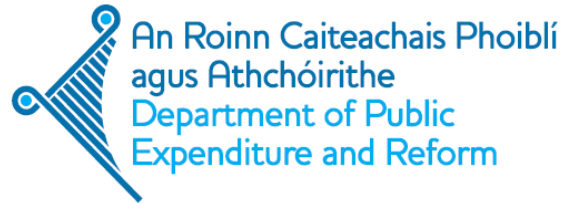




Irish Government Economic & Evaluation Service



**Staff Paper 2016**

# **Budgetary Impact of Changing Demographics 2017 - 2027**

**September 2016**

**Jenny Connors, Ryan Duffy and Frank Newman**

**Irish Government Economic & Evaluation Service  
Department of Public Expenditure and Reform**

This paper has been prepared by IGEES staff in the Department of Public Expenditure and Reform. The views presented in this paper are those of the authors alone and do not represent the official views of the Department of Public Expenditure and Reform or the Minister for Public Expenditure and Reform. The paper was prepared in the context of an on-going budget negotiation process and reflects the data available to the authors at a given point in time.



## Summary

This paper is an updated version of a 2015 IGEES Staff Paper *“Budgetary Impact of Changing Demographics 2016-2026”*. The paper has been updated to include 2015 outturn data and a recalculation of projections based on the latest figures from Census 2016.

### Data Source and Methodology

The CSO recently published preliminary results from the April 2016 Census. These figures measure population at 4.76m, an increase of 170,000 or 3.7% since 2011. This figure of 4.76m surpasses all previously modelled CSO population projections for 2016. The change in the population between successive censuses can be broken down into the combined effect of natural increase (births less deaths) and net migration (immigration less emigration). The main driver of the increase in population beyond previous projections is net migration. From 2011 to 2016, Census results measure net migration at -28,500. This is significantly lower than the CSO’s estimate of outward migration of between -95,000 and -125,000 for the same period.

In order to update the paper a two-step process was undertaken. Firstly, 2015 outturn data for each scheme or component of spend was included in the base. Secondly, the projections were revised to take account of the updated Census 2016 data. As no age breakdown is yet available for the results, the figures are calibrated to the same age distribution as the CSO’s population estimates using medium migration and low fertility assumptions (M2F2).

### Movement from Previous Estimations in 2015 Staff Paper

In the short term, the headline figures have increased marginally from previous projections. These changes are primarily driven by the higher than expected population level for 2016. Other significant changes across sectors are set out below:

- For Health, while the estimated cost pressure for the acute sector has increased due to the higher population level, pressure on General Medical Services (GMS) has reduced due to a reduction in medical cards numbers from 2013 to 2014. This reduction in cards provides a lower utilisation rate going forward.
- For Social Protection, expenditure pressures on pensions have increased due to the higher population estimates for the affected age cohorts. The increase takes account of the increase in the pension qualification age from 66+ in the period 2016 to 2020 to 67+ in the period 2021 to 2027.
- For the Early Childhood Care and Education (ECCE) Scheme, the estimations now reflect the extension of the scheme to include two years free pre – school for children aged between 3 years to 5.5 years. This change was announced in Budget 2016 and takes effect from September 2016.

## 1. Introduction

The paper examines expected changes in the structure of the Irish population and how these transformations affect public expenditure in the short, medium and long term. The changing age profile of the population puts a strain on the fiscal space within which sectors such as, Social Protection, Health and Education operate.

The primary objective of this paper is to estimate the pure demographic cost pressures from 2017 to 2027 across the three main areas of current expenditure; Social Protection, Health and Education<sup>1</sup>. The paper sets out the following:

- The key services within each area that account for the majority of the demographic cost pressure going forward.
- The estimated demographic cost pressure within each of these key services based on key underlying assumptions and any other policy considerations that may have an impact in the future.

According to preliminary Census 2016 results, the population stands at 4.76m and this is projected to continue to increase through to 2046. In the coming decades, the age structure of the Irish population is expected to change. This development is due to the changing dynamics of fertility, life expectancy and net migration. Over the next decade, the number of births is expected to fall, primarily due to the annual decline in the number of women in the child-bearing age cohort. By 2026, the F2 fertility scenario assumes the fertility rate will decrease from 2.1 to 1.8 and then stabilise at this level until the end of 2046. The decline in Ireland's fertility rate will generate a convergence with EU norms as prior to this Ireland experienced exceptionally high fertility rates. In absolute terms, the number of older people in Ireland is growing. This ageing population will have an effect on the proportion of the elderly population to the working age population.

Three areas of public expenditure are particularly affected by demographic pressures; namely Social Protection, Health and Education. The subsequent sections outline the demographic cost pressures across each of these three areas from 2017 to 2027.

---

<sup>1</sup> ECCE is included in the Education figures for presentational purposes only. ECCE is a scheme under the Department of Children and Youth Affairs.

## 2. Breakdown of Social Protection Cost Pressure Projections

Child Benefit and Pension related schemes represent two of the key demographically-driven areas within Social Protection, and are expected to account for 36% of total Department of Social Protection (DSP) expenditure in 2016.

### *Child Benefit*

#### **Key Assumptions**

- The projected expenditure and demographic pressures for Child Benefit, from 2017 to 2026, have been modelled using the updated population data available from the preliminary findings of the Census 2016.
- The assumptions regarding fertility and migration rates have remained as per the previous IGEEES Demographics paper published in 2015 i.e. medium migration (M2) and low fertility (F2).
  - F2: total fertility rate falls from 2.1 (2010 levels) to 1.8 by 2026.
  - M2: net migration turns positive in 2018 and rising thereafter to +10,000 by 2021.
- Table 1 below sets out the average annual change in persons and expenditure based on the above.

**Table 1: Demographic Cost Pressures in Child Benefit from 2017 – 2027**

<i>Demographic Cost Driver</i>	<b>2017 – 2020</b> <i>Pop. Aged 0-18 Years</i>	<b>2021 - 2022</b> <i>Pop. Aged 0-18 Years</i>	<b>2023 -2027</b> <i>Pop. Aged 0-18 Years</i>
Avg. Annual Change in Persons	6,193	-3,264	-7,312
Avg. Change in Expenditure	€11m	€-5.6m	€-13m

#### **Policy Considerations**

Using the updated population data from the 2016 CSO census data, the average annual change in persons between 2017 and 2020 is expected to be positive at c. 6,200. This is based on the assumption that the total fertility rate will be between 2.01 and 1.90 during this period. Following this however, the average annual change is expected to turn negative following a fall in the expected total fertility rates. By 2026, fertility rates are expected to fall to 1.80 and remain there until the end of the CSO projection period, which is 2046. This results in a more prolonged tapering and reduction in scheme expenditure and participation from 2020. This is based on a “no policy change scenario”.

## Pensions

### Key Assumptions

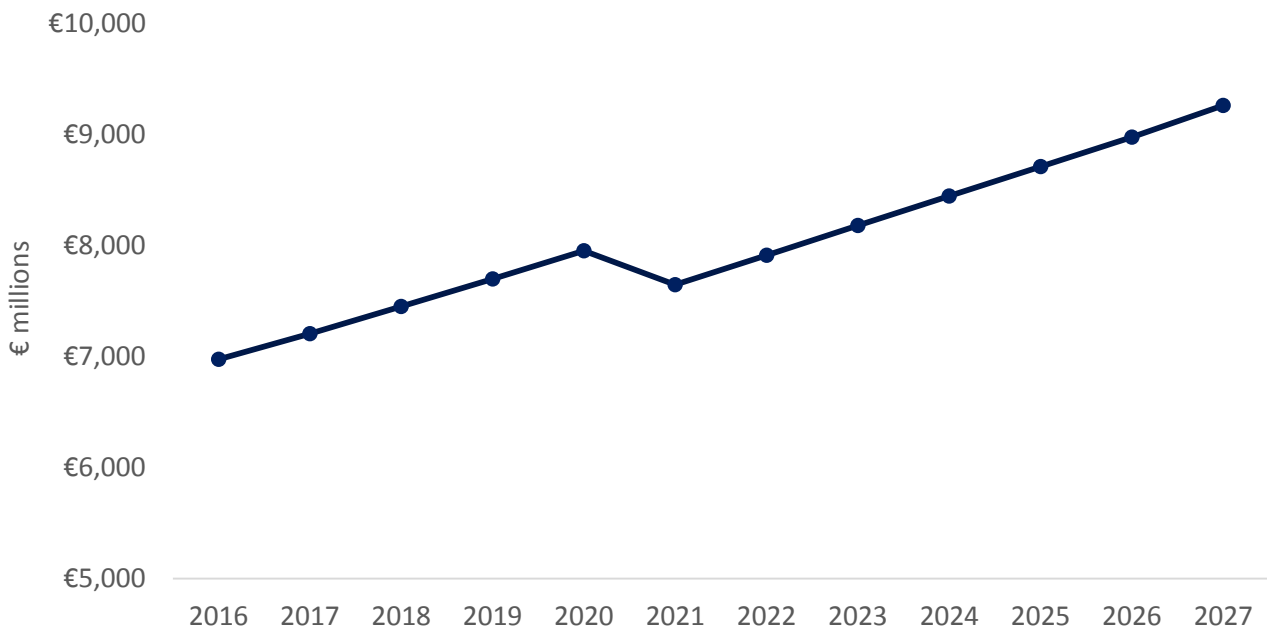
- The projections assume a “no change” scenario where expenditure is expected to rise from €6.97bn in 2016 to €9.3bn in 2027. The projections do take account of the change in legislation to increase the pension age, to 67, from 2021 onwards. A further increase in the pension age, to 68, will occur in 2028 however that is outside the scope of this paper.
- The projections are based on the assumption that the only variables changing over the projection period are the size and age distribution of the population as taken from the updated 2016 CSO population data.
- Table 2 sets out the average annual change in persons and expenditure based on the above.

**Table 2: Demographic Cost Pressure in Pensions from 2017 to 2027**

<i>Demographic Cost Driver</i>	<b>2017 – 2020</b> <i>Pop. Aged 66+ (2017) and 67+ (2018-2019) with Pension</i>	<b>2021 - 2022</b> <i>Pop. Aged 67+ (2020) and 68+ (2021) with Pension</i>	<b>2023 -2027</b> <i>Pop. Aged 68+ with Pension</i>
Avg. Annual Change in Persons	21,060	-1,726	23,196
Avg. Change in Expenditure	€245m	€-20m	€270m

- There is projected to be an average increase of c. 21,000 additional pension recipients per annum between 2017 and 2020, reflecting an ageing population with an increasing proportion of adults within the eligible age band.
- Between 2021 and 2022 the average annual change in numbers turns negative. This is due to the increase in the eligible pension age (from 66 to 67) in 2021. As a result, fewer people will become eligible for the state pension in that year. Those who turn 67 in the year will already be in receipt of the pension, as they became eligible at age 66 in the previous year. From 2023 to 2027 the average annual change is expected to turn positive again at c. 23,000.

**Figure 1: Pension Expenditure based on Demographic Cost Pressure Estimates 2016 - 2027**



Source: DSP Vote pension expenditure data and CSO (population estimates) updated by author to include Census 2016

### Policy Considerations

Every €1 increase in the weekly state pension rates results in a €29.4m increase in the annual cost of pension provision (full year cost).<sup>2</sup>

A range of policy options aimed at moderating future expenditure growth in this area were explored in previous IGEES analyses. These policy options included potentially increasing the pension age at an earlier point in time, in addition to changes to eligibility and the rates of certain pension schemes. These options are outlined in more detail in the IGEES 2014 paper entitled *Expenditure Review of State Pension and Related Supplementary Benefit Schemes*<sup>3</sup>.

It should be noted that the analysis undertaken in this paper will act as a guide with regard to estimating the additional annual pension cost attributable to the aging population over time. However, with regard to Budget allocations, pension cost estimates for each year will be calculated closer to the time of each Budget using the most up to date expenditure and recipient data available at the time.

<sup>2</sup> This figure takes account of a €1 increase in the State Pension (contributory and non-contributory), Widow/er's or Surviving Civil Partner's Pension (contributory and non-contributory), and the Death Benefit.

<sup>3</sup> Available here: <http://igees.gov.ie/wp-content/uploads/2014/11/Expenditure-Review-of-State-Pension-and-Related-Supplementary-Benefit-Schemes.pdf>

### 3. Breakdown of Health Cost Pressure Projections

For Health expenditure, the following services *account for 80%* of the “pure” demographic cost pressure; Acute Services, Primary Care Reimbursement Services (PCRS), the Nursing Home Support Scheme and Older Persons Services.

#### *Acute Services*

##### Key Assumptions

- The “pure” demographic cost pressures for in-patient and day case procedures are derived separately by multiplying the relative cost per case by the projected numbers of discharges for each age group. This provides an estimate of total casemix units (CMUs).
- The relative costs across age groups and procedures vary, one such example is the relative cost of care of over 65 year olds. For those over 65 years the relative cost of an inpatient procedure is one of the highest in comparison to other age cohorts, however the opposite is the case for day case procedures where over 65 year olds have one of the lowest relative costs.
- The projections are based on the assumption that the only variables changing over the projection period is the size and age distribution of the population, cost structures and utilisation rates are held constant.
- Estimating healthcare expenditure is highly complex as many factors impact pressures on healthcare services. Estimations in this paper are based on “pure” demographic pressures, however other factors beyond demographics positively and negatively impact pressures on healthcare services. Some of these factors include, technological advances, healthcare prices and productivity and population behaviour.

**Table 3: Demographic Cost Pressure in Acute Sector from 2017 to 2027**

Demographic Cost Driver	2017-2020	2021-2022	2023-2027
	All Age Cohorts	All Age Cohorts	All Age Cohorts
Avg. Annual Change in Persons	38,055	36,610	34,742
Avg. Change in Expenditure	€61m	€71m	€75m

##### Other Considerations

There is currently no consensus on the extent to which population ageing necessarily results in proportionally higher healthcare expenditure. Smith *et al* (2000)<sup>4</sup> found that population ageing was a minor factor in explaining US health spending over the period 1940 – 1990. Similarly other studies have discovered that

<sup>4</sup>Smith, S.D., Heffler, S.K. and Freeland, M.S. (2000) ‘The impact of technological change on health care cost spending: an evaluation of the literature’, Health Care Financing Administration

healthcare costs are associated with proximity to death rather than directly associated with the age of the population. For example, Seshamani and Gray (2004)<sup>5</sup> found that proximity to death explained most of the increase in health spending while a small amount was due to age. This concept suggests that as the health of the population increases, the number of years of healthy life are extended and life expectancy rises, most of the costs associated with dying are postponed. This concept has been termed the “compression of morbidity” and could potentially result in reduced costs, as it results in poor health being deferred until later in life with a significant proportion of lifetime healthcare costs occurring in the last year of life.

### **Primary Care Reimbursement Services (PCRS)**

#### **Key Assumptions**

- PCRS projections are based on 2014 PCRS Claims and Payments data<sup>6</sup>, this is the most up to date dataset available. A per capita cost for each age group, in receipt of services under PCRS schemes, was estimated. These were combined with age-specific population projections and then aggregated to give a total cost for each scheme.
- The per capita costs were held constant over the projection period assuming that both the cost structure and rates of utilisation remain unchanged.

**Table 4: Demographic Cost Pressure in GMS and Non-GMS from 2017 - 2027**

<i>Demographic Cost Driver</i>	<b>2017-2020</b> <i>All Age Cohorts</i>	<b>2021-2022</b> <i>All Age Cohorts</i>	<b>2023-2027</b> <i>All Age Cohorts</i>
Avg. Annual Change in Persons	38,055	36,610	34,742
Avg. Change in Expenditure (GMS)	€38m	€43m	€45m
Avg. Change in Expenditure (non-GMS)	€6.8m	€7m	€7m

#### **Other Considerations**

In Q3 2015, children under 6 and people over 70 were prioritised for the first phase of the roll-out of universal GP care. In 2016, the decision was taken to rollout the next phase of universal GP care, providing free access to all those under 12 years. This decision has a full year cost of €30m. However, it has yet to be implemented as negotiations with GPs are still ongoing and is, therefore, not included in this analysis.

<sup>5</sup> Seshamani, M. and Gray, A.M. (2004) ‘A longitudinal study of the effects of age and time to death on hospital costs’, *Journal of Health Economics* 2004; 23:217-235

<sup>6</sup> PCRS Statistical Analysis of Claims and Payments 2014 [http://www.hse.ie/eng/staff/PCRS/PCRS\\_Publications/PCRS\\_statAnalysis14.pdf](http://www.hse.ie/eng/staff/PCRS/PCRS_Publications/PCRS_statAnalysis14.pdf)



## Nursing Home Support Scheme (NHSS) and Other Services for Older People

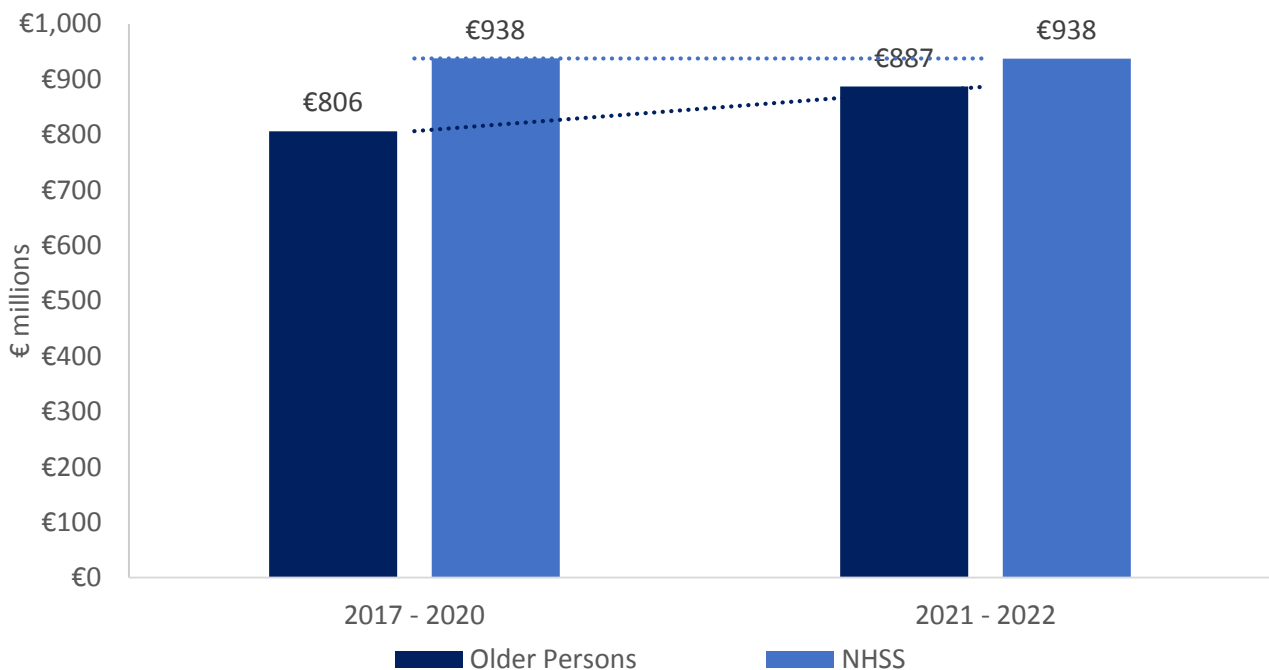
### Key Assumptions

- *Services for Older People*: these services are predominantly required by the older age groups and are highly responsive to changes in this age cohort. It is assumed that the cost pressure is aligned with the annual demographic pressure in the relevant age cohort.
- *NHSS*: assumptions are based on the 2015 IGEES paper on the NHSS<sup>7</sup>. These key underlying assumptions are as follows:
  1. The more expensive pre-scheme NHSS members will naturally exit the scheme
  2. The new members entering the scheme will be wealthier than those who have entered previously

**Table 5: Pressure for NHSS and Other Older Person Services from 2017 to 2027**

Demographic Cost Driver	2017 - 2020 <i>Population Aged 65+</i>	2021 - 2022 <i>Population Aged 65+</i>	2023 - 2027 <i>Population Aged 65+</i>
Avg. Annual Change in Persons	21,655	23,854	25,296
Avg. Change in Expenditure	€23m	€27m	€26m

**Figure 2: Average Annual Expenditure on NHSS and Older Person Services in the Short and Medium Term**



Sources: HSE (NHSS & Older Person data) and CSO (population estimates) updated by author to include Census 2016

<sup>7</sup> *Nursing Home Support Scheme (2015)*, by Tomás Campbell and Jenny Connors <http://igees.gov.ie/wp-content/uploads/2014/11/Nursing-Homes-Support-Scheme.pdf>

## **Other Considerations**

The number of people in the NHSS is expected to increase in the coming years, however this increased demand is not expected to translate into a dramatic rise in cost to the Exchequer. This development is expected to transpire due to; increased individual contributions as a result of increased wealth of new NHSS members, declining numbers of relatively expensive pre-scheme clients, and the possibility that the proportion of those in long-term care and not in the NHSS will grow with increased average incomes.

## 4. Breakdown of Education Cost Pressure Projections

### *Primary and Secondary Level Education*

#### Key Assumptions

- Expenditure projections are based on Department of Education and Skills report on [Projections of Full Time Enrolment, Primary and Second Level, 2015-2033](#)<sup>8</sup>. Expenditure combines additional teacher salaries and pupil capitation payments.
- Resource Teachers are excluded and the resulting Pupil Teacher Ratio is held constant for the duration.
- A core assumption is the extent to which new entrant salaries impact on average teacher unit cost.

**Table 6: Demographic Cost Pressure for Primary Education from 2017 - 2027**

<i>Demographic Cost Driver</i>	<b>2017-2020</b> <i>Primary School Population</i>	<b>2021-2022</b> <i>Primary School Population</i>	<b>2023-2027</b> <i>Primary School Population</i>
Avg. Annual Change in Persons	1,351	-9,459	-13,795
Avg. Change in Expenditure	€14m	€-27m	€-40m

**Table 7: Demographic Cost Pressure for Secondary Education from 2017 - 2027**

<i>Demographic Cost Driver</i>	<b>2017-2020</b> <i>Second Level Population</i>	<b>2021-2022</b> <i>Second Level Population</i>	<b>2023-2027</b> <i>Second Level Population</i>
Avg. Annual Change in Persons	5,738	8,378	2,742
Avg. Change in Expenditure	€23m	€38m	€16m

#### Other Considerations

The current demographic bulge is passing through the school system. Primary pupil enrolment is set to peak in 2018 and second level enrolment in 2025. There is a temporary need for additional teachers to meet the increasing participation, after peak enrolment, however, pupil numbers will begin to decline - along with the associated teacher requirement. This situation will present challenges, particularly around retirement, redeployment and recruitment.

<sup>8</sup> <https://www.education.ie/en/Publications/Statistics/Statistical-Reports/Projections-of-Full-Time-Enrolment-Primary-and-Second-Level-2015-2033.pdf>

## Third Level Education

### Key Assumptions

- Third level Exchequer funding (grants to Higher Education Institutions and Student Support payments) is averaged per full time student and held constant over the time frame. Expenditure projections are based on the S2 scenario in [Projections of Demand for Full Time Third Level Education, 2015 – 2029](#)<sup>9</sup>.
- Participation is expected to increase annually on the back of the previous strong demographic growth in the school system.

**Table 8: Demographic Cost Pressure for Third Level 2017 - 2027**

<i>Demographic Cost Driver</i>	<b>2017-2020</b> <i>Third Level Population</i>	<b>2021-2022</b> <i>Third Level Population</i>	<b>2023-2027</b> <i>Third Level Population</i>
Avg. Annual Change in Persons	2,199	2,832	3,457
Avg. Change in Expenditure	€17m	€21m	€26m

### Other Considerations

The Report on the Expert Group on Future Funding for Higher Education<sup>10</sup> was published in 2016. Of concern is: the scale of exchequer funding required to meet projected demand; the potential impact on quality if funding per student is allowed to decline; and how the current funding allocation model can be reformed.

## Special Needs (Resource Teachers)

### Key Assumptions

- The current percentage of Special Educational Needs pupils to total pupils and the ratio of Resource Teachers to mainstream teachers is held constant over the time frame. This allows Resource Teachers to increase in line with demographics. Special Needs Assistants and associated expenditure are currently excluded.
- Expenditure projections are based on the Department of Education and Skills report on [Projections of Full Time Enrolment, Primary and Second Level, 2015-2033](#).

<sup>9</sup> <http://www.education.ie/en/Publications/Statistics/Statistical-Reports/Projections-of-demand-for-full-time-Third-Level-Education-2015-2029.pdf>

<sup>10</sup> <http://www.education.ie/en/Publications/Policy-Reports/Investing-in-National-Ambition-A-Strategy-for-Funding-Higher-Education.pdf>

**Table 9: Demographic Cost Pressure for Special Needs at Primary and Secondary Level 2017 - 2027**

<i>Demographic Cost Driver for Primary Level</i>	<b>2017-2020</b> <i>Primary School Population</i>	<b>2021-2022</b> <i>Primary School Population</i>	<b>2023-2027</b> <i>Primary School Population</i>
Avg. Annual Change in Persons	71	-499	-728
Avg. Change in Expenditure	€1.5m	€-2.9m	€-5m
<i>Demographic Cost Driver for Secondary Level</i>	<b>2017-2020</b> <i>Second Level Population</i>	<b>2021-2022</b> <i>Second Level Population</i>	<b>2023-2027</b> <i>Second Level Population</i>
Avg. Annual Change in Persons	239	349	114
Avg. Change in Expenditure	€2.3m	€4m	€2.1m

### Other Considerations

Currently the number of Resource Teachers is growing at a faster rate than the general demographic increase. If that trend continues these projections can be seen as clarifying the underlying demographic component of the growth. Greater data is required to understand the drivers of demand in this area, and whether the current allocation system is optimal.

### *Early Childhood Care and Education (ECCE)<sup>11</sup>*

#### Key Assumptions

- The take up rate of the scheme was estimated at 95% and this estimation was held constant over the projection period. The projection also assumes the capitation cost per child is held constant.
- In Budget 2016, ECCE was extended to cover children from 3 or 3 and a half years until they start primary school or reach 5 and a half years. This came into effect in September 2016.

**Table 10: Demographic Cost Pressure ECCE from 2017 - 2027**

<i>Demographic Cost Driver</i>	<b>2017-2020</b> <i>All Eligible Age Cohorts</i>	<b>2021-2022</b> <i>All Eligible Age Cohorts</i>	<b>2023-2027</b> <i>All Eligible Age Cohorts</i>
Avg. Annual Change in Persons	-2,369	-3,018	-3,103

<sup>11</sup> ECCE is a scheme under Department of Children and Youth Affairs. It is included in Education here for presentation purposes only.

Avg. Change in Expenditure	€-6m	€-7.6m	€-7.8m
----------------------------	------	--------	--------

**Other Considerations**

Another principal cost driver of the scheme is staff qualification levels. Service providers are given a higher rate of capitation if staff have higher qualifications. In recent years, there has been an upward trend in those receiving the higher capitation grant. This could increase further as staff overall have higher qualification levels.

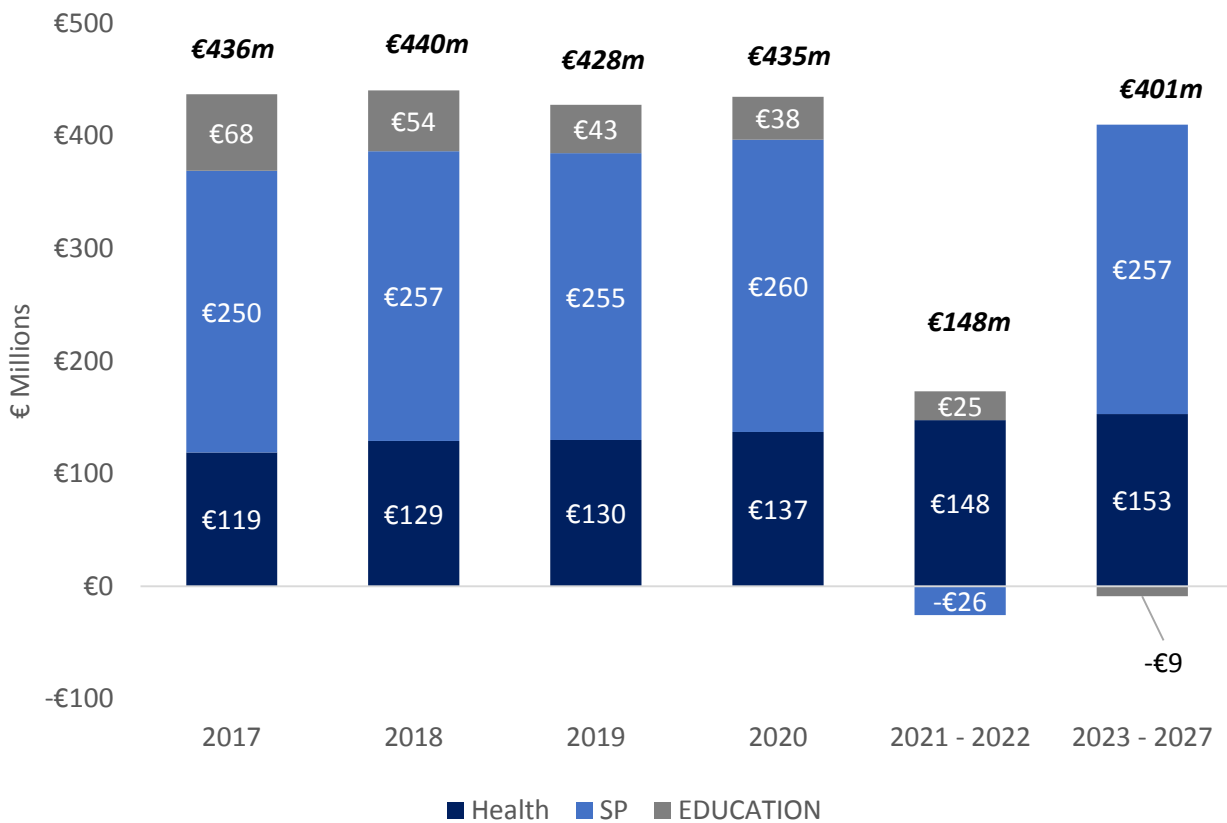
**5. Total Demographic Cost Pressure Projections 2017 - 2027**

**In the short term, from 2017 to 2020, pure demographic cost pressure across the three sectors is estimated to be between €428m to €440m annually.**

Over the next four years, 2017 to 2020, the total demographic cost pressure remains relatively stable. Demographic pressures in Health and Social Protection increase incrementally while pressures in Education (ECCE included) begin to ease due to the declining birth rate. In the medium term, 2021 to 2022, there is a large reduction in the overall demographic cost pressure, falling to an average annual demographic pressure of €148m. This significant fall off in cost is driven by Pension expenditure and is due to the change in policy underpinning the age of retirement. Based on legislation, the pensionable age will increase to 67+ in 2021.

The graph below illustrates annual demographic cost pressure projections broken down across the three sectors from 2017 - 2027.

**Figure 3: Annual Demographic Cost Pressure (€ millions) across Sectors, 2017 – 2027**



Sources: Sectorial expenditure data and CSO (population estimates) updated by authors to include Census 2016

**Tables 11 and 12** below illustrate the projections by service across all three sectors, Health, Social Protection and Education (including ECCE). The table outlines the number of additional persons for each demographic driver and the associated percentage change. It also sets out the additional expenditure required to support this pressure from 2017 to 2027. In some cases the corresponding demographic pressure has alleviated in turn delivering a reduction in spend.

**Table 11: Total Demographic Pressure in the Short Term 2017 - 2020**

		<i>Short Term Projection 2017 - 2020</i>												<b>2017 -2020</b>
<b>Sector</b>	<b>Demographic Driver</b>	<b>2017</b>			<b>2018</b>			<b>2019</b>			<b>2020</b>			<b>Annual Average Pressure €(m)</b>
		<i>Extra Persons (level)</i>	<i>% Change in Driver</i>	<i>Pressure €(m)</i>	<i>Extra Persons (level)</i>	<i>% Change in Driver</i>	<i>Pressure €(m)</i>	<i>Extra Persons (level)</i>	<i>% Change in Driver</i>	<i>Pressure €(m)</i>	<i>Extra Persons (level)</i>	<i>% Change in Driver</i>	<i>Pressure €(m)</i>	
<b>Children &amp; Young Adults</b>														
<i>Child Benefit</i>	0-18 years	10,070	1%	17.5	7,498	0.6%	12.9	4,467	0.4%	7.7	2,736	0%	4.7	11
<i>Childcare (ECCE)</i>	3 years to 5.5 years	-1,338	-1%	-3.4	-2,486	-1%	-6	-2,748	-2%	-7	-2,901	-2%	-7	-6
<i>Primary Level Education</i>	5-12 years	6,469	1%	31	4,092	1%	21	-458	0%	11	-5,516	-1%	-8	14
<i>Secondary Level Education</i>	12-19 years	4,526	1%	19.5	3,535	1%	19	6,397	2%	20	8,493	2%	32	23
<i>Third Level Education</i>	20-24 years	2,071	1%	15.6	2,122	1%	16	2,163	1%	16	2,440	1%	18.4	17
<b>Special Needs</b>														
<i>Primary Level</i>	5-12 (+ SEN)	341	1%	3	259	1%	2.2	-24	0%	1	-291	-1%	-0.8	1
<i>Secondary Level</i>	12-19 (+ SEN)	189	1%	2	147	1%	2	267	2%	2	354	2%	3	2.3
<b>Older People</b>														
<i>Pensions</i>	66+ (2016-2020); 67+ (2021-2027);	20,003	3%	232.5	21,035	3%	244.5	21,245	3%	247	21,956	3%	255	245
<i>NHSS &amp; Older Persons Services</i>	65+ & in the Scheme	20,104	3%	21.5	22,148	3%	24	21,446	3%	23	22,920	3%	25	23
<b>Whole Population</b>														
<i>PCRS - GMS (medical/GP cards)</i>	All ages	35,278	1%	35	38,950	1%	37.9	38,955	1%	38.7	39,037	1%	40.2	38
<i>PCRS - Non GMS</i>	All ages	35,278	1%	6.6	38,950	1%	6.8	38,955	1%	6.8	39,037	1%	7.2	6.8
<i>Acute Services</i>	All ages	35,278	1%	55.3	38,950	1%	60	38,955	1%	62	39,037	1%	65	61
<b>TOTAL</b>				<b>436</b>			<b>440</b>			<b>428</b>			<b>435</b>	<b>435</b>



**Table 12: Total Demographic Pressure in the Medium and Long Term 2021 - 2027**

		<i>Medium Term 2021 - 2022</i>			<i>Long Term 2023 -2027</i>		
<b>Sector</b>	<b>Demographic Driver</b>	<b>2021 - 2022</b>			<b>2023 - 2027</b>		
		<i>Average Annual Extra Persons (level)</i>	<i>Average Annual % Change in Driver</i>	<i>Average Annual Pressure €(m)</i>	<i>Average Annual Extra Persons (level)</i>	<i>Average Annual % Change in Driver</i>	<i>Average Annual Pressure €(m)</i>
<b>Children &amp; Young Adults</b>							
<i>Child Benefit</i>	0-18	-3,264	-0.3%	-5.6	-7,312	-0.6%	-12.7
<i>Childcare (ECCE)</i>	3 years to 5.5 years	-3,018	-2%	-7.6	-3,103	-3%	-7.8
<i>Primary Level Education</i>	5-12	-9,459	-2%	-27	-13,795	-3%	-40
<i>Secondary Level Education</i>	12-19	8,378	2%	38	2,742	1%	16
<i>Third Level Education</i>	20-24	2,832	1%	21	3,457	1%	26
<b>Special Needs</b>							
<i>Primary Level</i>	5-12 (+ SEN)	-542	-2%	-3	-728	-3%	-5
<i>Secondary Level</i>	12-19 (+SEN	349	2%	4	114	1%	2
<b>Older People</b>							
<i>Pensions</i>	66+ (2016-2020); 67+ (2021-2027);	-1,726	-0.2%	-20	23,196	3%	270
<i>NHSS &amp; Older Persons Services</i>	65+ & in the Scheme	23,854	3%	27	25,296	3%	26
<b>Whole Population</b>							
<i>PCRS - GMS (medical/GP cards)</i>	All age cohorts with Medical/GP cards	36,610	1%	42.5	34,742	1%	44.6
<i>PCRS - Non GMS (non-medical/GP cards)</i>	All age cohorts	36,610	1%	7	34,742	1%	7
<i>Acute Services</i>	All age cohorts	36,610	1%	71	34,742	1%	75
<b>TOTAL</b>				<b>148</b>			<b>401</b>

## 6. Conclusion

In the short term, the annual demographic cost pressure remains relatively static at an average of €435m. This is due to increased demographic pressures in Health and Social Protection being offset by a reduction in the pressure on schemes for children. Primarily driven by increasing numbers of elderly persons and fall in the number of births due to the declining fertility rate. The annual figure of €435m does not reflect actual increases in budgetary allocations as there are a variety of other factors influencing the actual level of expenditure. The annual budget allocation for each sector reflects the number of persons in receipt of services. However, the estimates provided in this paper are a useful tool for medium-term planning.

Looking toward the longer term projections, the main demographic pressure come from an ageing population in the form of increased requirements in the areas of Health, Social Care, and Pensions. The longer term spending projections are inherently uncertain and subject to upside and downside risks. Other factors also effect public expenditure such as, technological progress, the wider economic climate and changes to underlying policies. These elements are difficult to forecast in the longer term.