



Teacher Demand Projections and Costs

There is a data visualisation presenting teacher demand and cost data to accompany this note, available [here](#).

This note looks at National level overall demand for teachers at primary and post-primary level over the next 15 years¹. The data in the dashboard also show potential supply of teachers. A number of issues in this area are not looked at in this note. The demand for teachers of individual subjects at post-primary level is not included. Detailed data on this are not openly available. Demand for teachers by region and County is also not included. Despite reports of teacher shortages in some areas, possibly linked to housing supply in those areas, less data are available at this level and this note looks at the National data only. Central Statistics Office population projection data are used in this note. However, it is widely acknowledged that these projections require updating to account for recent changes in the population structure². In addition, data on retirements and resignations are taken directly from the Department of Education's report in 2021. These data may also require updating when the Department of Education release new analysis. Special Needs Assistants (SNAs) are not included in Pupil-Teacher-Ratios. Government policy may be to increase SNA numbers significantly in the coming years. Although this will not impact Pupil-Teacher-Ratios, it may impact the quality of education received, particularly for more vulnerable students. The main focus of this note is the National level demand for teachers, and associated costs, linked to population changes and potential policy changes to Pupil-Teacher-Ratios. Reduced Pupil-Teacher-Ratios will not necessarily lead to improved outcomes and this note does not attempt to tackle the complex relationship between Pupil-Teacher-Ratios and educational outcomes. The PBO is not advocating any particular policy approach; the analysis is simply designed to show potential costs of different policy options re Pupil-Teacher-Ratios in the coming years.

Key Messages

- Understanding future costs and demographic issues can provide additional context when considering public services. The PBO have provided the following analysis, in addition to Department of Education modelling, to illustrate the costs of teaching staff, and the potential impact of policy changes.
- Central Statistics Office population projection data suggest that primary pupil numbers may have peaked in 2019/2020 and that post-primary pupil numbers may peak around 2026, with substantial drops in school pupil numbers after these years (up to 2038 in this analysis). These changing demographics will have a significant impact on the demand for teachers.
- Current data on the supply of teachers (Teaching Council registration data and teacher graduate numbers from the Higher Education Authority) suggest that there may be a substantial oversupply of teachers in the coming years, if Pupil-Teacher-Ratios are unchanged.
- Current Pupil-Teacher-Ratios in Ireland (13.7 at primary and 12.2 at post-primary level) compare favourably to some OECD Countries, but lag behind many others. Leading Countries in this area have ratios as low as 9-10. The OECD averages in 2020 were 14.4 and 13.6 at primary and post-primary level respectively.
- The cost of a teacher in this note follows the Public Spending Code approach to staff costs in the Public Service. The estimated costs are €89,458 and €91,479 for a primary and post-primary teacher respectively. These estimates include pension, PRSI and overhead costs. It should be noted that the Department of Education take a different approach, using the average new entrant payroll cost of a teacher when assessing the cost of reducing Pupil-Teacher-Ratios.
- The total additional cost over the 15-year period to 2038 to incrementally reduce ratios in Ireland to 9, the lowest across the OECD, are estimated at circa €11bn at primary level and circa €7.3bn at post-primary level (baseline costs are estimated at €49bn and €46.5bn at primary and post-primary levels respectively, the costs with reduced Pupil-Teacher-Ratios are estimated at €60bn and €53.8bn). These costs are in 2023 terms, are based on the full Public Spending Code approach to staff costs (including pension, overhead and PRSI costs) and are based on gross demand, i.e. teacher allocation numbers determined by population and Pupil-Teacher-Ratios, not looking at retirements, resignations and supply.

¹ The PBO acknowledges the assistance of the Department of Education when preparing this note, via provision of data and dealing with queries relating to the Department's own model of teacher demand and supply. All analyses and commentary in this note are the responsibility of the PBO, not the Department of Education. Please note capital costs associated with reducing Pupil-Teacher-Ratios are not considered in this analysis.

² For example, Central Statistics Office data show that 9,484 Ukrainians have enrolled at primary level in Ireland for the 2022/2023 academic year and that 5,202 have enrolled at post-primary level. In addition, general migration and fertility assumptions may need to be updated.



Glossary

CSO	Central Statistics Office
DoE	Department of Education
HEA	Higher Education Authority
PSC	Public Spending Code
PTR	Pupil-Teacher-Ratio

Introduction

Teacher demand, supply and associated costs are a key consideration from an education policy and public expenditure perspective. Demographics are changing rapidly in Ireland, leading to a potential oversupply of teachers, if current Pupil-Teacher-Ratios (PTRs) and teacher supply remain constant. However, Ireland is behind many OECD Countries in terms of PTRs and, as an increasingly wealthy Country, Government may opt to pursue substantial reductions in PTRs in the coming years. This note looks at some of the key issues in this area – demographics, PTRs, the costs of teachers and the cumulative cost of reducing PTRs. Other key issues are not included due to a lack of detailed data at this point – specifically, demand at post-primary level by subject³.

Department of Education Teacher Demand and Supply Model

The Department of Education (DoE) published a paper outlining an updated teacher demand and supply model in May 2021⁴. Teacher demand is based on demographics and teacher retirements/resignations, in addition to the Pupil-Teacher-Ratio (PTR). The PTR at both primary and post-primary level are held constant in the analysis at the most recent values available at the time DoE published the paper (14.5 at primary level and 12.3 at post-primary level)⁵. Allocated teacher numbers are calculated by dividing pupil numbers by the PTR. Supply data are taken from Teaching Council registrations (graduate numbers are also considered). The DoE's full model is as follows:

Change in allocated teacher numbers (arising from change in pupil numbers) + teacher retirements + teacher resignations – new Teaching Council registrations = projected teacher gap

Overall, the DoE analysis shows that, although there is demand for primary teachers over the period 2021 – 2038 (driven by retirements and resignations), supply largely outstrips demand leading to potential excess supply⁶. This is based on estimated annual supply of 1,750 primary teachers⁷. The picture at post-primary level is somewhat similar – despite demand for post-primary teachers, driven by retirements and resignations, there may be excess supply based on estimated annual supply of 1,900 teachers⁸.

³ In addition, this note looks at Pupil-Teacher-Ratios, for a comprehensive overview of teacher allocations and staffing schedules, as distinct from Pupil-Teacher-Ratios, please see the [2020 Spending Review Paper on the Teacher Allocation Model](#).

⁴ [Developing a Teacher Demand and Supply Model for Ireland 2021-2038, A Technical Report, Department of Education May 2021](#).

⁵ The PTR is the number of pupils to the number of teaching staff, including non-mainstream teaching staff. Therefore, the PTR is considerably different to class size. The most recent data from the CSO/DoE show that the PTRs at primary and post-primary levels are 13.7 and 12.2 respectively (2022).

⁶ See Table 11 of the [DoE report](#).

⁷ Data received by the Parliamentary Budget Office from the Higher Education Authority (HEA) show that supply numbers based on annual graduations may now be less than this figure, even factoring in Hibernia College and Marino Institute of Education which are not included in HEA data.

⁸ The data visualisation accompanying this note allows users to conduct sensitivity analysis on annual supply numbers.

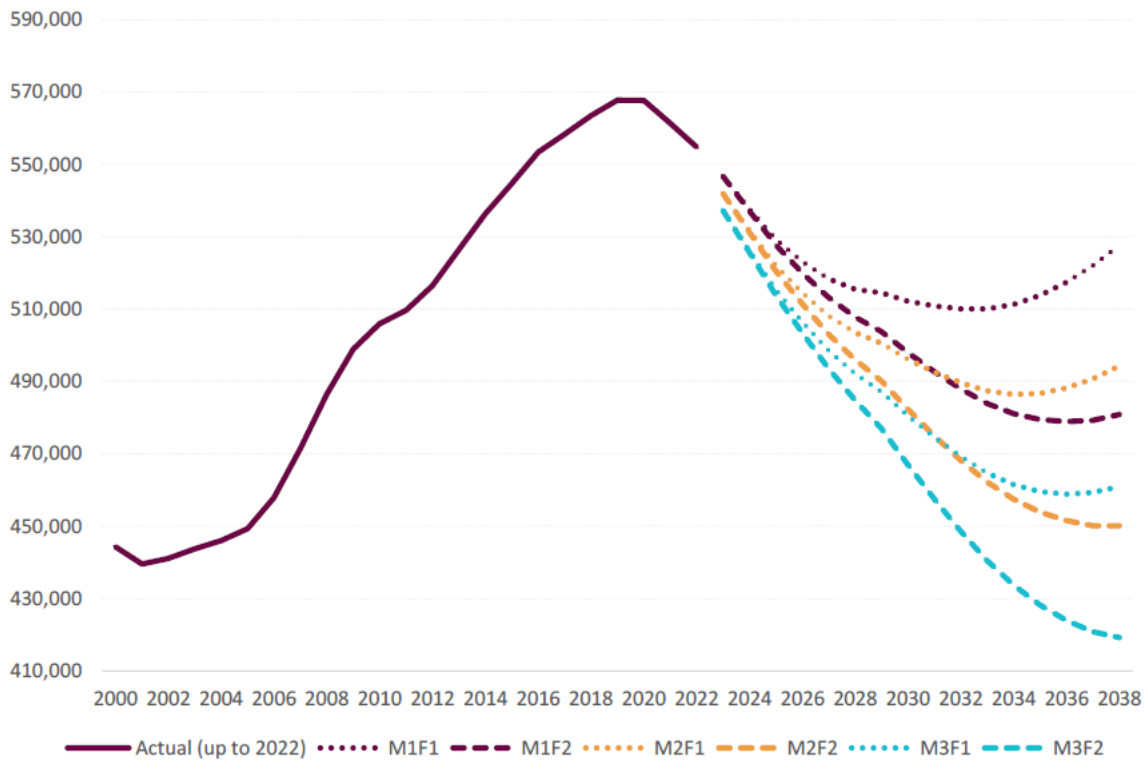


Demographics

Central Statistics Office (CSO) population projection data are used in the DoE analysis and the analysis presented in this note. Projections are currently being updated, current data do not account for recent changes to the population structure in Ireland. Therefore, analysis in this note will require revision once the updated data are available. Six population scenarios are considered by the CSO, based on two rates of fertility and three rates of migration, as follows: The fertility rates are F1: Constant 1.8 rate over the period & F2: Rate decreases to 1.6 in 2031. The migration rates are (all net inward per year) - M1: 30,000, M2: 20,000 & M3: 10,000.

The primary pupil population likely peaked around 2019/2020 at circa 568,000 pupils. The population is set to fall substantially in the coming years; even the most optimistic population projections do not forecast increases until well into the 2030s. Figure 1 below refers.

Figure 1: Primary Pupil Population, Actual and Projected, 2000 - 2038⁹



Source: Author's analysis of CSO/DoE Data

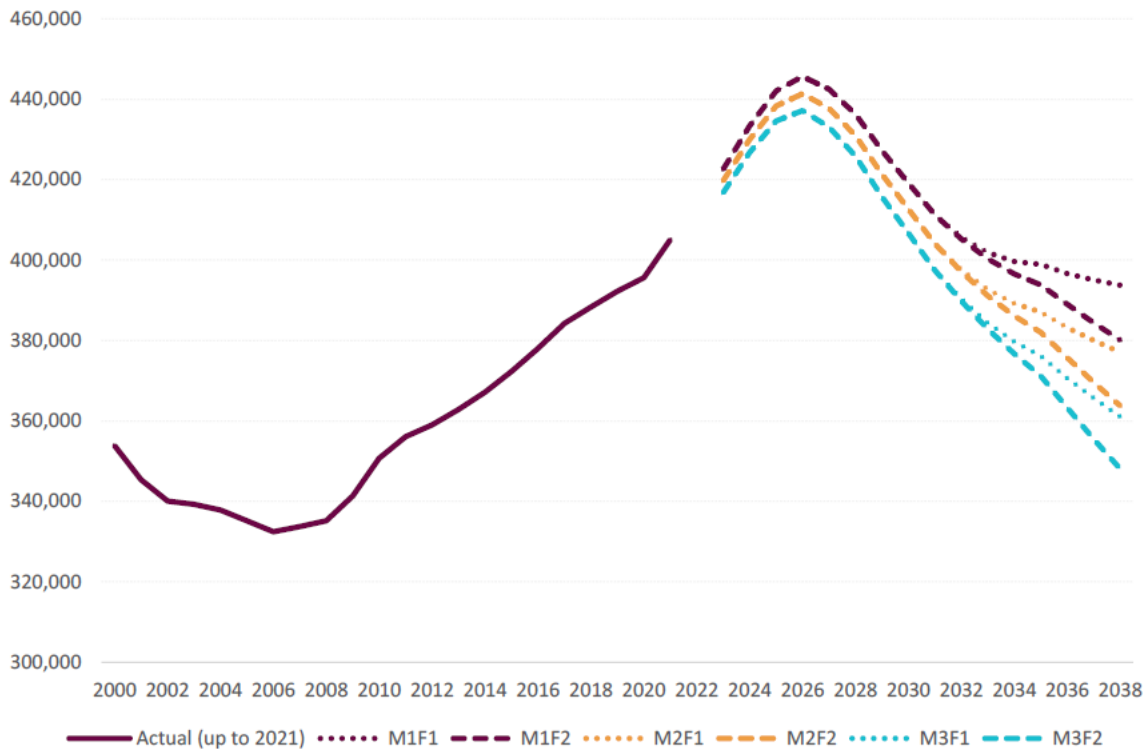
The post-primary pupil population is set to peak around 2026, based on current CSO population projections, before falling over the entire period to 2038 according to all six population scenarios (Figure 2 overleaf)¹⁰.

⁹ Actual numbers up to 2022 and projections up to 2038, taken from the CSO database. For the purposes of this analysis, primary pupil projections are of those aged 5 – 12, post-primary pupil projections are of those aged 13 – 18. Actual data are DoE data provided to the CSO, projection data are taken from CSO population projections.

¹⁰ Actual numbers up to 2021 and projections up to 2038, taken from the CSO database. Actual data are DoE data provided to the CSO, projection data are taken from CSO population projections.



Figure 2: Post-Primary Pupil Population, Actual and Projected, 2000 – 2038



Source: Author’s analysis of CSO/DoE Data

Pupil-Teacher-Ratios

OECD data¹¹ show that Ireland had a below average PTR¹² at primary level in 2020 (14.9 compared to the OECD average of 14.4). Although data for Ireland are not published by the OECD at post-primary level for 2020, CSO/DoE data show that Ireland had an above average PTR in 2020, compared to other OECD Countries (12.8 compared to the OECD average of 13.6)¹³. The leading Countries at primary level include Greece, Luxembourg, Norway, Poland, Slovenia and Iceland, all with PTRs at or below 10.5.

The leading Countries at post-primary level include Greece, Luxembourg, Portugal, Belgium, Austria, Slovenia, Norway and Lithuania, all with PTRs below 10. The leading Countries at post-primary level include Greece, Luxembourg, Portugal, Belgium, Austria, Slovenia, Norway and Lithuania, all with PTRs below 10.

Figures 3 and 4 overleaf, refer.

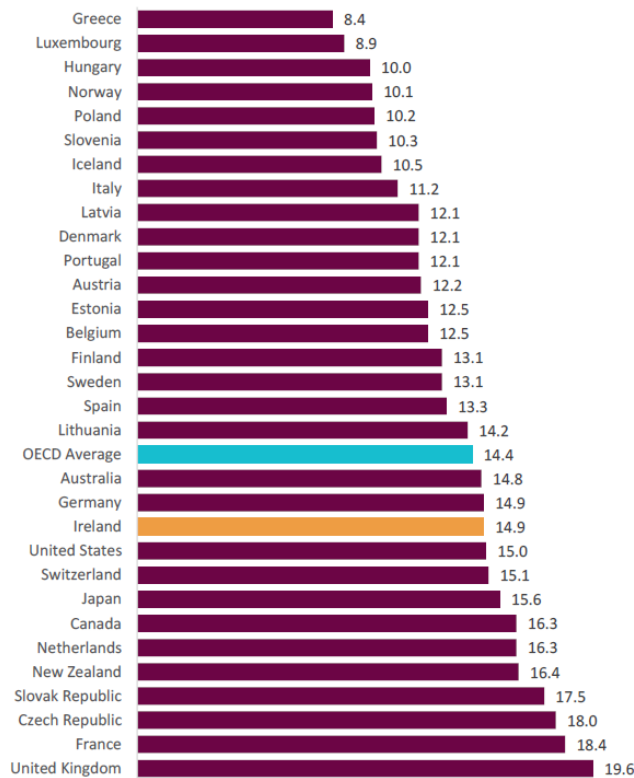
¹¹ OECD students per teaching Staff ratio data, taken from the OECD Database.

¹² PTRs include mainstream teachers and non-mainstream teaching staff, e.g. special education teachers, but do not include Special Needs Assistants (SNAs) and other aides. The OECD definition is as follows: Teachers refer to professional personnel directly involved in teaching students: classroom teachers, special education teachers and other teachers who work with students as a whole class in a classroom, in small groups in a resource room, or in one-to-one teaching inside or outside a regular classroom. This does not include teachers’ aides and other paraprofessional personnel.

¹³ However, the overall OECD average at post-primary level in 2020 was pulled upwards by high PTRs in Chile, Colombia and Mexico. At 12.8 in 2020 (CSO/DoE data), Ireland was behind most other OECD Countries.

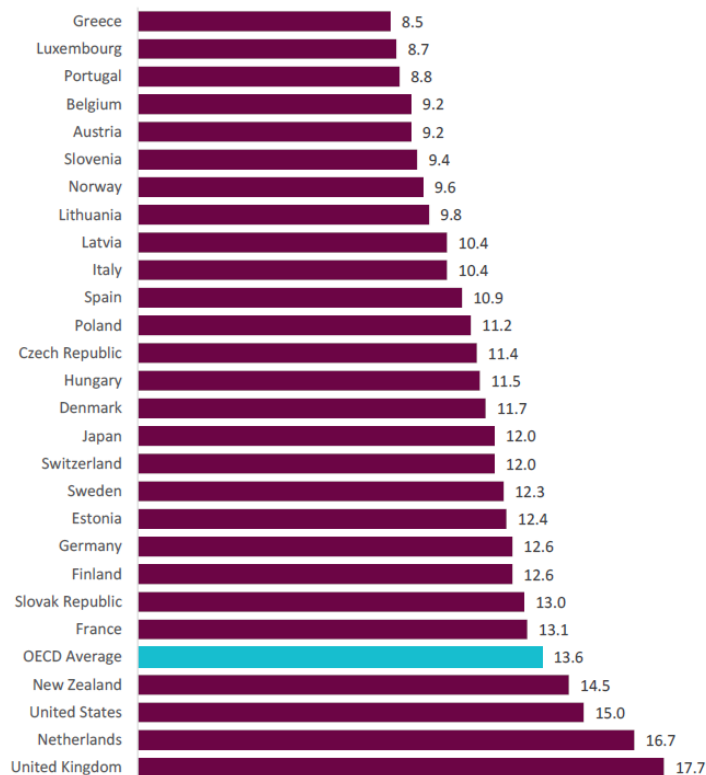


Figure 3: Primary Pupil Teacher Ratios Across the OECD, 2020



Source: Author's analysis of OECD Data

Figure 4: Post-Primary Pupil Teacher Ratios Across the OECD, 2020

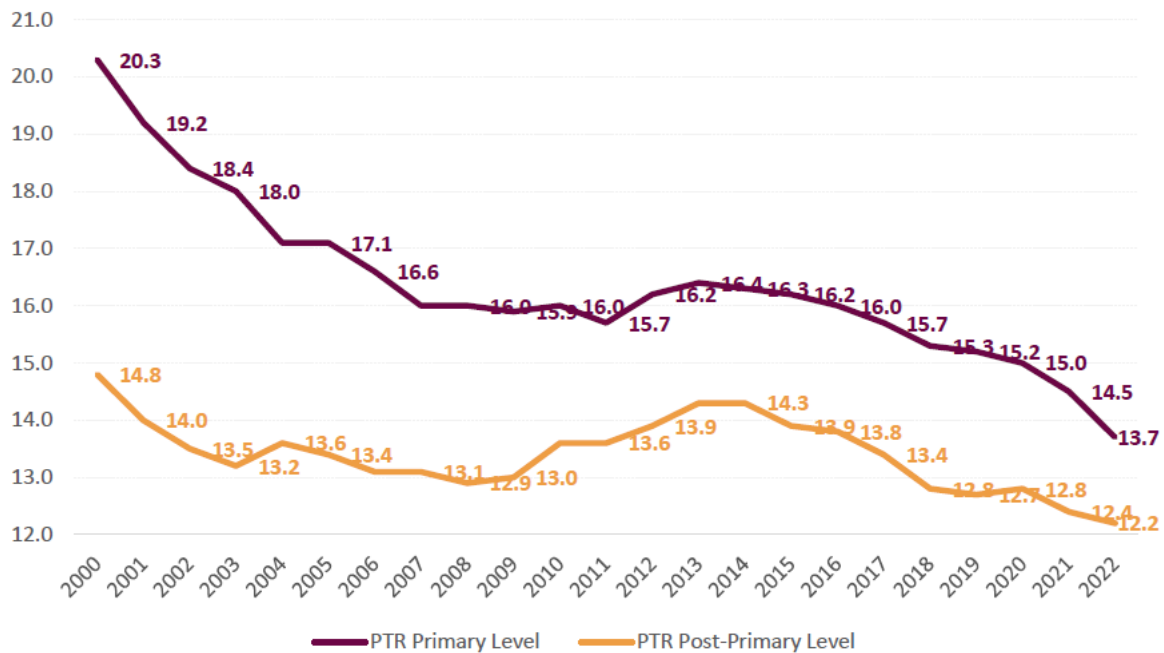


Source: Author's analysis of OECD Data



CSO/DoE data¹⁴ show that the PTRs have fallen substantially in Ireland, at both primary and post-primary level, since 2000, despite increasing for a few years in the aftermath of the big recession. However, Ireland still lags behind many other European and OECD Countries – some have PTRs at 9 and below. Figure 5 below shows the PTR trend in Ireland since 2000, at both primary and post-primary level.

Figure 5: Pupil Teacher Ratios, Ireland 2000 – 2022



Source: Author’s analysis of CSO/DoE Data

Cost of a Teacher

The cost of a teacher used in this analysis follows the Public Spending Code (PSC) guidelines¹⁵, using the salary scale median (midpoint)¹⁶, and includes PRSI, pension and overhead costs. DoE use a substantially different approach to the cost of teachers when providing political party costings of reductions in PTRs. Budget 2023 costings data show that DoE use amounts that are only 57% and 55% of the primary and post-primary teacher costs, respectively, calculated using the Public Spending Code approach. Therefore, overall costs presented in this note are significantly more than would be the case if the DoE costs of a teacher were used. Table 1 below shows the estimated cost of a teacher based on the PSC approach.

Table 1: Cost of a Teacher, 2023 – Public Spending Code Approach

Cost Element	Primary Teacher	Post-Primary Teacher
Payscale Median	€61,674	€63,067
PRSI (11.05%)	€6,815	€6,969
Pension (9%)	€5,551	€5,676
Overheads (25%)	€15,419	€15,767
TOTAL	€89,458	€91,479

¹⁴ CSO/DoE PTR data & DoE Indicators data.

¹⁵ Public Spending Code staff cost guidelines.

¹⁶ Teacher payscales, March 2023.



Analysis of Projected Teacher Demand and Costs

The interactive data visualisation should be used in conjunction with the analysis below for a comprehensive overview of these data, available [here](#).

Various scenarios are shown below at primary and post-primary level, based on current and potential target Pupil-Teacher-Ratios. Targets are based on PTRs requested in political party costings¹⁷ and PTRs in OECD countries with the lowest PTRs overall. The M1F2 population scenario is used for these scenario examples. Retirement/resignation data are taken from the DoE data.

Primary Level

Table 2 below shows the demand and costs associated with maintaining the current PTR of 13.7 at primary level, over the period 2024 – 2038. Despite population-driven reduced demand for primary teachers over the period, excess demand will increase in later years due to a projected increase in retirements (projected net demand comprises the additional number required due to demographic changes plus the replacement of those retiring and resigning). Annual supply is shown here at a constant 1,750, actual supply may be less based on data provided by the HEA. Costs shown are estimates for the purpose of this additional cost analysis only and are based on the Public Spending Code method of estimating staff costs (pension, PRSI and overhead costs included). The actual staff paybill will vary substantially.

Table 2: Primary Teacher Demand and Costs at Constant PTR, 2024-2038

Year	Revised Pupil-Teacher-Ratio	Demand at Constant PTR (13.7)	Projected Gross Demand (based on revised PTR)	Projected Net Demand	Projected Supply	Excess Demand	Total Cost of Teachers Revised PTR	Total Cost of Teachers Constant PTR	Additional Cost of Reducing PTR
2024	13.7	39,206	39,206	281	1,750	-1,469	€3,507m	€3,507m	€0m
2025	13.7	38,520	38,520	283	1,750	-1,467	€3,446m	€3,446m	€0m
2026	13.7	37,959	37,959	384	1,750	-1,366	€3,396m	€3,396m	€0m
2027	13.7	37,462	37,462	439	1,750	-1,311	€3,351m	€3,351m	€0m
2028	13.7	37,070	37,070	546	1,750	-1,204	€3,316m	€3,316m	€0m
2029	13.7	36,775	36,775	649	1,750	-1,101	€3,290m	€3,290m	€0m
2030	13.7	36,352	36,352	542	1,750	-1,208	€3,252m	€3,252m	€0m
2031	13.7	35,966	35,966	621	1,750	-1,129	€3,217m	€3,217m	€0m
2032	13.7	35,616	35,616	739	1,750	-1,011	€3,186m	€3,186m	€0m
2033	13.7	35,322	35,322	896	1,750	-854	€3,160m	€3,160m	€0m
2034	13.7	35,119	35,119	1,112	1,750	-638	€3,142m	€3,142m	€0m
2035	13.7	34,999	34,999	1,328	1,750	-422	€3,131m	€3,131m	€0m
2036	13.7	34,958	34,958	1,545	1,750	-205	€3,127m	€3,127m	€0m
2037	13.7	34,982	34,982	1,754	1,750	4	€3,129m	€3,129m	€0m
2038	13.7	35,101	35,101	1,971	1,750	221	€3,140m	€3,140m	€0m
								Total Additional Cost	€0m

Source: Author's analysis of CSO and DoE Data, all costs are shown in 2023 terms

Table 3 overleaf shows the demand and costs associated with reducing the current PTR of 13.7 at primary level to 11.7 by 2038 in incremental steps, over the period 2024 – 2038. The total cost of this two-point reduction in the PTR over the period is circa €3bn, in simple 2023 terms.

¹⁷ Political Party Costings, Budget 2023; the requests were received from Sinn Féin and involved a reduction in the primary PTR by 2 points and the post-primary PTR by 1 point.



Table 3: Primary Teacher Demand and Costs at Revised PTR A, 2024 - 2038

Year	Revised Pupil-Teacher-Ratio	Demand at Constant PTR (13.7)	Projected Gross Demand (based on revised PTR)	Projected Net Demand	Projected Supply	Excess Demand	Total Cost of Teachers Revised PTR	Total Cost of Teachers Constant PTR	Additional Cost of Reducing PTR
2024	13.7	39,206	39,206	281	1,750	-1,469	€3,507m	€3,507m	€0m
2025	13.6	38,520	38,803	566	1,750	-1,184	€3,471m	€3,446m	€25m
2026	13.6	37,959	38,238	380	1,750	-1,370	€3,421m	€3,396m	€25m
2027	13.5	37,462	38,017	715	1,750	-1,035	€3,401m	€3,351m	€50m
2028	13.5	37,070	37,619	540	1,750	-1,210	€3,365m	€3,316m	€49m
2029	13.4	36,775	37,598	923	1,750	-827	€3,363m	€3,290m	€74m
2030	13.3	36,352	37,445	812	1,750	-938	€3,350m	€3,252m	€98m
2031	13.1	35,966	37,613	1,175	1,750	-575	€3,365m	€3,217m	€147m
2032	12.9	35,616	37,825	1,301	1,750	-449	€3,384m	€3,186m	€198m
2033	12.7	35,322	38,103	1,468	1,750	-282	€3,409m	€3,160m	€249m
2034	12.5	35,119	38,490	1,702	1,750	-48	€3,443m	€3,142m	€302m
2035	12.3	34,999	38,983	1,941	1,750	191	€3,487m	€3,131m	€356m
2036	12.1	34,958	39,581	2,184	1,750	434	€3,541m	€3,127m	€414m
2037	11.9	34,982	40,273	2,422	1,750	672	€3,603m	€3,129m	€473m
2038	11.7	35,101	41,101	2,680	1,750	930	€3,677m	€3,140m	€537m
								Total Additional Cost	€2,996m

Source: Author's analysis of CSO and DoE Data, all costs are shown in 2023 terms

Table 4: Primary Teacher Demand and Costs at Revised PTR B, 2024 - 2038

Year	Revised Pupil-Teacher-Ratio	Demand at Constant PTR (13.7)	Projected Gross Demand (based on revised PTR)	Projected Net Demand	Projected Supply	Excess Demand	Total Cost of Teachers Revised PTR	Total Cost of Teachers Constant PTR	Additional Cost of Reducing PTR
2024	13.4	39,206	40,084	1,159	1,750	-591	€3,586m	€3,507m	€79m
2025	13.1	38,520	40,284	1,169	1,750	-581	€3,604m	€3,446m	€158m
2026	12.8	37,959	40,628	1,289	1,750	-461	€3,635m	€3,396m	€239m
2027	12.5	37,462	41,058	1,366	1,750	-384	€3,673m	€3,351m	€322m
2028	12.2	37,070	41,628	1,508	1,750	-242	€3,724m	€3,316m	€408m
2029	11.9	36,775	42,338	1,654	1,750	-96	€3,787m	€3,290m	€498m
2030	11.6	36,352	42,933	1,560	1,750	-190	€3,841m	€3,252m	€589m
2031	11.3	35,966	43,605	1,679	1,750	-71	€3,901m	€3,217m	€683m
2032	11.0	35,616	44,358	1,842	1,750	92	€3,968m	€3,186m	€782m
2033	10.7	35,322	45,225	2,057	1,750	307	€4,046m	€3,160m	€886m
2034	10.4	35,119	46,263	2,353	1,750	603	€4,139m	€3,142m	€997m
2035	10.1	34,999	47,474	2,659	1,750	909	€4,247m	€3,131m	€1,116m
2036	9.8	34,958	48,870	2,982	1,750	1,232	€4,372m	€3,127m	€1,245m
2037	9.4	34,982	50,983	3,843	1,750	2,093	€4,561m	€3,129m	€1,431m
2038	9.0	35,101	53,432	4,301	1,750	2,551	€4,780m	€3,140m	€1,640m
								Total Additional Cost	€11,071m

Source: Author's analysis of CSO and DoE Data, all costs are shown in 2023 terms

Table 4 above shows the demand and costs associated with reducing the current PTR of 13.7 at primary level to 9 by 2038 in incremental steps, over the period 2024 – 2038.

The total cost of this reduction in the PTR, to match the lowest PTRs across the OECD, over the period is circa €11bn, in simple 2023 terms.

Post-Primary Level

Table 5 overleaf shows the demand and costs associated with maintaining the current PTR of 12.2 at post-primary level, over the period 2024 – 2038. Due to demographic trends, projected net demand is high in the next few years, then falls substantially due to the demographic trends changing, before rising again slightly at the end of this period due to increasing projected retirements.

Current supply levels at post-primary level may lead to substantial over-supply in years to come. However, the demand/supply dynamic at post-primary level is more complex than at primary level due to subject specialisation at post-primary level. For instance, overall demand figures may mask an oversupply of English teachers and an undersupply of Mathematics teachers. This note looks at the broad level only as sufficiently detailed data at subject level are not yet available.



Table 5: Post-Primary Teacher Demand and Costs at Constant PTR, 2024 - 2038

Year	Revised Pupil-Teacher-Ratio	Demand at Constant PTR (12.2)	Projected Gross Demand (based on revised PTR)	Projected Net Demand	Projected Supply	Excess Demand	Total Cost of Teachers Revised PTR	Total Cost of Teachers Constant PTR	Additional Cost of Reducing PTR
2024	12.2	35,518	35,518	1,771	1,900	-129	€3,249m	€3,249m	€0m
2025	12.2	36,235	36,235	1,628	1,900	-272	€3,315m	€3,315m	€0m
2026	12.2	36,527	36,527	1,205	1,900	-695	€3,341m	€3,341m	€0m
2027	12.2	36,272	36,272	664	1,900	-1,236	€3,318m	€3,318m	€0m
2028	12.2	35,757	35,757	424	1,900	-1,476	€3,271m	€3,271m	€0m
2029	12.2	35,020	35,020	215	1,900	-1,685	€3,204m	€3,204m	€0m
2030	12.2	34,357	34,357	306	1,900	-1,594	€3,143m	€3,143m	€0m
2031	12.2	33,708	33,708	334	1,900	-1,566	€3,084m	€3,084m	€0m
2032	12.2	33,218	33,218	514	1,900	-1,386	€3,039m	€3,039m	€0m
2033	12.2	32,814	32,814	628	1,900	-1,272	€3,002m	€3,002m	€0m
2034	12.2	32,506	32,506	753	1,900	-1,147	€2,974m	€2,974m	€0m
2035	12.2	32,279	32,279	866	1,900	-1,034	€2,953m	€2,953m	€0m
2036	12.2	31,884	31,884	723	1,900	-1,177	€2,917m	€2,917m	€0m
2037	12.2	31,507	31,507	770	1,900	-1,130	€2,882m	€2,882m	€0m
2038	12.2	31,155	31,155	812	1,900	-1,088	€2,850m	€2,850m	€0m
								Total Additional Cost	€0m

Source: Author's analysis of CSO and DoE Data, all costs are shown in 2023 terms

Table 6 below shows the demand and costs associated with reducing the current PTR of 12.2 at post-primary level to 11.2 by 2038 in incremental steps, over the period 2024 – 2038. The total cost of this one-point reduction in the PTR over the period is circa €2bn, in simple 2023 terms.

Table 6: Post-Primary Teacher Demand and Costs at Revised PTR A, 2024 - 2038

Year	Revised Pupil-Teacher-Ratio	Demand at Constant PTR (12.2)	Projected Gross Demand (based on revised PTR)	Projected Net Demand	Projected Supply	Excess Demand	Total Cost of Teachers Revised PTR	Total Cost of Teachers Constant PTR	Additional Cost of Reducing PTR
2024	12.2	35,518	35,518	1,771	1,900	-129	€3,249m	€3,249m	€0m
2025	12.1	36,235	36,534	1,927	1,900	27	€3,342m	€3,315m	€27m
2026	12.0	36,527	37,136	1,515	1,900	-385	€3,397m	€3,341m	€56m
2027	12.0	36,272	36,877	660	1,900	-1,240	€3,373m	€3,318m	€55m
2028	11.9	35,757	36,658	720	1,900	-1,180	€3,353m	€3,271m	€82m
2029	11.8	35,020	36,207	501	1,900	-1,399	€3,312m	€3,204m	€109m
2030	11.8	34,357	35,522	284	1,900	-1,616	€3,250m	€3,143m	€107m
2031	11.7	33,708	35,148	609	1,900	-1,291	€3,215m	€3,084m	€132m
2032	11.6	33,218	34,936	792	1,900	-1,108	€3,196m	€3,039m	€157m
2033	11.6	32,814	34,511	607	1,900	-1,293	€3,157m	€3,002m	€155m
2034	11.5	32,506	34,484	1,034	1,900	-866	€3,155m	€2,974m	€181m
2035	11.4	32,279	34,544	1,153	1,900	-747	€3,160m	€2,953m	€207m
2036	11.4	31,884	34,122	696	1,900	-1,204	€3,121m	€2,917m	€205m
2037	11.3	31,507	34,016	1,041	1,900	-859	€3,112m	€2,882m	€230m
2038	11.2	31,155	33,937	1,085	1,900	-815	€3,105m	€2,850m	€254m
								Total Additional Cost	€1,957m

Source: Author's analysis of CSO and DoE Data, all costs are shown in 2023 terms



Table 7: Post-Primary Teacher Demand and Costs at Revised PTR B, 2024 - 2038

Year	Revised Pupil-Teacher-Ratio	Demand at Constant PTR (12.2)	Projected Gross Demand (based on revised PTR)	Projected Net Demand	Projected Supply	Excess Demand	Total Cost of Teachers Revised PTR	Total Cost of Teachers Constant PTR	Additional Cost of Reducing PTR
2024	12.2	35,518	35,518	1,771	1,900	-129	€3,249m	€3,249m	€0m
2025	11.9	36,235	37,148	2,541	1,900	641	€3,398m	€3,315m	€84m
2026	11.7	36,527	38,088	1,853	1,900	-47	€3,484m	€3,341m	€143m
2027	11.5	36,272	38,480	1,311	1,900	-589	€3,520m	€3,318m	€202m
2028	11.2	35,757	38,949	1,408	1,900	-492	€3,563m	€3,271m	€292m
2029	11.0	35,020	38,840	843	1,900	-1,057	€3,553m	€3,204m	€349m
2030	10.8	34,357	38,811	940	1,900	-960	€3,550m	€3,143m	€407m
2031	10.6	33,708	38,795	967	1,900	-933	€3,549m	€3,084m	€465m
2032	10.4	33,218	38,967	1,176	1,900	-724	€3,565m	€3,039m	€526m
2033	10.1	32,814	39,636	1,701	1,900	-199	€3,626m	€3,002m	€624m
2034	9.9	32,506	40,057	1,482	1,900	-418	€3,664m	€2,974m	€691m
2035	9.7	32,279	40,598	1,634	1,900	-266	€3,714m	€2,953m	€761m
2036	9.5	31,884	40,946	1,466	1,900	-434	€3,746m	€2,917m	€829m
2037	9.3	31,507	41,332	1,533	1,900	-367	€3,781m	€2,882m	€899m
2038	9.0	31,155	42,233	2,065	1,900	165	€3,863m	€2,850m	€1,013m
								Total Additional Cost	€7,285m

Source: Author's analysis of CSO and DoE Data, all costs are shown in 2023 terms

Table 7 above shows the demand and costs associated with reducing the current PTR of 12.2 at post-primary level to 9 by 2038 in incremental steps, over the period 2024 – 2038. The total cost of this reduction in the PTR, to match the lowest PTRs across the OECD, over the period is circa €7.3bn, in simple 2023 terms.

Summary

Ireland compares favourably to some but lags behind many other OECD Countries in terms of Pupil-Teacher-Ratios at primary and post-primary level. The lowest ratios across the OECD Countries are in Greece, where PTRs at both primary and post-primary level are below 9. The PTRs in Ireland in 2022 were 13.7 and 12.2 at primary and post-primary level respectively. To reach a PTR of 9 at primary level over the next 15 years may cost circa €11bn in 2023 cost terms. To reach a PTR of 9 at post-primary level over the next 15 years may cost circa €7.3bn in 2023 cost terms. At current PTR levels, there is likely to be an oversupply of teachers at both levels in the next 15 years, even when factoring in the replacement of increasing numbers of retirements. This is driven by changing demographics, with current population projections suggesting that primary pupil numbers peaked a few years back and post-primary numbers will peak in the next few years. However, population projections are currently being updated by the CSO to account for new data and changes to migration and fertility patterns, e.g. Ukrainian immigration. Overall demand and supply analysis also masks the varying demand at post-primary level across subjects. Detailed data are not yet openly available to allow for demand analysis of this nature by subject. There may be an issue in the coming years with excess teacher demand in subjects such as Gaeilge, Home Economics and Modern European Languages and an oversupply in subjects such as History, Geography and English¹⁸. This note does not look at educational outcomes, which do not necessarily improve with reduced PTRs. The issue of a regional demand imbalance is also not analysed in this note, again a lack of current data does not allow for such analysis. It should be noted that SNA numbers may be increased significantly in the coming years but do not impact PTRs, despite having an impact on the number of staff available to support disadvantaged students. These topics will require further analysis when data are available.

¹⁸ Striking the Balance, Teacher Supply in Ireland: Technical Working Group Report, December 2015.



Appendix

Tables 2 – 7 in the above note look at three scenarios at primary and three scenarios at post-primary level involving reductions in the PTR. Tables 2 and 5 show the no change scenarios at both levels. At primary level, using the PSC approach to staff costs, the cost of a teacher is estimated at €89,458 per annum. At post-primary level, using the PSC approach to staff costs, the cost of a teacher is estimated at €91,479 per annum. However, the DoE use the average payroll cost of new teachers in their costings of reductions in the PTR¹⁹. Their estimates of the cost of a teacher are €50,871 and €50,327 per annum at primary and post-primary level respectively.

Table 8: PSC Costs Compared with DoE Costs

	PSC Teacher Cost	DoE Teacher Cost
Table 3	€2,996m	€1,704m
Table 4	€11,071m	€6,298m
Table 6	€1,957m	€1,077m
Table 7	€7,285m	€4,008m

This approach does not account for pension, PRSI and overhead costs incurred when employing additional staff. In the short-term, the use of entry points on the salary scale may be more appropriate than using the median (the point used in the PSC approach to staff costs).

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¹⁹ Political Party Costings, Budget 2023