Agreement is understandable given the better than expected economic performance and the importance of maintaining industrial peace and a collective approach to pay in the public service it is important that pay trends reflect what is affordable, given the competing demand for resources. In this context, any new deal must fully take into account the value of enhanced pension entitlements in the public service, relative to the private sector. In this section we look at pensions coverage in Ireland, disparities between the public and private sector and the finally give our views on how this should be factored into the work of the commission.

4.1 Public pensions

According the states revised estimates for 2017 the total number of public service occupational pensioners this year will number somewhere around 146,000 (of whom over 100,000 come from health, education and the Garda). In addition to this there are 277,000 current public service employees – not including those employed by the local authorities. Against this, the most recent estimates of the total accrued liability in respect of public service occupational pensions is now estimated at €98 billion. The figure represents the current value of all expected future superannuation payments to current staff and their spouses for service up to December 2012, plus the liability for all future payments to current pensioners and their spouses.

Costs

There are few contemporary comparisons of public and private pensions but a number of studies have been completed in the past decade which gives us some indication of the gaps that exist. Ibec in 2007 commissioned Mercer Human Resource Consulting to undertake an actuarial analysis of the current cost of public service pensions and to calculate the required contribution rates if these pensions were to be fully funded. The study found that in order to fully fund public service pensions the relative contributions that would have to be made as a proportion of salary would have ranged from 18% of salary for nurses to 31% for Gardaí, with a typical civil servant at 22% of salary. Based on the distribution of public service employment by occupation at the time the average contribution rate for the public service would be 23%.

Other studies completed by Life Strategies for the Irish Insurance Federation arrived at similar figures. They found that the average required contribution rate for public servants would have been 25% of salary. A 2009 report by the C&AG again reported somewhat similar figures in gross terms that the weighted average across the public service would cost around 20.1% of gross pay.

Table 6: Gross pension funding cost % of salary

	C&AG, 2009	Ibec, 2007
Prison Officers	29.6	.
Defence Forces	28.2	.
Gardaí	27.9	31
Teachers	22.4	22
Civil Service	22.3	22
State Sponsored Bodies	21.2	.
VECs & Its	19.9	.
Universities	19.3	.
Health	16.1	18
Weighted Avg.	20.1	23

Given that the ongoing structural change in private sector pensions in the intervening years it is likely that these estimates of the cost of funding public pensions have increased dramatically for most civil servants in the meantime. It is important to recognise that significant changes have been brought into place for new entrants from 2013, however, to what is in effect a state guaranteed defined contribution scheme.

Changes where they have come will have been offset for the most part by the increasing difficulty in finding yield in international markets. As such, the figures may well be higher based on contemporaneous assumptions. For example, the discount rate estimates for the 2009 C&AG report the real discount rate for public service pensions amounted to 3.31%. Recalculating using the C&AG report methodology and today's figures for German, French and Irish bond yields would give a nominal discount rate of 1.75 down from 5.02 in 2009 and a real discount rate of 0.8 down from 3.3.

Table 7: C&AG discount rate calculation, 2008 v 2017

		Yield as 31 December 2008	Yield as 20th Jan 2017
i	Benchmark German Government Bond (30y) yield	3.53	1.176
ii	Benchmark Irish Government Bond (10y) yield	4.44	0.98
iii	Benchmark German Government Bond (10y) yield	2.95	0.407
iv	Margin between Irish and German Benchmark Bonds (ii-iii)	1.49	0.57
v	French Government Bond (30y) yield	3.94	1.941
vi	French Government Index Linked Bond yield	2.25	1.0
vii	Break-even Inflation (v-vi)	1.69	0.94
viii	Derived Nominal Discount Rate (i + iv)	5.02	1.75
ix	Derived Real Discount Rate (viii-vii)	3.33	0.81

A change in the real discount rate will affect both the value of the accrued liabilities and the pensions cost. The C&AG report suggests that their cost figure arrived at in 2009 is extremely sensitive to these changes. A 0.5% change in the discount rate in the sensitivity analysis performed by the C&AG would change the average cost of pension provision by around 3% of an individual's gross wage. As such, recalculating at current market yields could add between 10 and 15 percentage points to the notional cost of fully funding an individual's public service pension. The €91 billion figure arrived at by the C&AG for the total public service pension liability would increase by around €9 billion for every 0.5% fall in the discount rate or an almost 50% increase. The states pension liability at today's yields – taking the C&AG methodology - could look closer to €136 billion. In this context, a full review of these figures must be conducted by the Commission.

Taking all this into account it is reasonable to assume that the cost of funding public service pensions would cost at least 30% of gross wages if the value of those arrangements was to be replicated in the private sector.

Contributions

Previous analysis such as the C&AG report in 2009 relied on modelling of individual contributions adjusted by employment to estimate contributions toward public s service pensions. This relies on making numerous assumptions about average contribution rates based on data which is of varying quality. It is possible to simply rely on reliable macro-data when looking at the global total across the public service.

The most recent complete data on public service pension contributions on a macro-level is from 2015. The total exchequer funded public pay bill numbered just over €15.12 billion in 2015. Annual exchequer pension contributions by public servants amounted to approximately €500 million per annum down from €713 million in 2009. This suggests that superannuation contributions across the civil and public service amount on average to around 3.3% of salary.

It is worth noting that some workers in the public service do make more significant contributions to their pension coverage. In non-civil service occupations most employees pay some superannuation. For most of these workers (teachers, health service, Gardaí) this usually amounts to between 4% and 5% of gross pay (depending on PRSI class) plus 1.5% for child and spouse cover. These contributions do, however, entitle those workers to improved terms and conditions on their pensions along with more generous benefits.

Within the civil service, pre-1995 employees have limited superannuation contributions (a 1.25% payment for child and spouse cover) toward their occupation pension. It is worth recognising, however, that the 70,000 public workers on B, C and D stamps do pay PRSI at 4% without receiving the state pension entitlements of other workers.

Post-1995 civil servants pay a personal contribution of 1.5% of pensionable remuneration plus 3.5% of net pensionable remuneration (average adding to around 4% of gross pay). They also pay contributions of 1.5% of gross pay for spouse and child cover. There workers receive additional salary to cover differences in PRSI contributions and as such make no additional net contribution.

On top of this the pension related deduction (PRD) amounted to €876 million down from €1 billion in 2009. In their analysis of pension contributions the C&AG treated the PRD as a pension related contribution but the FEMPI legislation is quite clear on the matter with section 7(2) stating:

"A deduction under section 2 is not a pension contribution for the purposes of the Pensions Act 1990."

In effect it is possible for the commission to treat the PRD as either a pay deduction or pension contribution, but not both. For completeness the figures suggest that the average PRD was 6.2% of gross pay in 2015.

The average pension's contribution of a public service worker is therefore around 9.5% of gross salary. This is a slight fall on the 11.5% estimate of the C&AG in 2009 accounted for by alterations to the PRD, the changing profile of the sector and methodological differences. This suggests that the average equivalent employer contribution to a public service workers pension is in the region of 20%.

In the private sector, on the other hand, the CSO's QNHS module on pension's shows coverage in private dominated sectors reached 51.6 in Q4 2015 from 1.24 million employees. Of the 639,000 private sector employees with a pension around 126,000 or 19.7% (Irish Association of Pension Funds) are members of a DB scheme with the remainder DC.

The average value of employer pension contributions at a private sector workplace level has been estimated by taking into account the percentage of private sector workplaces with no pension provision, the average cost of DB schemes and the average cost of DC schemes. For estimated over average contribution by type of scheme we use data from the Ibec pensions survey (2016) at a workplace level.

Table 8 summaries these key variables. The weighted average employer pension contribution rate for the private sector is estimated at 6.7% at a workplace level. It is worth

remembering, however, that up to 50% of the private sector workforce has no occupational pension coverage.

Table 8: Pension contributions by private sector employers

Pension type	Number of workers	% of private sector workers	Average employer contribution
None	601,000	48.5%	0%
DB	513,000	41.4%	7%
DC	126,000	10.2%	12%
Weighted average employer contribution	.	.	4.1%
Weighted average for those with a pension	.	.	8.0%

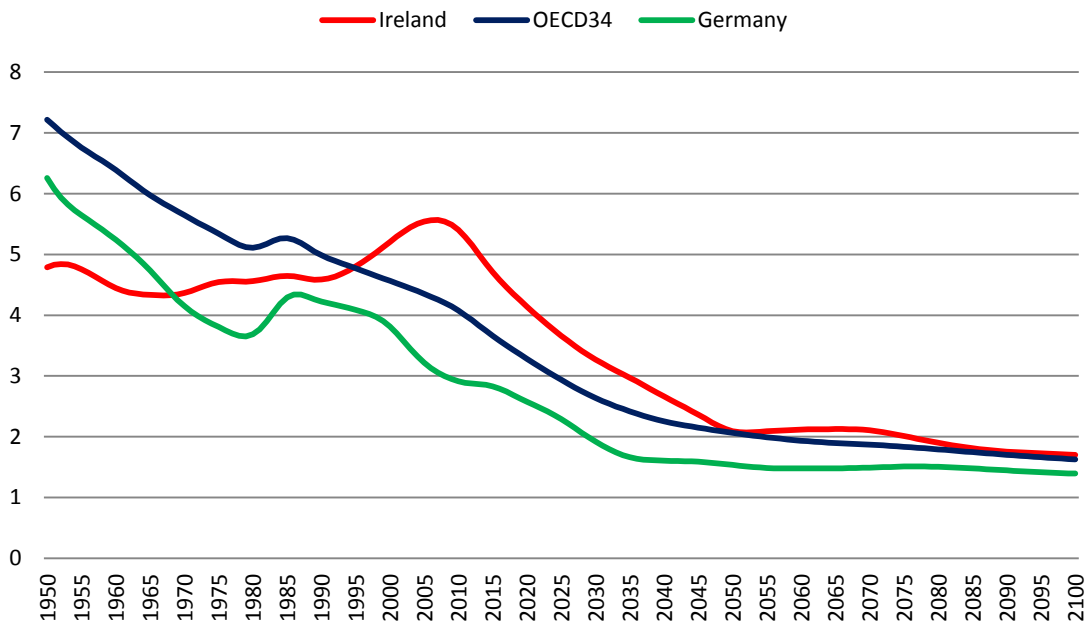
We have shown that the average public service pension contribution is worth somewhere in the region of 9% of gross pay with variance between sectors. On the other hand the cost is likely to be almost 30%. This suggests an employer contribution equivalent to over 20% of gross pay. On the other hand the average private sector employer contribution is just 4.1%. As such, the unadjusted premium for public service workers in terms of employer pension contributions is around 15.9% of gross pay on top of an existing gross pay differential of 12%.

4.2 Affordability

As noted in the C&AG report (2009) the Government has two ways in which it might fund public service pensions. Its first option is that it can put money away and invest it for a future date in the manner of the national pension reserve fund. The second option is to pay for pensions on a pay-as-you-go (PAYG) basis with contributions from today's workers or other taxpayers. The reality is that almost all public pensions are now funded on a PAYG basis.

Population ageing across Europe has become a major issue for policymakers in recent years. The challenges presented, to the continent, by looming demographic shifts are stark. In 35 years 28.1% of the total population of the EU28 countries could be aged 65 and over. This would represent an increase from only 18.9% in 2015. In Ireland the equivalent share would be 24.9%; an increase of 12 percentage points on the position today.

Figure 8: Number of people at work for each person retired



One of the challenges faced by governments, in this context, is how to finance the pension commitments of the post-war European welfare state in the face of growing dependency ratios. This will pose particular problems to countries, such as Ireland, who have adopted a 'pay as you go' (PAYG) approach to both their state and public service pensions. The explicit social contract in PAYG pension arrangements is that today's workers will pay for the pension needs of today's retired population through the taxation system and in turn future workers will pay for the pensions of current workers.

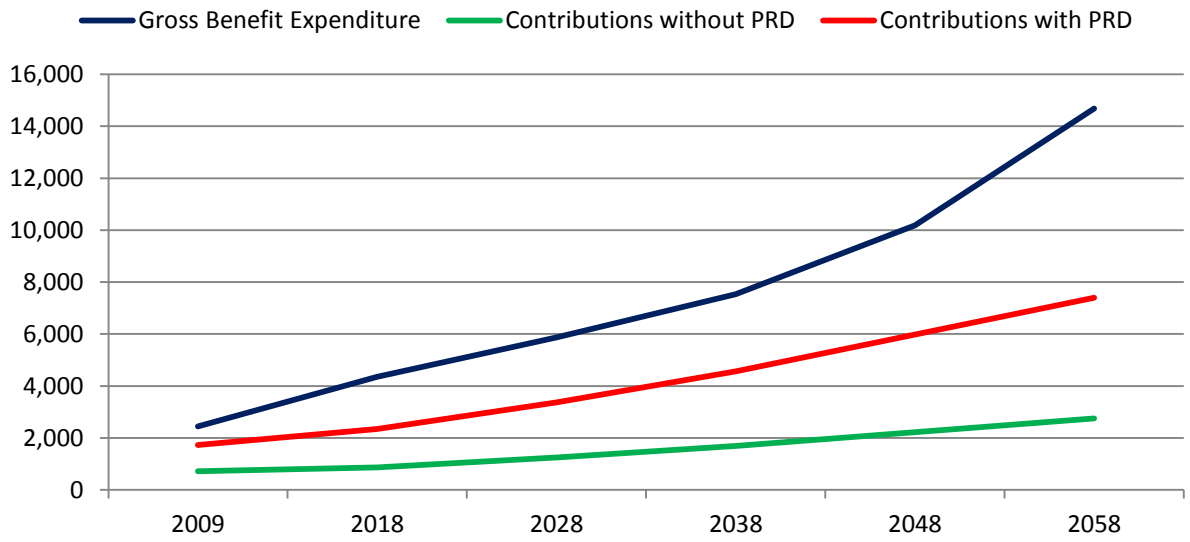
In its simplest form a PAYG pension system's expenditure over the business cycle will balance such that total contributions on pensions should equal outflows. The system can be written as:

$$\boldsymbol{Pa = WcI} \qquad \textbf{(1)}$$

Where a is the average pension, P is the number of pensioners, W is the number of workers, c is their average wage, and I is their rate of contribution (Willmore, 2004). Assuming replacement rates of pensions are constant, as a proportion of wages, over time the contribution rate of tomorrow's workers in a PAYG system will depend on the relative dependency ratio of workers to retired persons. If dependency ratios are constant over time then replacement and contribution rates may also remain constant. Pensions will share in productivity growth through indexation to wages.

This system of intergenerational transfers has worked perfectly well at providing adequate replacement rates for retired persons in much of the post-war era. This has been facilitated by the fact that the ratio of workers to pensioners has been sufficiently high to allow modest contribution rates. Infact, Ireland is in that position today.

Figure 9: Public service pension outflows and contributions



The long-term projections found in the C&AG report (2009) are worrying in this regard. Current contributions (total excluding PRSI and PRD), inclusive of the PRD, amount to around 70% of outgoing with the state in effect funding the remainder. Discounting the PRD that figure falls to only 29% being funded by current contributions. By 2058 these figures will stand at 50% and 18% respectively leaving an unsustainable bill for the State. The need to act on this now must be borne in mind by the Commission.

5. Reform, attraction and retention

5.1 Reform fatigue must be overcome

Reform fatigue has clearly taken hold; but the drive to improve public services should not begin and end in times of fiscal rectitude. Good business practice requires keeping an eye on how to improve, re-imagine and transform services in good times and bad. We need to challenge the traditional ways in which the public sector has operated and continually respond to the needs of service user.

5.1.1 Managing change across the public service

Over the past six years, a number of initiatives have been undertaken to control public sector expenditure. These include measures to reduce non-discretionary expenditure, smarter procurement, better management of property and estates, and the creation of a smaller civil service. Reduced budgets have brought changes in how departments are operating, in terms of budget cuts, restructuring and reduced staff levels.

Cost reductions could not provide a satisfactory result on their own. Productivity improvements such as changes to terms and conditions secured through recent public pay agreements have made a contribution. So too have new ways of working through investment in technology, shared services, agency rationalisation and new business models have also resulted in more efficient and changed working practices. The net result must be more efficient and effective services, ultimately benefiting the Irish taxpayer.

Future pay agreements should not result in reversing these savings and service improvements secured to date. The Public Service Pay Commission's methodology should extend to include performance management and related pay, customer focus, engagement with transformation initiatives, redundancy, staff transfer and working hours. Government can use such data prepared by this independent body for monitoring performance and productivity.

5.1.2 Public services still need to be transformed

Public service reform initiatives should result in the transformation of our public services, which clearly champion excellence in the services provided to business and the citizen. Outsourcing or external service delivery, shared services, public procurement reforms and better use of technology are very effective ways to reform and improve public services in Ireland. However, delivering on commitments in the two recent public service reform plans to these four important areas has been mixed.

Shared services quickly became the cornerstone of public sector reform. HR and payroll services are already operational across central government (PeoplePoint, the Payroll Shared Service Centre & the Financial Management Shared Service) and the local government sector. A number of other projects at various levels are either in operation or in planning/development phase. A National Shared Services Office has also been established to coordinate policy and manage the delivery of key projects.

Technology is not an end in itself but it can enable the public sector to cut costs and to adopt fundamentally different ways of doing things, providing better and more responsive services. Our expectations for using and consuming services have changed. Businesses have changed how they interact with the civil service, with 83% of businesses now interacting via online services compared to 33% in 2009.[2] Traditional counter transactions like motor tax have increasingly been conducted online. The Revenue On-line Service is a model that should be replicated across government. Targets should be set to transition specific services online. We also must benchmark the cost of providing services across all delivery channels. For example, there needs to be a full understanding of the unit costs of provision via email, phone, face-to-face (e.g. counter services) or online. Such an exercise would allow resources to be allocated where they are required.

Providing e-government, mobile and online services have been a feature of governments internationally. At the turn of the millennium, Ireland was a leading country for e-government but over the past 15 years we have significantly slipped down the rankings. Government's Chief Information Officer and his team must be given appropriate resources to deliver a best-in-class e-government strategy. This would achieve the twin objectives of efficiencies in public services and being more responsive to the needs to users.

While stakeholder buy-in may be required to deliver the required improvements to public services, a solid commitment from Government to transformational management is essential. A transformation strategy can increase the quality of public services and allows greater transparency on the costs of service provision.

5.1.3 Pay agreements must not restrict much needed public service reform

Very little attention was paid to the non-pay related elements of the three public sector pay deals. In fact, in addition to pay rises, the Lansdowne Road Agreement placed restrictions on public service reform. External service delivery, the fourth pillar of the public service reform approach, has been severely curtailed, along with further attempts to improve services to meet the needs of citizens and businesses alike.

Historically public sector pay policy has focused solely on the provision of services from the point of the provider. The politics of provision often loses sight of the actual services to be provided and those that rely on them. These two perspectives should not be confused. Increasing input costs (e.g. pay) will not improve service provision for the service user. Quite simply, pay does not equal improved effectiveness. It is important that future public sector pay arrangements support the delivery of the necessary and very significant transformation of work practices that are still required.

Under the Croke Park Agreement management could test services for productivity improvements, whilst allowing public sector unions to make alternative proposals to improve efficiencies. The Lansdowne Road Agreement, however, states that management could no longer take into account the staff costs associated with a given service when evaluating whether it could be delivered by another approach. This in effect became a new and very significant barrier to public sector transformation.

[2] Civil Service Business Customer Survey 2016

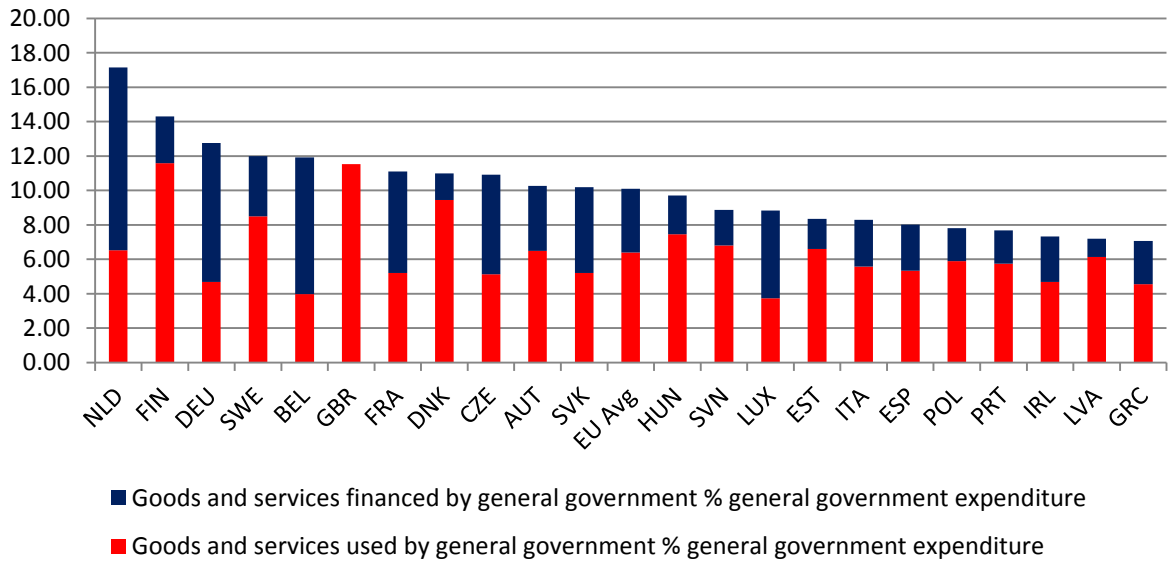
This current pay arrangement prohibits proper benchmarking of services right across the public sector to monitor performance. It limits the promotion of best practice in customer service and the use of more efficient channels for service delivery (e.g. external service delivery, e-government etc). The net result is that Government is prevented from having accurate data on the true costs of service provision. Future pay arrangements must not prevent Government from putting in place mechanisms to collate such data and to use it for monitoring performance and productivity.

5.1.4 Government must recommit to external service delivery

The Lansdowne Road Agreement raised the important questions over whether Government will stick with its July 2012 mandate that all new services should be tested for external service delivery first. Based on its track record, low level non-core services such as catering, call centres and facilities management and those further from the centre were more likely to be considered for external service delivery. These include the administration of higher education grants (i.e. Student Universal Support Ireland) and administering the provision of new or replacement of learner-permits or driving licences (i.e. National Driver Licence Service). Previously they were functions of the local authority sector but both were centralised and outsourced.

Governments across Europe and beyond make greater use of outsourcing as a means of providing quality services, more efficiently across a range of services. Yet, Ireland ranks 20th out of 22 European countries, just ahead of Greece and Latvia, in terms of using external service delivery. This is some way off the EU average and less than half the rate in the Netherlands. Ireland also ranks sixth from bottom in the OECD

Figure 10: Expenditures on general government outsourcing as a percentage of general government expenditure



It is clear that there has been far too little debate in Ireland about the role the private sector can play in delivering public services. While it is clear that there is no one-size-fits-all approach, the potential benefits are significant. External service provision need not lead to

job losses and is not akin to privatisation: public sector control can be maintained and service levels improved. There is a need for much more direct engagement led by Government right across the public service to explore the possibilities. An informed decision can then be taken as to how best to proceed.

5.2 Attraction and retention

Our economic circumstances over recent years necessitate that all areas of public services be made more effective and efficient. As outlined above, Government's principal focus was on workplace issues such as pay, productivity improvements and public sector staffing levels. For example, staff numbers in local government have fallen by 25% since 2008, from 37,243 to 28,100. Besides addressing the need to continually reform public services, Government must also address issues of recruitment across the public service. It must be able to attract and retain skilled employees. People management is deemed to be the most substantial challenge facing all organisations, public and private, over the next 5-10 years.

5.2.1 Human resource structures must support public service accountability and better policy-making

Over the past eight years, the public service has lost experienced officials including through high levels of retirement. Recruitment embargos placed more demands on remaining staff, particularly those in middle-ranking grades, who had limited prospects for career advancement because of the then restrictions on promotion. This contributed to more risk-averse decision-making processes and lack of fresh and innovative thinking.

The public sector should be more resilient in mitigating the loss of organisational knowledge and expertise. Skills, knowledge and experience built up by individual public servants should be recognised as an investment by the State and always put to the best use. To enable knowledge and expertise transfer, the system should ensure formal interaction between senior public servants nearing retirement with those who will ultimately replace. In addition, more junior public service staff should be equipped with the tools, skills and training to enable them to move through the ranks. Finally, recognition should be given to those with current skills in exploiting the benefits of new technologies to deliver better services.

Efforts to strengthen the accountability of senior officials need to be continued. A culture of accountability needs to become widespread across the public service. This should not be interpreted as saying that many public servants do not demonstrate a consistent commitment to delivering high quality results. Accountability structures are required to highlight and address instances where the delivery of services and output is not satisfactory; it is essential that cases and causes of underperformance are tackled swiftly and decisively. Stronger accountability measures and scope to implement them will lead to improved recognition of the quality and breadth of work that many public servants can deliver.

5.2.2 Ensure the best use of skills and expertise available within the public service

Greater mobility between government departments (and between departments and the public service) must be encouraged and allowed to become widespread. The public service needs to be diverse and inclusive. The Service Wide Mobility Scheme must be given time, management and staff buy-in and adequate support to achieve its objective. This would facilitate better sharing of knowledge and improved career prospects particularly for mid-ranking public servants.

Our public service requires a much stronger emphasis on 'talent management' to ensure that promotion and career advancement processes across the public service are open to all qualified public servants to ensure that the best candidate is selected for the post. Restricted

mobility limits Government's ability to have skilled, experienced and knowledge staff in the right areas.

5.2.3 Recruitment must focus on securing the best candidates

It is not enough to look internally to fill roles. An effective mechanism to appropriately assess the market value of jobs in the public sector is to increase external recruitment. For example, the current emphasis on external recruitment into the civil service, particularly at senior management levels, must be continued. It allows Government to access the full talent within the economy and society. Also, specific focus needs to be placed on the retention rates of external-hired staff vis á vis internal staff. At the very least, closely monitoring turnover and retention levels would ensure that the public service is resourced with the best available staff and expertise.

The Public Service Pay Commission should have the flexibility to prioritise adjusting pay rates in particular areas of the public sector where skills shortages are leading to severe recruitment and retention problems. Money spent on across-the-board pay awards is money that is not going on recruiting new staff, retention of specific skills within the public sector or on much-needed public investment. It is crucial that all decisions are informed by the broad needs of the country. This approach would be more responsive to wider labour market trends.

Appendix 1: International wage comparisons

Table A1: Wage comparisons for public administration

	Total	Non manual workers	Managers	Professionals	Technicians and associate professionals	Clerical support workers	Service and sales workers
Irish positon	1st	1st	2nd	1st	3rd	1st	1st
Irish premium on average	24%	24%	9%	31%	13%	32%	47%
Ireland	47,108	48,355	67,555	59,837	41,438	39,901	54,332
Netherlands	46,921	48,048	65,275	53,993	44,179	37,609	40,111
Denmark	42,128	42,444	64,993	46,663	39,966	34,558	36,958
Germany	40,683	42,080	63,763	52,955	42,369	30,901	39,913
Unweighted average	37,989	38,941	62,096	45,635	36,679	30,261	36,944
Finland	36,993	37,383	60,872	42,650	33,604	28,519	30,879
United Kingdom	36,131	36,777	52,064	42,153	30,526	25,663	41,417
Sweden	35,379	35,385	51,733	38,945	30,820	28,788	29,464
Italy	34,140	34,412	90,398	38,854	40,117	27,252	37,321
Spain	32,270	34,116	48,684	39,938	32,381	26,249	33,416
France	28,133	30,410	55,621	40,357	31,391	23,170	25,632

Table A2: Wage comparisons for the health sector

	Total	Non manual workers	Managers	Professionals	Technicians and associate professionals	Clerical support workers	Service and sales workers	Manual workers
Irish position	1st	1st	6th	3rd	1st	1st	2nd	1st
Irish premium on average	15.1%	14.2%	-22.5%	-1.1%	24.0%	10.3%	9.5%	24.3%
Ireland	42,227	43,232	54,418	51,600	45,098	35,404	31,670	32,197
Netherlands	38,762	39,794	58,941	48,986	36,851	33,533	32,479	26,020
Germany	36,139	37,266	99,288	52,284	34,625	31,938	25,373	23,560
Austria	35,526	36,428	62,659	49,444	35,190	30,350	29,756	25,648
Belgium	35,196	37,816	79,551	48,918	37,815	34,975	31,414	25,717
Denmark	34,659	34,977	53,853	39,595	35,405	32,445	28,946	26,889
Italy	34,377	35,530	82,553	74,361	29,581	26,001	22,729	21,339
Unweighted average	36,698	37,863	70,180	52,170	36,366	32,092	28,910	25,910
Sweden	32,128	32,393	46,550	36,190	29,441	27,148	28,620	25,099
United Kingdom	31,786	32,451	45,486	42,985	28,284	21,511	21,342	19,153
Finland	31,390	31,898	48,555	47,884	30,346	25,797	26,058	23,158
Spain	30,741	31,865	51,137	42,959	26,879	23,242	20,602	19,696
France	25,913	27,758	47,010	37,168	27,096	21,196	21,626	17,484
Portugal	18,936	20,263	35,466	30,737	19,657	13,928	11,172	10,837

Table A3: Wage comparisons for the education sector			
	Total	Managers	Professionals
Irish position	1st	1st	1st
Irish premium on average	36.2%	23.0%	35.2%
Ireland	51,244	70,331	56,274
Netherlands	44,859	59,361	46,739
Belgium	42,418	62,558	42,916
Germany	42,277	67,587	49,267
Austria	42,227	61,491	51,916
Denmark	41,188	60,472	42,932
Finland	37,216	61,305	40,601
United Kingdom	32,833	51,959	41,676
Sweden	31,630	48,210	34,044
Spain	31,208	50,951	33,660
France	31,074	45,852	31,999
Italy	30,869	60,922	33,253
Portugal	30,176	42,179	35,906
Unweighted average	37,632	57,168	41,629