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Department of Children, Equality, Disability, Integration and Youth

Early Learning and Care and School-Age Childcare

Towards a New Funding Model

Working Paper 4

Mechanisms to Control Fees Charged to Parents for Early Learning and Care and School-Age Childcare

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November 2020

This report was funded by the Department of Children, Equality, Disability, Integration and Youth. The authors are solely responsible for the views, opinions, findings, conclusions and/or recommendations expressed, which are not attributable to the Department or the Expert Group. The researchers are responsible for the accuracy of the research.

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Glossary

Additional charges	Amounts paid by parents for specified items in the provision of ELC and SAC which are not included in the regular fees.
Centre-based provision	Publicly regulated ELC provided outside the home.
Childcare	Broadly used to mean ELC and/or SAC.
Childcare tax credits	See refundable childcare tax credits.
Childcare tax deductions	Reduction in the amount of income subject to tax for childcare expenses.
Childminders	See home-based provision.
Community Childcare Subvention (CCS)	A programme in Ireland providing supply-side subsidies for ELC and SAC. CCS-related programmes include CCS, CCSP and CCSR/T (see Pobal 2019).
Delivery cost	Amounts paid by providers for the resources they need to deliver ELC or SAC such as staff salaries, rent and costs of materials.
Demand-side subsidies	Public subsidies paid directly to parents to reimburse them for childcare expenses. Includes refundable tax credits and tax deductions.
Early Childhood Care and Education (ECCE)	Programme in Ireland providing free hours of ELC for children aged between 2 years, 8 months and 5 years, 6 months.
Early Childhood Education and Care (ECEC)	All regulated arrangements to provide care and education for children under compulsory school age, regardless of setting, funding, opening hours or programme content. Includes ISCED 0 and ECEC services without a defined educational component. Also called Early Learning and Childcare (ELC).
Early Learning and Childcare (ELC)	All regulated arrangements to provide care and education for children under compulsory school age, regardless of setting, funding, opening hours or programme content. Includes ISCED 0 and ECEC services without a defined educational component. Also called Early Childhood Education and Care (ECEC).
Fees	See provider fees.

For-profit provision	For-profit provision exists primarily to generate a profit, that is, to take in more money than it spends. The owners may keep the money themselves or re-invest it in the business or share it with employees through various types of compensation plans.
Formal childcare	Centre-based ELC and SAC. May or may not include home-based provision.
Free hours or places	Use of ELC or SAC service free of charge for parents. The resulting costs for free access are typically covered by (government) subsidies.
Gross domestic product (GDP)	Total value of goods and services produced in an economy during a particular period (quarterly or yearly).
Home-based provision	Arrangements to provide education or childcare within the home. Also called family-based provision, family childcare or childminders.
ISCED 0	Any type of childcare with an educational component before the start of primary education. ISCED 0 is sub-classified into ISCED 01 and ISCED 02. Also called Early Childhood Education (ECE).
Not-for-profit provision	See non-profit provision.
Non-profit provision	Non-profit provision exists to provide a particular service to the community and is typically organised under rules that forbid the distribution of profits to owners. All of the money earned is used in pursuing the organisation's objectives and keeping it running. Typically, organisations in the non-profit sector are tax-exempt charities or other types of public service organisations which are not required to pay most taxes.
Parent-paid fees	Fees paid by parents to providers of ELC and SAC. Also called provider fees.
Private provision	Provision administered or owned directly or indirectly by a non-governmental organisation or private individuals. Private settings may or may not be publicly subsidised.
Provider fees	Prices charged by providers for ELC and SAC. Also called parent-paid fees.
Public provision	Provision managed by a public education authority, government agency or municipality.

Refundable childcare tax credits	Public reimbursement for childcare costs regardless of parents' tax liabilities. Also called childcare tax credits.
Quality	Characteristics of ELC and SAC which have effects on children's development, learning and wellbeing. Includes process quality (the nature of the daily experiences of children) and structural quality (distal factors that are typically regulated, such as children-to-staff ratio, group size and staff training/education, and create the framework for the experiences of children).
School-Age Childcare (SAC)	Arrangements to provide childcare outside of normal school hours for school-going children, whether provided in formal or home-based settings. This includes before school, after school and school holidays, but excludes weekends.
Special Educational Needs and Disabilities (SEND)	Special needs children are those for whom a special learning need has been formally identified because of mental, physical or emotional issues. Also called Additional Needs.
Subsidies	Public funding paid directly to providers in return for provision delivered to eligible children. Also called supply-side subsidies.
Supply-side subsidies	See subsidies.
Teachers (in ELC)	Teachers are contact staff with the most responsibility for a group of children in ELC. They may also be called pedagogues, educators, childcare practitioners, core practitioners or pedagogical staff.
Teachers' aides	See assistants.
Workforce turnover	The share of staff who leave a setting within a year.
Working parents	Parents who meet specific work criteria in terms of earnings or work hours to be eligible for ELC or SAC support.

Executive Summary

Introduction

As part of the First 5 Strategy to improve outcomes for children in Ireland from birth to age five, a commitment has been made by the Irish Government to at least double public spending on Early Learning and Childcare (ELC) and School-Age Childcare (SAC) in Ireland by 2028. An Expert Group was tasked to deliver a report containing proposals for a new funding model which will help ensure that this additional funding can be used in the best way to deliver safe, high quality, affordable and accessible ELC and SAC. This report is the fourth in a series of working papers delivered by Frontier Economics in the role of Research Partnership to provide research support to the Expert Group.

A key concern with government subsidies for the delivery of ELC and SAC is who the money will benefit. While subsidies are intended to reduce costs for parents, there is a risk that providers will simply raise fees to increase their income while the amounts paid by parents remain basically unchanged. This paper documents the use of mechanisms to control fees for ELC and SAC[1] and critically reviews the evidence on the effects of these mechanisms, drawing out lessons on how such fee control mechanisms might be applied in Ireland. In total, information on fee controls or similar-type mechanisms is described for 19 countries and evidence on the impacts of using such mechanisms was identified for 9 countries.

Use of fee control mechanisms

Fee control mechanisms are regulations which determine the amount that providers can charge parents for ELC or SAC services. Key features of fee control mechanisms are:

- The identified cases of fee control mechanisms only applied the controls to provision that was publicly funded, either in the form of subsidies or public provision. There

[1] The term ECEC (Early Childhood Education and Care) is widely used in the international literature, but the term ELC (Early Learning and Care) is used here in place of ECEC in the original sources. Where the term ELC is used alone, it does not include SAC. The terms “childcare” or “child care” are widely used in the international literature to mean ELC and SAC and the use of the term “childcare” is maintained from original sources in order to avoid any confusion with the meaning.

were no cases where controls were applied to private providers who were not in receipt of supply-side public subsidies.

- Around half of the identified cases set a specific rate and the remainder impose a maximum amount. Just under half of the cases have exemptions from fees, that is, some families effectively receive ELC for free.
- In 12 cases, the rates or maximum amounts vary across households according to their income level, with a greater tendency for income-related controls to be used when they cover a mix of public and private provision rather than just one or the other. For 8 of these 12 cases, fees also vary by the number of children in the family.
- There is little information about how fee control levels are determined. Maximum fee caps expressed as a proportion of family income or the minimum wage suggest that the driver is a notion around the reasonable *amount* that parents might be expected to pay. Rates expressed as a proportion of delivery costs suggest that there is a notion of the reasonable *proportion* of costs that parents might be expected to pay or that the state pays as much as it can and parents must pay the residual.

Effects of fee control mechanisms

Evidence on the benefits of fee controls could be drawn from only three jurisdictions: Quebec's $5 a day policy introduced in the late 1990s, Sweden's introduction of national fee caps in 2001-2003 and Norway's introduction of a national fee cap in 2005. The evidence from these reforms indicates that fee control mechanisms can have the intended impacts:

- The fee controls lowered childcare costs for parents and increased childcare use, but the impacts favoured higher income families more than lower income ones.
- There were positive impacts on maternal employment, but not in cases where employment rates were already high.
- Although the public spending costs of the policies were high, there were substantial returns to the government in the form of increased tax revenues and reduced transfers as maternal employment rates increased or the ELC workforce expanded.

- There was limited evidence that fertility rates increased in response to the lower childcare costs.

There is some limited evidence that fee control mechanisms can have unintended consequences. There are reports of four types of issues, drawn from a handful of countries:

- The introduction of demand-side subsidies with hourly caps on reimbursement rates for fees in the Netherlands in 2015 highlights how such caps may not protect against price increases or even push up prices, leading to higher profits for private providers.
- A lack of available places due to the fee controls has been reported for Quebec, Germany and Italy.
- There is evidence that the fee controls in Quebec have had adverse effects on quality and child outcomes. The impacts on quality have also been a concern for the use of fee controls in Korea.
- There is some very limited evidence indicating problems of financial sustainability and longer-term investment due to fee caps.

Potential use of fee controls in Ireland

The evidence highlighted some considerations for the possible use of fee controls in Ireland:

a) Fee controls (or fee controls in conjunction with supply-side subsidies) need to be set at a level which financially sustains provision without driving excessive profits or surplus for providers, but this may be challenging.

b) The structure of the fee controls will influence the distribution of the benefits across different types of families and the work incentives they create.

c) Conditionality measures on the receipt of subsidies may be required to help to guard against specific adverse consequences. These could include conditions to prevent providers using ways to circumvent the fee controls; conditions on quality, wages and work conditions; and regulations on profit rates.

d) There may be a need to facilitate investment in expanded capacity if demand for provision increases substantially under the fee controls.

e) The magnitude of the budget required to fund fee controls and accompanying subsidies will be difficult to predict due to uncertainties around potential expansion in the demand for ELC and SAC and, to a lesser degree, the magnitude of increased government revenues if parental employment increases.

1. Introduction

1.1 Background and objectives

As part of the First 5 Strategy to improve outcomes for children in Ireland from birth to age five, a commitment has been made by the Irish Government to at least double public spending on Early Learning and Childcare (ELC) and School-Age Childcare (SAC) in Ireland by 2028. A new funding model is required to help ensure that this additional funding is used in the best way to deliver safe, high quality, affordable and accessible ELC and SAC which meets families' diverse needs. An Expert Group was tasked to deliver a report containing proposals for a new funding model which includes the costs, risks and implementation plans for different options.[2]

Frontier Economics was appointed as the Research Partnership for this Expert Group to provide research support and advice to the group. This report is the fourth in a series of working papers summarising the evidence in several key areas.

A key concern with government subsidies for the delivery of ELC and SAC is who the money will benefit. In particular, while subsidies are intended to reduce the amounts paid by parents, the risk is that providers will simply raise fees to increase their income while the amounts paid by parents remain basically unchanged. This risk should not materialise (or be sustained in the longer term) if the market is reasonably competitive and parents choose to use providers where they pay the lowest possible amount.[3] Although there is little evidence to suggest that childcare markets are inherently uncompetitive,[4] there is evidence that

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[2] The terms of reference for the Expert Group are available at https://first5fundingmodel.gov.ie/wp-content/uploads/2020/01/Terms-of-Reference-1.pdf

[3] There are two mechanisms by which subsidies could lead to an increase in delivery costs and a consequent increase in fees within a competitive market. First, parents could choose to use the subsidies to purchase more expensive types of ELC or SAC, paying a higher total (but same net) fee for better care. Second, the subsidies could lead to an expansion in ELC or SAC, requiring the use of more expensive resources (for example, if higher wages were required to attract additional staff), which could increase total fees but not net fees for parents (or there would be no expansion in demand). In both cases, the benefits of the subsidies would accrue to parents and their children and not to providers.

[4] It should be noted that variation in fees may reflect differences in resource costs or quality of provision across settings and does not necessarily imply that markets are not competitive.

some providers have market power to control fees, for example, by offering more niche services or being located in sparsely populated areas. Hence, it is important to consider potential mechanisms that could be applied to control fees under a new and more generous funding model.

The aims of this paper are to:

- Document the use of mechanisms to control fees for ELC and SAC[5] internationally, including the context in which the mechanisms are or were used;
- Critically review the evidence on the effects of these mechanisms, including unintended consequences;
- Consider the applicability of the evidence in the Irish context, both in terms of whether the rationale for the use of the mechanisms would be applicable and in terms of whether the mechanisms could be expected to have the same effects in the Irish case; and
- Draw conclusions on whether and how mechanisms to control fees might be required and effective under different types of funding models in Ireland.

1.2 Methodology and scope

A broad-ranging search was undertaken for evidence on the use of fee control mechanisms and their effectiveness. This search covered government, social policy and academic databases without restrictions on the range of countries or timeframe. Such a broad scope was appropriate given the potentially limited application of fee controls and size of evidence base. The search used key relevant phrases in Google Scholar including combinations of "childcare", "early education" and "ECEC" with "fee control", "price control", "fee regulation", "price regulation", "fee cap" and "price cap", as well as using references and

[5] The term ECEC (Early Childhood Education and Care) is widely used in the international literature, but the term ELC (Early Learning and Care) is used here in place of ECEC in the original sources. Where the term ELC is used alone, it does not include SAC. The terms "childcare" or "child care" are widely used in the international literature to mean ELC and SAC and the use of the term "childcare" is maintained from original sources in order to avoid any confusion with the meaning.

weblinks from publications with international reviews.[6] Following the identification of countries with fee control mechanisms, further searches were undertaken for targeted country-specific sources of information on fee controls (typically from government websites) and evidence on impacts (from English-language based research). Contextual information for countries with fee control mechanisms was also collated.

The collated evidence was analysed in two ways:

- A summary description for each identified use of fee control mechanisms, combined with key contextual information; and
- A critical review of the evidence on the effects of fee control mechanisms, summarising the key findings and robustness of each source.

In total, information on fee controls or similar-type mechanisms is described for 19 countries and evidence on the impacts of using such mechanisms was identified for 9 of these countries. The description of the mechanisms considers all 19 cases to present a broad range of approaches. The concentration of evidence on impacts within less than half of these countries partly reflects that some mechanisms were introduced or are implemented in such a way that facilitates isolating the effect of the mechanism and partly reflects that some countries simply have more data and conduct more analysis of ELC.

1.3 Robustness of the evidence

It should be noted that, as the objective of this paper was to inform on the potential application of fee control mechanisms to the Irish context, this means that:

- The summary should not be considered a comprehensive summary of all applications of such mechanisms. The focus was on the use of mechanisms in European and OECD countries, the evidence for which may be most useful for the Irish context.

[6] Key international sources included Oberhuemer and Schreyer (2018), European Commission (2019, Figure B5) and the Eurydice country sheets "National Education Systems" (Section 3.1 Early Childhood and School Education Funding).

- The information presented is the most up-to-date evidence identified, but it is possible that current policies may now differ from this. In terms of learning for the Irish case, evidence on mechanisms which are no longer operating is still useful.
- The limited nature and robustness of the evidence on impacts meant that it was challenging to draw strong conclusions, and the focus has been on drawing together a framework of key considerations for any application in Ireland.

Finally, it should be noted that the research for this report was undertaken prior to and during the COVID-19 pandemic and that some information may have subsequently changed as a result.

1.4 Report structure

The remainder of this report is structured as follows:

- Chapter 2 considers the reasons for the use of fee control mechanisms and their potential impacts.
- Chapter 3 summarises the use of fee control mechanisms or related approaches across the 19 countries.
- Chapter 4 presents the evidence on the effects of fee controls, both the intended impacts and unintended consequences. It also identifies gaps in the evidence.
- Chapter 5 considers the applicability of this evidence to the context in Ireland and considers how mechanisms to control fees might be most effective in Ireland.

2. Fee control objectives and potential impacts

This chapter provides a framework within which to consider the evidence on fee control mechanisms for ELC and SAC. The first section describes the reasons for such fee controls, while the second summarises the range of intended impacts and potential unintended consequences.

2.1 Reasons for fee controls in ELC and SAC

Fee control mechanisms are regulations which determine the amount that providers can charge parents for ELC or SAC services. They typically have two purposes:

- Efficiency: to minimise the amounts paid for ELC and SAC by ensuring that these amounts match as closely as possible the efficient (minimum) cost of delivery;[7] and
- Equity: to generate lower costs for families with lower incomes.

Efficient delivery requires sufficient competitive pressures from consumers to ensure that only the lowest-cost providers with the lowest prices remain operating. However, ELC and SAC services have specific features which may reduce parents' ability to seek out and use the most efficient providers, dampening competitive pressures. These features include local monopoly power (a sparsely populated geographic area may only sustain one provider), asymmetric information (parents may not have the information to make informed judgements about why prices differ across providers) or switching costs (parents may be reluctant to move their child from a familiar provider). Although there is little documentation that the delivery of childcare is inherently uncompetitive, there is evidence that some providers have market power to control fees, for example, by offering more niche services or being located in sparsely populated areas.[8]

When competitive pressures are weak, price control mechanisms may be used to address market failures in sectors with primarily private provision such as utilities or transport. For

[7] This also captures value for money for public spending by ensuring that subsidies are used for provision delivered at minimum cost.

[8] See, for example, discussion and evidence for England in Paull (2014) and Paull and La Valle (2018).

ELC and SAC, however, it appears that such mechanisms have only been used in conjunction with public subsidies in some form. This may be due to a combination of factors:

- A lack of competitive pressures may drive up prices and reduce efficiency for provision which is for-profit (private business), non-profit (private community or voluntary services) or public (government-run or maintained services). In the case of for-profit provision, there is an obvious motivation to minimise costs and charge as high a price as possible. But there may also be pressures for higher prices for non-profit and public provision for related reasons. First, there may be less incentive to operate efficiently as there is no reward for the effort of reducing costs or penalty for not operating efficiently. Second, providers of non-profit or public provision may have a "surplus" motivation (akin to the profit one) to have excess income over costs, which they can use to achieve objectives which run counter to keeping prices low. These could include paying higher staff salaries for more qualified staff or spending on other elements which improve provision,[9] but they could also be used for individual personal benefits.
- If the price for services is partly paid by government (in the form of subsidies), parents may have considerably weaker incentives to seek lower fees and drive competitive efficiency, increasing the market failure case for price controls.
- The government may be more concerned about efficiency and minimising prices when public funding is being spent.

Hence, price control mechanisms for ELC and SAC have primarily been used to ensure that public funding does not dissipate into provider profit or other forms of surplus rather than benefiting parents.

When government subsidies are involved, the design of these mechanisms incorporates three elements: the "price" (defined here as the amount received by the provider), which consists of the "subsidy" (the amount paid by public funding) and the "parent fee" (defined

[9] The next section describes how quality objectives may clash with cost objectives.

here as the amount paid by parents). The process is often presented as the government setting the parent fee and paying for any remaining cost with a subsidy, suggesting that the provider determines costs and is free to set the price. In practice, however, it is more likely that the government has some notion of an efficient price based on delivery cost and sets the subsidy and parent fee levels to cover this cost. Hence, the government must be able to control both subsidy levels and parent fees to ensure that subsidies are not replaced with a corresponding increase in parent fees and simply push up prices.

There are three main ways in which government can subsidise ELC and SAC:

(a) Demand-side subsidies: subsidies are paid directly to parents to reimburse them for childcare expenses, typically through tax credits or through co-payments to the provider on the parents' behalf. Fees can be controlled in a proxy manner through limitations on the hourly costs that the subsidy will reimburse, but the control is partial because parents can choose to pay more (or less) if they wish.[10]

(b) Supply-side subsidies: subsidies are paid directly to providers in return for provision delivered to eligible children. Fees can be controlled by conditions placed on providers for subsidy receipt.

(c) Free places: funding is paid directly to providers in return for provision delivered free of charge to eligible children. Fee control mechanisms are not relevant in this case (costs are effectively controlled through the funding rates paid to providers for free places) and the use of free places is not considered in this report.[11] [12]

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[10] Schemes offering subsidies without fee controls in Ireland include the CCS (Community Childcare Subvention) and CCS-related programmes and the National Childcare Scheme.

[11] Although free places could be considered as an extreme version of supply-side subsidies with fee controls setting fees to zero, they are not usually considered in these terms and the zero fee means they are fundamentally different in some respects. Indeed, subsidies with fee controls have two key differences from the provision of free hours. First, they include a co-payment for parents, which helps to ensure that an efficient level of provision is used by making parents' decisions on use and hours weigh up some of the cost against the benefits. Second, they can be more finely tuned to different levels of support according to families' income levels and need.

[12] Schemes offering free places in Ireland include the ECCE (Early Childhood Care and Education) programme and the TEC (Training and Employment Childcare) programme.

All three mechanisms provide an opportunity to incorporate elements to promote **equity objectives** by relating the level of support to household income. Supply-side subsidies can address this through the structure of the subsidies (such as paying higher amounts to settings in more deprived areas), but this is a relatively blunt instrument to precisely target support to specific households, while fee controls can be targeted much more effectively to household income. Consequently, fee controls with supply-side subsidies can be used not only to promote efficiency in providing support for ELC and SAC but also to promote equity objectives.[13]

2.2 Intended impacts and unintended consequences

Reducing ELC and SAC costs for parents – be it through subsidies and fee controls or free hours – has a well-documented set of secondary, ultimate goals which are summarised in the first column in Figure 1. Lower costs increase disposable income for families, may increase the use of formal childcare (and thereby improve child development) and may increase parental employment (increasing family income and raising government revenues). In some cases, increased fertility is also seen as a secondary objective of lower costs. Reducing costs for lower income families is most likely to improve equality and raise incentives to work among those most receptive to them.

In theory, these benefits could be achieved without any drawbacks if public funding is set at a sufficient level to precisely compensate providers for any loss in income from the fee controls. If the level of public funding is not sufficient, or if the allocation of funding is poorly matched to loss of fee income, there could be several types of unintended consequences as listed in the second column in Figure 1.[14]

First, providers could recoup the lost fee income from parents through other means. This could include increasing or introducing additional charges for parents (such as for lunches, special activities or administration) to circumvent the fee caps or increasing fees for any

[13] Price controls can be used to promote equity objectives for purely private provision without public subsidies, such as lower prices for some types of transport or utilities, but the mechanisms can be quite blunt.

[14] The intended impacts and unintended consequences in Figure 1 could equally apply to the provision of free places, with the level of public funding for free hours needed to match the entire parent fee it displaces.

unregulated hours or for children not subject to the regulation. In addition, if the fee cap is not tailored to the variation in provider costs, some settings could increase their fees to meet the cap, with the fee cap effectively acting as a means to support collusion.

Figure 1: Intended impacts and unintended consequences of fee controls

Intended impacts	Potential unintended consequences
Primary impacts: • Ensure that public funding for ELC and SAC reduces costs for parents • Reduce costs for parents with lower incomes	Higher costs for parents: • Increase in additional charges not counted as fees • Increase in fees for unregulated hours or children not subject to regulations • Settings increase fees to the control levels
Secondary impacts from reduced costs for all parents: • Increased disposable income for families • Increased use of childcare ➔ improvement in child development • Increased parental employment ➔ increased income for families and higher government revenues • Higher fertility	Changes in provision to reduce delivery costs: • Reduction in provision for higher-cost children • Reduction in quality ➔ deterioration in child development • Reduction in flexibility ➔reduced parental employment
Secondary impacts from reduced costs for families with lower incomes: • Greater equality of disposable income • Greater increase in parental employment	Reduced availability: • Unsustainable provision ceases • Infeasibility of higher-cost provision • Lack of investment funds for replacement and expansion provision

Second, providers could reduce their costs in response to lower income, possibly by reducing quality or flexibility of provision or by offering fewer places to "higher-cost" children such as those with disabilities or special needs. As highlighted by Penn (2014), there are limited technological opportunities to improve reduce costs:

> *"Caring cannot be made more productive: the caring capacities of staff can be improved but cannot usually be extended to cover more children. The only way in which labour costs can be reduced is by paying staff less."* (Penn 2014, page 24)

Penn goes on to highlight that lower staff costs can be achieved by employing lower-paid staff (such as low-qualified, temporary or trainee staff) or by minimising other benefits such

as sick leave, holidays and pensions. However, this is likely to lead to higher staff turnover and a poorer experience for children.

Finally, the availability of places could be reduced if some providers find that their business (or public provision) is not financially sustainable. Indeed, some kinds of higher-cost provision (such as care at unsocial hours or niche provision for specialist interests) may simply not be viable under the fee caps even though parents would be willing to pay the cost. In the longer term, if profit margins are reduced for private providers, they may be less able and willing to invest in new provision. Without public investment to replace this, expansion of provision could be limited, creating insufficient provision in the future.

Overall, the challenge is to identify and create a combination of public subsidies and fee controls which are sufficiently matched to ensure that the funding benefits parents (rather than providers) without having adverse consequences for provision. The following chapters review the evidence on how fee control mechanisms have been used and how well the applications of fee control mechanisms have achieved their intended objectives.

3. Use of fee control mechanisms

This chapter describes the use of fee control mechanisms and summarises the sources of research on the effectiveness of such controls. The first section provides an overview of the use of fee control mechanisms. The following three sections consider the types of provision which have fee controls, how the mechanisms are structured and what might drive decisions around the setting of fee control levels.

3.1 Overview of the use of fee control mechanisms

As noted in a recent European Commission report (European Commission 2019), ELC fees are regulated in most European countries and this regulation is most important for children under the age of three:

> *"Most families need to pay fees for the youngest children… …In such cases, the levels of fees and their regulation largely influence accessibility to ECEC."* (European Commission 2019, page 57)

The fee ceiling is usually a specific , but sometimes it is a proportion of family income or ELC costs. Earlier work (Penn 2014) similarly reported that many countries in Europe operate a fee cap, but also highlighted that substantial state funding is given directly to providers on a supply-side basis to ensure that the costs of provision are fully covered with the fee controls.

In other work, Penn suggested that fee controls are driven to a large degree by redistribution motives and that the use of such mechanisms may be limited in countries where ELC is primarily delivered through the market:

> *"To compensate for the inherent inequality in the childcare market, many countries have introduced price controls. Parents pay fees on a banded scale related to household income – usually around 15% of net household income. There is also a price ceiling. In other countries, most notably in the UK and Ireland, there are no price controls… The effect of introducing price controls is to limit profitability, so that most provision in those countries that legislate for price controls tends to be non-profit rather than commercial."* (Penn 2013, page 31)

However, as noted in Lloyd and Penn (2012), Ireland and the UK are more typical in the global context. Reliance on the for-profit sector to deliver early childhood services is widespread in countries like the USA, Australia, New Zealand and in many East Asian countries. In line with this, the use of fee controls is also quite rare outside of Europe.

These earlier observations were reflected in the range of countries with fee control mechanisms identified in the evidence review undertaken for this report. Of the 38 European countries covered in the European Commission report, 18 have fees regulated at the top (national) level, 7 have fees regulated at the local level and 13 do not have any fee regulations. In other words, roughly two-thirds of countries in Europe operate some kind of fee control mechanism in at least some regions.[15] Additional information on the operation of fee controls or their impacts was identified for 15 of these countries. Outside of Europe, such information was only identified for three additional countries (Canada, Korea and Singapore). In addition, the Netherlands was also included as the upper limits on hourly fee rates in the demand-side subsidies used in this country are a type of indirect means to control fees.

Figure 2 presents a summary of the key features of the fee control mechanisms in the 19 countries. This summary includes the types of provision covered by fee controls, the structure of the fee controls, whether they vary across family characteristics and whether the fee levels or caps are explicitly related to average income or wages or to delivery costs. Each set of characteristics is discussed in the following sections.

It should be noted that the is based on the most recent information that could be identified and may not always be up to date. Figure 3 in the Annex presents further details on the fee control mechanisms for each country and lists the sources.[16]

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[15] Figure B5 in European Commission (2019) shows that fees are regulated at the top (national) level in Austria, Belgium, Bulgaria, Bosnia and Herzegovina, Denmark, Estonia, Finland, France, Hungry, Luxembourg, Montenegro, North Macedonia, Norway, Poland, Romania, Serbia, Spain and Sweden; that fees are regulated at the local level in Albania, Croatia, Germany, Iceland, Italy, Lithuania and Switzerland; that fees are not regulated in Cyprus, the Czech Republic, Ireland, Greece, Latvia, Liechtenstein, Malta, the Netherlands, Portugal, Slovakia and the United Kingdom; and that there are no parent-paid fees in Latvia and Malta.

[16] As noted in footnotes 10 and 12, programmes in Ireland do not include direct fee control mechanisms and Ireland is therefore not included in Figure 2.

Figure 2: Summary of fee control mechanism designs

Country	Public and subsidised private provision with fee controls	Fee control structure			Fees vary by family characteristics			Levels or caps related to:	
		Rates	Maximums	Exemptions	Income	Child number	Child needs	Income / wages	Delivery costs
For children under age three									
Belgium (Flemish)	Private and public	✓			✓	✓			
Belgium (French)	Private and public	✓			✓	✓	✓		
France	Private and public	✓			✓				
Hungary	Private and public		✓		✓			✓	
Italy	Private and public	✓		✓	✓				✓
Spain	Public and non-profit		✓						
For all ages									
Bulgaria	Private and public [1]	✓							
Finland	Public	✓	✓	✓	✓	✓			
	Private		✓						
Germany	Public and non-profit	✓		✓	✓				
Korea	Private and public [2]		✓						
Norway	Public and private	✓	✓	✓	✓	✓		✓	
Slovenia	Public and private		✓		✓	✓			✓
Sweden	Public and private		✓	✓	✓	✓		✓	
Denmark	Public		✓	✓	✓	✓	✓		✓
Estonia	Public		✓	✓				✓	
Lithuania [3]	Public	✓				X			
Serbia	Public	✓		✓					✓
Canada (Quebec)	Private	✓			✓ [4]	✓			
Canada (Manitoba)	Private		✓						
Canada (PEI)	Private	✓							
Netherlands [5]	Private		✓						
Singapore	Private		✓						

Sources: See Figure 3 in the Annex.

Notes: [1] Does not cover public for age three plus. [2] Only covers childcare centres and does not cover kindergartens. [3] Fees only cover meals. [4] Income-related element from 2015. [5] Indirect fee controls through demand-side subsidies. Rate controls specify the amount that can be paid per time unit (e.g. hourly or daily), while the maximums are caps on the total amount that can be paid. Exemptions mean that fees are zero for some families.

3.2 Types of provision covered by fee controls

All of the fee control mechanisms identified in this review were related to provision that was publicly funded, either in the form of subsidies or public provision. The only example of controls with demand-side subsidies is the Netherlands,[17] where there are caps on the hourly fee rates that the government reimburses to parents. It should be noted that these are only proxy controls because the parent could still pay higher fees but not be reimbursed the additional cost.

In most of the countries in Figure 2, the absence of fee controls for some types of provision reflects that the provision is one of three cases:

- The provision is free, as is the case for children over the age of three in Belgium, France, Hungary, Italy and Spain.
- The provision is not subsidised, as is the case for private provision for children aged three and older in Bulgaria and for private pre-school in Serbia.
- The provision type does not exist or is virtually non-existent, as is the case for for-profit provision in Germany and public provision in Canada, the Netherlands and Singapore.

There are few cases where subsidised provision is not covered by fee controls:

- In Denmark, subsidies can be paid to private settings without any fee controls.
- In Estonia, private settings can receive subsidies without any fee controls, although the subsidies are limited to specified items (such as staff salaries, teaching materials and professional development).
- In Lithuania, subsidised private settings are allowed to charge for meals at their own discretion.

[17] The UK also has caps on demand-side ELC and SAC subsidies, but these are on total amounts spent (capturing hours, weeks and price of care used) and the link to hourly fees is weak.

- In Korea, price caps for after-school programmes are not applied to kindergartens which are subsidised and cater for children aged three to five.

The countries in Figure 2 have been ordered by the age of children in provision covered by the fee controls and by the type of provision (public and private) that is covered in order to help discern whether there are any relationships between the provision type and the design of the fee controls. However, there is only one weak pattern: there is some tendency for exemptions to be used when the fee controls apply to public provision for all ages of children.

3.3 Structure of fee controls and variation by family characteristics

The mechanisms in Figure 2 are almost equally divided between setting a rate per period (such as an hourly or daily or monthly fee) and imposing a maximum amount, while two cases have both (Norway and public provision in Finland). The main difference between the two approaches is that the rates approach is more akin to price-setting for public provision, while the maximum levels are more akin to price controls for private provision where an element of price competition between providers below this maximum is permitted. However, and somewhat surprisingly, there are no strong patterns between the use of rates versus maximums and the public-private division in the provision covered by the fee controls.

There are eight countries which have exemptions from fees, that is, some families effectively receive ELC for free. This may be because these countries generally do not offer free places or limit who is entitled to a free place.[18] Hence, it appears that the fee control mechanism is used as a means to deliver free hours for targeted families in these countries. This may be an efficient approach to delivering free ELC as it enables precise targeting, particularly as six of the eight countries also vary the fee controls by household income.

[18] Three of these countries (Estonia, Norway and Denmark) do not offer directly named free places, while Finland and Serbia only offer free places from ages six and five-and-a-half respectively and Sweden offers a relatively low number of free hours. For the remaining two countries, free places in Germany are difficult to generalise because they vary by region, while Italy offers free places with 25 weekly hours from age three.

In 12 jurisdictions, the rates or maximum amounts vary across households according to their income level. As noted above, there is a greater tendency for income-related controls to be used when they cover a mix of public and private provision rather than just one or the other. This may reflect a desire to target the benefits towards lower income families when the mix of public and private provision allows a greater dispersion in expenditure on ELC. For 8 of these 12 cases, fees also vary by the number of children in the family (or number of siblings at the same setting), targeting support towards larger families who may have lower incomes net of childcare costs.[19]

In two cases, fees are related to child needs: fees are reduced for disabled children in the Belgium French community and there are discounts for children with special educational and support needs in Denmark.

3.4 Links to income, wages and delivery cost

There is little information about how the rates or maximum caps are determined in the fee control mechanisms. Given that the remainder of the delivery costs will be covered by public funding, the setting of the fee control levels implicitly determines (or is determined by) the share of the costs between public funding and parents who use the services. As considered in footnote 3, delivery costs could rise in response to a public subsidy. Nevertheless, any higher delivery cost will either be driven by the combined public subsidy or will drive higher combined levels of public subsidy and the fee cap. By controlling both the subsidy and the fee cap, the government implicitly controls delivery costs and thereby the quality of provision and expansion of provision (if provision can only expand with rising delivery costs).

In four of the cases presented in Figure 2, the share is indicated in the maximum fee caps, which are expressed as a proportion of family income or the minimum wage:

[19] Sibling discounts were not reported for fee controls in France, Hungary, Italy and Germany, although there is a possibility that this may have been an omission in the descriptions rather than a genuine absence.

- In Hungary, the maximum cap is 25% of net family income for centre-based provision and 50% of family net income for home-based provision.
- In Norway, the maximum cap is 6% of household income.
- In Sweden, the maximum cap is 3% of gross family income (for the first child).
- In Estonia, the maximum cap is 20% of the minimum wage.

This suggests that the driver of fee controls is a notion around the reasonable *amount* that parents might be expected to pay and that the state pays the residual. The variation in the proportions of income may reflect different views of "reasonable" or the extent to which the maximum will be binding (that is, what proportion of families it will affect).

In another four of the cases presented in Figure 2, the share is indicated by the proportion of the delivery costs that parent fees are expected to cover:

- In Denmark, the maximum cap is 25% of gross operating cost.
- In Slovenia, the maximum cap is 77% of costs.
- In Italy and Serbia, the fee rates are determined by the proportion of the delivery costs that the municipalities can pay.

The first two of these examples suggest that there is some notion of the reasonable *proportion* that parents might be expected to pay or, to put it another way, the reasonable proportion that the state might be expected to pay. The two cases in the final bullet suggest that the state pays as much as it can, and parents must pay the residual.

4. Effects of fee controls

This chapter presents a summary of the research on the effects of fee controls. The first section examines the evidence on how well fee control mechanisms have achieved their intended objectives of reducing costs for parents and ensuring an efficient use of public spending, while the second section reviews the evidence on unintended consequences. The third section highlights some facilitators of effective mechanisms, while the final section summarises the gaps in the evidence base.

Further information on the cited evidence and country context and description of the fee controls are presented in Figure 3 in the Annex.

4.1 Evidence of benefits

Evidence on the benefits of fee controls could be drawn from only three jurisdictions: Quebec, Sweden and Norway.[20]

Evidence from **Quebec** on the introduction of the $5 a day policy in the late 1990s (later increased to $7) has focused on four areas: increase in the use of childcare; the distribution of benefits for families; the impact on maternal employment; and the net impact on government revenues. Much of the evidence on the impacts of this policy used a robust quasi-experimental difference-in-difference approach which compared changes in Quebec over the period of policy implementation with the rest of Canada (where there was no similar policy) using microdata from two large Canadian longitudinal surveys

There is evidence that the use of childcare increased as a result of the policy:

- Lefebvre et al. (2011) showed that the number of children and their weekly number of hours in childcare increased.

But several studies concluded that the distribution of the benefits of the policy favoured more affluent families:

[20] There was also one piece of evidence from Denmark which simply concluded that although fee controls had reduced costs in Denmark, fees were still high relative to other Scandinavian countries due to higher costs (OECD 2006).

- There was less gain for low income families than higher income families because the pre-1997 childcare policies had targeted low income families (Baker et al. 2008).
- Children of lower socio-economic status are less likely to attend childcare, and when they do, it tends to be of lower quality. The lower participation may be because some families cannot afford to pay the $7 fee (Japel et al. 2005).
- Children of lower socio-economic status are least likely to be enrolled in higher-quality settings, due to limited number of high quality spaces and because high quality settings tend to be located in higher socio-economic areas (Howe et al. 2018).

On the other hand, several studies indicated that the policy had a significant positive impact on maternal employment:

- Maternal labour supply increased significantly (Baker et al. 2008).
- It had a large and statistically significant impact on the labour supply of mothers with pre-school-aged children (Lefebvre and Merrigan 2008).
- It had long-term labour supply effects on mothers who benefited from the programme when their child was aged less than six years, driven by changes in the labour supply of less-educated mothers[21] (Lefebvre et al. 2009).
- It significantly increased the labour force participation and annual weeks worked for mothers with a child aged one to four years (Lefebvre et al. 2011).

Analysis of the effects on government revenues drew mixed conclusions:

- Howe et al. (2018) found that increased maternal employment and increases in the ELC workforce increased the tax base, but Baker et al. (2008) concluded that the additional tax revenues from increased maternal employment fell short of paying for the subsidy costs. Simulations of additional net taxes also showed modest effects,

[21] This is not inconsistent with more affluent families benefiting the most as the largest gains may have come from reduced childcare costs rather than from changes in employment. Less-educated mothers are less likely to have been working in the absence of the policy and are therefore more likely to have increased their labour supply.

with the Canadian federal government being the main beneficiary (Lefebvre et al. 2011).

- On the other hand, Fortin et al. (2012) estimated that female employment was 3.8% higher in 2008; that Quebec's GDP was higher by about 1.7%; and that the tax-transfer return from the programme significantly exceeded its cost (based on more optimistic assumptions about the impacts).

There have been several studies of the impact of the Maxtaxa reforms in 2001-2003 in **Sweden**. These reforms included the introduction of national income-based fee caps and an obligation for municipalities to provide part-time pre-school places for children of unemployed parents and parents on parental leave, and 525 free hours per year for children aged four and over. Like the policy introduction in Quebec, this reform provided a natural experiment to observe impacts as municipalities moved from a wide variety of pre-reform positions to the new national standards. These were exploited in two approaches using pre-reform variation in fee *levels* across municipalities (Lundin et al. 2008; Mörk et al. 2013) and using pre-reform variation in fee *structures* to estimate the impact of moving from rate-based fee controls to income-based fee caps[22] (Hanes et al. 2009; Wilkström 2007). In addition, one study used simulation modelling to consider the potential impacts (Brink et al. 2007).

The evidence indicated substantial impacts on the costs paid by parents and government budgets:

- The reform made municipalities' fee systems simpler and more uniform and enrolment rates in pre-school across socio-economic background became more similar across municipalities (Skolverket 2007).

[22] By the end of the 1990s, most municipalities used some form of time-dependent fee using either hourly rates or time intervals rather than an income-dependent fee (Hanes et al. 2009). Municipalities that had applied time rates had larger changes in the parent fees with the introduction of the national income-dependent caps than those which already used such caps. In addition, the use of time rates restricts demand in terms of the numbers of hours of care relative to the use of income-dependent fees with maximum caps.

- Most households experienced a reduction in childcare price, although there was large variation, and some experienced a rise (Lundin et al. 2008). Overall, parents' contribution to childcare costs reduced from 16% to 10% (Brink et al. 2007).
- Higher income families using more hours benefited most (Brink et al. 2007).
- Municipalities that had applied rates (such as hourly rates) rather than income-dependent fees prior to the reform experienced less decline in the cost per child; larger increases in average hours in pre-school; and larger increases in expenditure (in comparison to municipalities that had used income-dependent fees) (Hanes et al. 2009; Wilkström 2007). This is consistent with the explanation that the use of time rates restricts demand for ELC relative to the use of income-dependent fees with caps.

However, the evidence on parental employment was more mixed:

- Lundin et al. (2008) found that the fee cap had no substantial impact on mothers' employment, possibly due to the fact that childcare was already highly subsidised and female labour supply was already high.
- However, Brink et al. (2007) found that the greatest impacts on work were for single mothers, with smaller effects on mothers and fathers in couples. This may have reflected differences in labour force participation prior to the reform and the availability of childcare.

There was also evidence of other impacts:

- The cost to government of the reform was offset by increased tax revenues (work and consumption taxes) and reduced social assistance and housing allowances: the net cost was estimated to be 79% of the gross cost (Brink et al. 2007).
- Anticipation of a reduction in childcare costs had a positive impact on fertility: it was estimated to have increased the number of first and higher-order births and affected the timing of second births (Mörk et al. 2013).

A maximum fee for full-time provision was introduced in **Norway** in 2004. It was lowered in 2006 and currently stands at 6% of family income (or 34,485 NOK per year, whichever is the lowest). There are also other fee discounts based on family income and number of children. The evidence on the impacts of this policy are mainly descriptive, but it appears that the impacts on costs of care and the use of ELC were considerable:

- Parental contributions to running costs as a share of total costs fell from 37% in 2002 to 15% in 2012 (OECD 2017).
- The overall commitment to expand access to childcare led to a considerable increase in ELC participation: from 37% to 80% between 2000 and 2011 for one- and two-year-olds (Ellingsgaeter 2014).
- Wheaton and Harding (2017) observed that the fee cap helped to manage costs for parents and contributed to a high maternal employment rate. However, they concluded that the redistributive effects were not progressive: the policy stopped high-earning families from overpaying for childcare while low income families still spent a greater proportion of their income on care.[23] They also noted that the fee cap requires a high level of subsidisation.

In summary, the evidence from the reforms in these three jurisdictions indicates that fee control mechanisms can have the intended impacts:

- The fee controls lowered childcare costs for parents and increased childcare use, but the distribution of impacts favoured higher income families more than lower income ones.
- There were positive impacts on maternal employment, but not in cases where employment rates were already high.

[23] Expenditure was capped at 6% of household income, but this could reflect that more affluent households spent less than 6% of their income on childcare.

- Although the public spending costs of the policies were high, there were substantial returns to the government in the form of increased tax revenues and reduced transfers as maternal employment rates increased or the ELC workforce expanded.
- There was limited evidence that fertility rates increased in response to the lower childcare costs.

4.2 Evidence of unintended consequences

There is little robust evidence on the unintended consequences that occurred following the introduction of fee caps. There are reports of four types of issues, drawn from a handful of countries.

First, the example of the introduction of demand-side subsidies with hourly caps on reimbursement rates for fees in the Netherlands in 2005 highlights how such caps may not protect against price increases. There are no direct fee controls or regulation in the Netherlands, but parents who are working, studying or unemployed are compensated for their childcare cost by the tax authorities based on actual childcare payments and income (varying from 0% to 63%), while employers pay one-third of cost for their employees. The tax allowance reimbursement is subject to a maximum hourly rate (€8.17 for day care and €7.02 for out-of-school care in 2020), which is usually lower than the actual hourly cost charged by the childcare provider.[24] Although the subsidies reduced the costs paid by parents, the fee caps on the hourly reimbursement did not prevent prices rising:

- Parental childcare costs were halved by 2009, but average childcare fees rose in line with the levels of fiscal support, and average profits for day nurseries increased from around 0.6% of turnover in 2005 to 5.2% in 2007 (Penn and Lloyd 2013).

In addition, the fact that providers took the fees caps into consideration when setting their annual fees allows for the possibility that fees may have increased up to the hourly caps:

[24] The childcare allowance is also for a maximum of 230 hours per month per child.

- Moreover, it was reported that 70% of providers took the policy parameters into account in setting their annual fees (Penn and Lloyd 2013).

Second, a lack of available places due to the fee controls were reported for three jurisdictions:

- In the case of Quebec, Howe et al. (2018) reported that fewer than half of pre-schoolers had access to $7 places and many parents relied on more expensive unlicensed home or for-profit centre care in spite of the number of spaces having increased substantially. The account also cited several other sources reporting that demand exceeded supply (Baker et al. 2008; Cleveland 2012; Haeck et al. 2012; Lefebvre and Merrigan 2008; Lefebvre et al. 2009).
- In the case of Germany, Hufkens and Verbist (2017) reported that demand still exceeded supply for under-three-year-olds despite an increase in childcare places.
- In the case of Italy, Del Boca and Vuri (2007) reported that the severe lack of availability of nursery spaces meant that subsidies to reduce prices would only affect use and women‘s labour supply in areas with greater availability.

Third, adverse effects on quality of care have also been a concern. There is some reasonably robust evidence that the fee controls in Quebec had adverse effects on quality and child outcomes:

- Howe et al. (2018) reported that, while licensed childcare had positive cognitive and behavioural outcomes for children, the government has allowed the for-profit sector to expand[25] where the overall quality of most care is “minimal” in terms of staff training and children-to-staff ratios.
- Baker et al. (2008) reported lower child, family and parenting outcomes on a broad range of measures as a result of the $5 a day policy.

[25] Fee caps may increase demand for childcare, and this increased demand may be more easily met by an expansion in supply in the for-profit sector due to better access to funds for investment or a reluctance by the government to spend public funds on capital investment in childcare.

- Lefebvre et al. (2011) found no improvement in school readiness or child early literacy skills from the policy and adverse effects on scores of children aged five. They also argued that a maximum daily rate created strong incentives to use long childcare hours for children at a young age, which may be detrimental to child development.

Impacts on quality have also been a concern in Korea:

- Park et al. (2017) argued that the fee controls on childcare centres meant that the quality of care in terms of the quality of teachers, facilities, and programmes was lower than in kindergartens, where fees were unrestricted, and that parents faced a dilemma to choose between lower cost or higher quality.

Finally, there are two pieces of evidence indicating problems of financial sustainability and longer-term investment due to fee caps:

- For Spain, Oberhuemer and Schreyer (2018) cited a report from Save the Children (2015) with evidence that private subsidised settings were increasingly asking for (voluntary) donations for a variety of reasons, such as material resources, visits and excursions.
- Penn and Lloyd (2013) expressed the view that the use of supply-led systems and fee-capping regulation in most countries had "depressed the growth of the private childcare market" and had led to more reliance on voluntary, co-operative and state provision.

No evidence was identified of unintended impacts on fees for children or sectors not subject to the fee controls.

In summary, there is some limited evidence that fee control policies may actually encourage some increase in fees (when coupled with increases in public subsidies) and have led to a shortage of places. In addition, other evidence suggests that fee controls can have adverse effects on the quality of care and consequently child outcomes.

4.3 Facilitators of effective mechanisms

Finally, the review of evidence highlighted some factors that helped ensure fee controls were more effective and had fewer adverse consequences.

First, there was mixed evidence on the use of an hourly cap (or fixed rates) versus the use of income-dependent fees with caps:

- As the evidence from Sweden cited above shows, the use of income-dependent fees with caps is less restrictive on demand for ELC relative to time rates. In addition, the zero additional cost for childcare use above an overall cap creates good work incentives for parents who reach that point.
- On the other hand, others have argued that caps on hourly rates are more effective in preventing subsidies leading to fee inflation (Stewart and Gambaro 2014). The relative advantages in terms of redistributional effects also seem to favour hourly caps: even those using few hours can benefit from hourly caps, while overall caps will benefit only those using longer hours, who are more likely to be more affluent families.

Second, the level of the caps is critical to achieving the desired impacts and minimising adverse effects: if set too high, they will not reduce costs for parents, and if set too low (relative to public funding), they risk a loss of financial sustainability for providers and insufficient availability of places. Ideally, price caps should aim to set the combined fee and subsidy amount as close as possible to delivery costs:

- In the context of the Quebec experience, Lefebvre et al. (2011) suggested that fees (regulated rates or caps) should be annually indexed and vary by age of child to reflect the social cost of the subsidised places.
- Brennan and Anderson (2014) suggested that price caps should reflect a “reasonable price of delivery” which would cover essential cost elements such as salaries (to

meet national quality guidelines), legitimate variable costs such as rent, administrative costs and a "fair" surplus or profit.[26]

- Friendly (2011) (in the context of the Canadian experience) noted that all three provinces with fee control policies have province-wide salary scales which help predict and manage costs and quality: collective bargaining covers most centres de la petite enfance (CPEs) in Quebec and wage scales are agreed between the provincial governments and the early-childhood organisations in Manitoba and Prince Edward Island (PEI).

Policy in Norway highlights how additional measures can be used to mitigate against adverse consequences of public subsidies and fee caps:

- Strict conditionality rules for the receipt of subsidies support quality and wages and working conditions for staff.
- Regulation also covers profits: private kindergartens receive state subsidies only if they operate with no more than "reasonable" profits, and profits are not considered reasonable if the wage share is lower than in public kindergartens.

Finally, the German administrative design for fee controls suggests that existing processes can be used for effective implementation (potentially at a national rather than local level):

- Local authorities administer supply-side funding: parents' tax declarations are used to determine the level of co-payment (which the parent pays to the provider), while the local authority pays the remainder. Hence, public money follows the child, preserving parental choice, but can be adjusted for different child characteristics and goes directly to the provider.

4.4 Gaps in the evidence

This review suggests there are substantial gaps in the evidence base on the impacts of fee controls for ELC and SAC. Indeed, a better description might be that there are fragments of

[26] Brennan and Anderson (2014) advocated this as part of a proposal for demand-side subsidies in Australia, but it applies equally to fee cap mechanisms for supply-side subsidies.

insights rather than specifically identifiable gaps. In addition, much of the evidence appears to be circumstantial or speculative rather than based on direct links to fee controls per se.

Given the widespread use of fee controls, the relative scarcity of evidence on both the intended impacts and unintended consequences is surprising. This may be due to the fact that fee control mechanisms have typically been in place for a lengthy period and are inherently bound up with broader supply-side subsidy policies. The bundle of policies makes evaluation of fee controls alone both more challenging and of less policy interest. It might also arise because the fee controls have simply achieved their purpose (costs for parents are visibly lower) and concerns around other issues such as quality and availability of provision are seen as broader issues to be considered beyond the scope of the fee controls alone.

On the other hand, the lack of widespread evidence may be the result of a lack of monitoring and opportunities for robust evaluation of the mechanisms. Indeed, the best evidence sources (from Quebec and Sweden) have relied on the good fortune of natural experiments resulting from policy changes in countries with devolved systems and well-established robust data sources. Further research to directly measure impacts (both intended and unintended) could be considerably challenged to find an appropriate opportunity or methodology.

Even in the absence of opportunities for a robust evaluation, it would be helpful to have more descriptive evidence on fee control mechanisms (particularly the sharing of costs between government and parents) and how key parameters relate to delivery costs, fees in unregulated provision and measures of parents' ability to pay.

5. Application to Ireland

This chapter considers the applicability of the evidence to Ireland. The first section reviews which of the findings are most relevant to the Irish case, while the second section concludes with some thoughts on the potential use of fee controls in Ireland.

5.1 Applicability of the evidence to the Irish context

Much of the evidence has been drawn from countries with a long history of public provision and sustained experience of high levels of subsidies and use of fee controls for ELC and SAC. A critical contextual factor in Ireland is the fact that all provision is private (74% is for-profit and 26% is non-profit).[27] Hence, the experiences of Quebec and the Netherlands, where provision is almost entirely privately provided, may provide the most useful insights.[28]

In both cases, the policy (hourly fee controls in Quebec and hourly caps on demand-side subsidies in the Netherlands) had the intended impacts of substantially reducing costs for parents and also had substantial positive impacts on maternal employment in Quebec. However, both cases also suffered from negative unintended consequences: average fees and nursery profits rose in the Netherlands, while the quality and availability of care in Quebec declined. It could be argued that this contrast in adverse impacts reflects opposite funding level issues: the flow of additional funding into the sector was high in the Netherlands due to unexpectedly high take-up of the new subsidies, while the shortage of places and decline in quality in Quebec indicates that the government subsidy may have been too low.[29]

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[27] Pobal (2019, page 9).

[28] Singapore might also provide applicable findings as provision is almost entirely private, but no evidence on impacts was identified for this country.

[29] Quality in the Netherlands declined over the same period, but this has been accredited to the concurrent relaxation in provision regulations (Penn and Lloyd 2013).

5.2 Potential use of fee controls in Ireland

Although the evidence is limited, the collation of the issues that have been considered in the use of fee controls across a range of international examples provides a useful framework to highlight the key points to consider for the potential use of fee controls in Ireland:

a) Fee controls (or fee controls in conjunction with supply-side subsidies) need to be set at a level which financially sustains provision without driving excessive profits or surplus for providers. Two issues underlie this possibly obvious point. First, fee controls alone will only reduce costs for parents in an effective manner without unintended consequences if providers currently draw substantial profits or surpluses. If they do not, lower fees need to be matched by increases in public funding. Second, identifying the level which financially sustains providers is complicated by several factors:

   - Delivery costs can vary substantially across providers and across different levels of quality of service. Identifying the appropriate level will require decisions about the amount and quality of provision that is desired.
   - There may be a need to provide an appropriate level of profit or surplus to maintain ongoing investment and expansion of services.
   - Financial information about costs and income are confidential for private provision. The financial accounts of large-scale operators of multiple settings can be especially opaque.

b) The structure of the fee controls will influence the distribution of the benefits across different types of families and the work incentives they create. Determination of an underlying principle on how costs should be shared between parents and public funding is helpful to underpin this. Specifically, the principle could be cost based (parents pay a specific share of the delivery costs) or affordability based (parents pay a limited share of their income or of average wages). The parameters for the fee control structure would then include whether rates or caps are used; whether controls are applied to hourly, daily or other timeframes; whether they vary by family income or other family characteristics; and the level of the minimum payment. If fee controls are related to

family income or other family income, a process will be required to obtain and verify this information.

c) Conditionality measures on the receipt of subsidies may be required to help to guard against specific adverse consequences. These could include consideration of:

- Conditions to prevent providers using ways to circumvent the fee controls, such as charging parents for additional (optional) items or increasing fees for unregulated hours or unregulated children;
- Conditions on quality, wages and work conditions; and
- Regulations on profit rates (to reduce the incentives to push down costs).

d) There may be a need to facilitate investment in expanded capacity if demand for provision increases substantially under the fee controls.

e) The magnitude of the budget required to fund fee controls and accompanying subsidies in the short term will depend primarily on existing ELC use and costs. In the medium term, two additional factors will affect the budget. First, any expansion in demand will increase the cost, including that which may result from switches from informal care or childminders. Second, the net cost may be lower than the gross cost if rises in parental (particularly maternal) employment increase tax revenues and reduce transfer payments.

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Annex: Summary of the evidence on fee control mechanisms by country

Figure 3 presents a summary of the different fee control mechanisms across countries, together with the context in which they operate and any evidence on their impact.

Figure 3: Summary of evidence on fee control mechanisms by country

	Evidence on fee control mechanism
Belgium	
Context throughout Belgium	• Childcare sector for children under age 3. Almost all provision is subsidised in private, municipal and state-maintained settings. • Children aged 2½ to 6 years are entitled to a free place in a pre-primary setting, although the number of hours varies across the three language communities. All facilities are state maintained.
Fee controls in the Flemish community	• In subsidised childcare, parental contributions constitute an average 45% of income. The government subsidy covers the difference between the parental contributions and the guaranteed daily fee for private settings. • Families pay a financial contribution according to their income, and families with more than one dependent child receive a discount. • For out-of-school initiatives, families' financial contribution is not income-related but minimum and maximum contributions are stipulated, and a discount is given where more than one child attends a facility. • For unsubsidised independent childcare centres and childminders, the childcare facility sets the price paid by the parents.
Fee controls in the French community	• In subsidised childcare, parents' financial contributions are set on the basis of net monthly household income in accordance with the government scale, which is reviewed annually. Fees are reduced for two children in attendance, for families with three or more children and for disabled children. • For unsubsidised childcare, the amount payable by the parents is set freely.
Sources	European Commission (2019, 2020f, 2020g, 2020h), Oberhuemer and Schreyer (2018)
Bulgaria	
Context	• Nurseries/infant-toddler centres for children up to age 3 and kindergartens for 2-/3- to 7-year-olds (compulsory at ages 5 and 6). • 87% of the education system is state funded: private nurseries are publicly funded but private kindergartens are not.

	Evidence on fee control mechanism
Fee controls	• For public and private nurseries, parents are charged a fee of approx. 60 leva (€30) per month. • For public kindergartens under the age of 5, parents pay on average a fee of €23 a month to cover subsistence. Kindergarten is theoretically free for 5- and 6-year-olds, but municipalities frequently charge attendance fees to cover lunch and building maintenance. • Private kindergartens are not subsidised and charge €230-€430 a month.
Sources	European Commission (2019, 2020i), Oberhuemer and Schreyer (2018)
Canada	
Context	• There are almost no publicly operated childcare centres in Canada. • Parent fees constitute the majority of funding for services for children aged 0-4 and school-aged care. All jurisdictions provide financial support for families who meet specific eligibility criteria (such as family income). • Quebec, Manitoba and Prince Edward Island (PEI) provide enhanced base funding for licensed ELC programmes and regulate parent fees.
Fee controls in Quebec	• Provision of childcare at a price of $5 per day rolled out between 1997 and 2000, increased to $7 in 2004 and moved to a partial, geared-to-income, sliding-fee scale for fees ranging from $7.75 to $21.20 (and $8.15 for school-age programmes) in 2015. • Fees above $7.75 are collected through the tax process, with additional contributions reduced by 50% for the second child and no addition for third and following children. • Government pays subsidies for the remaining costs. • Available for non-profit and for-profit provision. • Unfunded for-profit centres are not subject to the fee regulation (but 90% of fees are paid to parents as a tax credit from the Quebec government).
Fee controls in Manitoba	• Maximum daily fees that vary by age group. • Available to for-profit, non-profit and family childcare. • Funded through a mix of operating grants and parent fee subsidies.
Fee controls in PEI	• Parent fees in Early Years Centres are regulated by age of the child: daily rates in 2016: $34 for infants, $28 for 2-year-olds and $27 for 5-year-olds. • The maximum per diem rates for parent subsidies match the fees charged by Early Years Centres so that subsidies cover the full fee. • In unsubsidised centres, fees may exceed the subsidy.
Sources	Baker et al. (2008), Doherty et al. (2003), Friendly (2011), Friendly et al. (2018), Howe et al. (2018), Tougas (2002)
Evidence for all three provinces	Implementation: • All three provinces have province-wide salary scales which help predict and manage costs and quality: collective bargaining covers most CPEs in Quebec, and wage scales are agreed between the provincial governments and the early childhood organisations in Manitoba and PEI (**Friendly 2011**).

	Evidence on fee control mechanism
Evidence on impacts in Quebec	Most robust evidence uses a difference-in-differences quasi-experimental methodology comparing changes in Quebec over the period of policy change with the rest of Canada using microdata from two Canadian longitudinal surveys (Baker et al. 2008; Lefebvre and Merrigan 2008; Lefebvre et al. 2009; Lefebvre et al. 2011).
Impacts on childcare use	• Demand far exceeded the supply, number of spaces increased significantly and more children attended (**Howe et al. 2018** citing Baker et al. 2008; Cleveland 2012; Haeck et al. 2012; Lefebvre and Merrigan 2008; Lefebvre et al. 2009). • Some crowding out of existing arrangements (including informal care) (**Baker et al. 2008**). • Number of children and their weekly number of hours in childcare increased (**Lefebvre et al. 2011**). • But fewer than half of pre-schoolers had access to $7 places and many parents rely on more expensive unlicensed home or for-profit centre care (**Howe et al. 2018**).
Impacts on quality and child development	• While licensed childcare had positive cognitive and behavioural outcomes for children, government allowed the for-profit sector to expand and the overall quality of most care is "minimal" in terms of staff training and children-to-staff ratios in Canada (**Howe et al. 2018**). • Poorer child and family/parenting outcomes on a broad range of measures (**Baker et al. 2008**). • No improvement in school readiness or child early literacy skills and adverse effects on scores of children aged 5 (**Lefebvre et al. 2011**). • Argument that maximum daily rate creates strong incentives to use long childcare hours for children at a young age, which may be detrimental to child development (**Lefebvre et al. 2011**).
Impacts on mothers' employment	• Maternal labour supply increased significantly (**Baker et al. 2008**). • Policy had a large and statistically significant impact on the labour supply of mothers with pre-school children (**Lefebvre and Merrigan 2008**). • Policy had long-term labour supply effects on mothers who benefited from the programme when their child was less than 6. Results driven by changes in the labour supply of less educated mothers (**Lefebvre et al. 2009**). • Significantly increased the labour force participation and annual weeks worked for mothers with a child aged 1 to 4 years (**Lefebvre et al. 2011**).
Distribution of impacts	• Less gain for low income families because pre-1997 childcare policies had targeted low income families (**Baker et al. 2008**). • Children of lower socio-economic status less likely to attend childcare, and when they did, it was likely to be of lower quality. Speculated that some families could not afford to pay the $7 fee (**Japel et al. 2005**). • Low socioeconomic status (SES)children were least likely to be enrolled in higher-quality centres de la petite enfance (CPEs), due to limited number of CPE spaces, and CPEs tended to be located in higher SES areas (**Howe et al. 2018**).

	Evidence on fee control mechanism
Impacts on government revenues	• Partly due to crowding out in childcare use, the additional tax revenues from increased maternal employment fell short of paying for the subsidy costs (**Baker et al. 2008**). • Increased maternal employment and increases in the workforce increased the tax base (**Howe et al. 2018**). • Using earlier work, estimated that female employment was 3.8% higher in 2008, Quebec's GDP was higher by about 1.7%, and the tax-transfer return from the programme significantly exceeded its cost, with each $100 of subsidy paid by the Quebec government generating a return of $104 for itself and a windfall of $43 for the federal government (**Fortin et al. 2012**). • Simulations of additional net taxes showed modest effects, with the federal government the main beneficiary (**Lefebvre et al. 2011**).
Reform proposals	**Lefebvre et al. (2011)**: • Fees should be annually indexed and vary by age of child to reflect the social cost of the subsidised places. • No subsidies for children under the age of one would discourage the use of long hours of childcare for very young children. • Network should offer more part-time spaces, in line with parents' preferences. • Full-time (free) kindergarten for 4-year-olds with before- and after-school childcare would help to reduce disadvantaged families using lower-quality childcare.
Denmark	
Context	• The funding, organisation and regulation of ELC falls under the responsibility of the local municipal authorities. • Universal entitlement to a fee-paying, full-time place in publicly subsidised ELC from 6 months. • ELC services include both age-integrated (0-5 years) and age-separated (0-2 years, 3-5 years) ELC centres, as well as regulated home-based provision. • In 2014, approximately 70% of providers of centre-based settings were public/municipal, 17% publicly subsidised private non-profit and 13% private for-profit. Growing number of ELC centres are privately owned and run with subsidies from the local authorities.
Fee controls	• Municipal ELC is funded through local authority subsidies (per capita funding) and the parents pay the remainder. • The parental fee is not allowed to exceed 25% of the gross operating costs. Parents pay lower fees or no fees if their income is below a certain limit, and there are discounts for siblings and for children with special educational and support needs. • Some subsidies can be paid directly to settings for private provision but there are no fee controls. Hence, fees may be higher than in municipal centres. • For after-school care, parent payments are not allowed to exceed 30% of the gross operating costs.

	Evidence on fee control mechanism
Sources	European Commission (2019), Oberhuemer and Schreyer (2018), Naumann et al. (2013)
Evidence on impacts	**OECD (2006)**: • Relative to other Scandinavian countries, fees are still high due to higher costs.
Estonia	
Context	• All children aged between 1½ and 7 years are entitled to a free place in an ELC setting, but availability is limited. • The majority of ELC provision is public/municipal and only 9% of childhood settings were run by private agencies in 2015. • Public/municipal ELC centres are financed by municipalities but both public/municipal centres and privately run settings may receive subsidies for such items as staff salaries, teaching materials and professional development.
Fee controls	• In public/municipal ELC centres, parents always have to pay for meals and sometimes contribute to staff salaries and materials/equipment, but the maximum fee may not exceed more than 20% of the minimum wage, and disadvantaged families may be exempt from fees. • No fee controls in private ELC settings.
Sources	European Commission (2019, 2020j), Oberhuemer and Schreyer (2018)
Finland	
Context	• All children are entitled to a place in public childcare after the period of parental leave until compulsory school age (age 6) . • Municipalities can directly provide childcare or supervise private provision. In 2016, 14% of all children attending ELC services were enrolled in a publicly subsidised privately run setting.
Fee controls	• Fees in municipal childcare facilities are income based and depend on the size of the family and the requested hours of childcare, subject to maximum amounts. Day care is free of charge for low income families. Parental fees cover around 14% of the centre‘s running costs. • Fees in private day care are determined by the service provider, but parents can receive an allowance to cover these expenses. The compensation is means tested and paid as a flat care allowance directly to the private-care provider. The fee in private day care cannot be more than €30 larger than the fee in municipal day care. • Fees are generally higher in the privately run ELC centres than in municipal provision.
Sources	European Commission (2019), Hufkens and Verbist (2017), Oberhuemer and Schreyer (2018)
France	

	Evidence on fee control mechanism
Context	• Childcare for under-3s is dominated by childminders but crèches also take children from 3 months to 3 years. *Ecoles maternelles* take children from 3 to 6 years. • In 2012, 36% of crèches were private, mostly non-profit. 85% of early education for children between 3 and 6 years is provided by the state and the remainder are mostly provided by non-profits subsidised by the state.
Fee controls	• All state funding is through supply-side subsidies. • A system of scaled fees is in operation for under-3s, with families contributing according to income and settings compensated accordingly. • Parents pay an estimated 27% of costs of centre-based childcare for under-3s. • *Ecoles maternelles* are publicly funded and provided free of charge to parents, although local authorities charge for some expenses like catering and childcare after school hours.
Sources	Naumann et al. (2013), Oberhuemer and Schreyer (2018), European Commission (2019), Stewart and Gambaro (2014)
Germany	
Context	• The sharing of responsibilities between different levels means that there can be considerable regional differences. • Legal right to day care for all children between the age of 1 and 3 since 2013. Children under 3 generally attend a day nursery and children over age 3 attend kindergarten, although an increasing number of facilities offer places across the entire age range due to the new entitlement. • Two-thirds of centre-based childcare is run by subsidised voluntary providers, and one-third is managed by public local authorities. There are no for-profit providers. • Providers are entitled to subsidies from the *Länder* and local authorities if they are part of local childcare plans. • There are tax deductions for childcare fees.
Fee controls	• Fees for nurseries vary substantially across regions and depend on the income of the parents. • All recipients of child allowance and housing benefit are exempt from fees and the *Länder* can also use funds to relieve other families of fees. • Local authorities administer funding: parents' tax declarations are used by local authorities to determine the level of co-payment (which the parent pays to the provider), while the local authority pays the remainder. Hence, public money follows the child, preserving parental choice, but can be adjusted for different child characteristics and goes directly to the provider. • The costs of institutional childcare places vary between states but 11-29% of the costs are borne by parents.
Sources	Department for Education (2013), European Commission (2019), Hufkens and Verbist (2017), Oberhuemer and Schreyer (2018), Stewart and Gambaro (2014)

	Evidence on fee control mechanism
Evidence on impact	**Hufkens and Verbist (2017)**: • Demand still exceeds supply for under-3-year-olds (but source not cited). **Wrohlich (2008)**: • Evidence showing that a large fraction of parents with children under age 3 demand a childcare slot but are not offered one (but uses data from 2002).
Hungary	
Context	• Municipalities have a duty to provide the appropriate number of nursery places for children under the age of 3. Enrolment in kindergarten is compulsory from age 3 until primary school starts at age 6. • Most kindergartens and infant-toddler centres are either state maintained or run by the municipalities. In 2016, around 19% of kindergartens were run by private (non-profit and for-profit) providers.
Fee controls	• For children under age 3, fees and meals cannot exceed 25% of net family income per person in centre-based settings and 50% in home-based ones. • In public kindergartens, parents pay only for subsistence, but parents pay more in state-subsidised private settings than public ones.
Sources	European Commission (2019), Oberhuemer and Schreyer (2018)
Italy	
Context	• ELC mainly organised and regulated at regional or municipal level. • Parents pay fees for children under age 3 to attend nurseries. Since 2016 (with increased funds in 2020), demand-side subsidies in the form of nursery vouchers are given to parents based on ISEE (Equivalent Economic Situation Indicators) scores. • Pre-primary school for children over 3 is financed mainly by the state and local authorities. • ELC is run by municipalities and accredited private centres with public funding. Around 70% of services for under-3-year-olds are publicly run and around 60% of kindergartens are state run, 30% are private and 10% are run by municipalities. • Quality of services is high, but there is a severe lack of spaces for nurseries.
Fee controls	• Fees for nurseries are regulated at the municipal level, based on the proportion of costs that the municipality cannot cover. On average, 40% of total costs are paid by parent fees. • In most cases, tariffs are based on a family's ISEE scores (but the exact fee structure varies). Some municipalities exempt families with difficult socio-economic backgrounds. • There are no fees at the pre-primary level, but families pay a small contribution towards transport and canteen services, from which low income households are exempted.

	Evidence on fee control mechanism
Sources	Cittadinanza Attiva (2011, 2020), Del Boca and Pasqua (2010), Del Boca and Vuri (2007), European Commission (2019), Istituto Nazionale Previdenza Sociale (INPS) (2020), Oberhuemer and Schreyer (2018)
Evidence on impacts	• **Del Boca and Vuri (2007)**: The severe lack of availability of nursery spaces means that subsidies to reduce prices would only affect utilisation and women's labour supply in areas with less rationing. • **Istituto degli Innocenti (2011)**: Public nurseries have higher costs but lower fees than private services.
Korea	
Context	• ELC is split into childcare centres (for 0- to 6-year-olds) which provide care for working mothers and kindergartens (for 3- to 5-year-olds) which have an educational purpose. • Free education and care for all children aged 3-5 was introduced in 2013. • High dependency on private provision for children's centres and kindergartens (only 6% of childcare centres were public in 2014).
Fee controls	• Although there is free provision and subsidies, parents are responsible for paying for after-school programmes. • Childcare centres have price caps and financial regulations, but there are no caps for kindergartens. Consequently, fees in kindergartens for children aged 3 to 5 are higher and have a wider range than in childcare centres.
Sources	Park et al. (2017), Yun et al. (2014)
Evidence on impact	**Park et al. (2017)**: • The tuition differences between kindergartens and childcare centres mean that the quality of care in terms of the quality of teachers, facilities and programmes is higher in kindergartens than in childcare centres. • Means that parents face a dilemma to choose between lower cost or higher quality. • Means that although each child aged 3-5 receives an equal amount of government subsidy, there are inequalities in their education depending on their parents' financial state. **Yun et al. (2014)**: Argue that there is evidence of high profitability for childcare providers in the premiums that are paid for childcare businesses and that competitive pressures for higher quality and lower prices are weakened by several factors: • Lax government oversight and inadequate quality control for centres receiving government financial assistance. • Entitlement to public support does not have financial accounting rules, with a risk of subsidies being paid to individuals. • Lack of accessible information for parents to compare institutions in terms of cost and quality. • Government guidelines that childcare permits should only be issued when occupancy is high by national standards restricts entry of new providers.

	Evidence on fee control mechanism
Lithuania	
Context	• Pre-school education institutions for children from birth up to 6 years of age and pre-primary education institutions for 6- to 7-year-olds. • Compulsory attendance in pre-primary education creates a de facto free entitlement for 6- to 7-year-olds for 20 hours per week. • Private ELC provision is rare and 94% of children attended publicly provided provision in 2015. • Both public and private provision are subsidised by the government, with a mixture of funding from the national level and from municipalities.
Fee controls	• Public ELC provision is free of charge, but the local council regulates parental fees to cover the cost of meals, with the amounts halved for single parents, parents who are studying and parents with more than three children. • Private centres which are subsidised by the government are allowed to charge a fee at their discretion to cover the remaining costs.
Sources	European Commission (2019), Hufkens and Verbist (2017), Oberhuemer and Schreyer (2018)
Netherlands	
Context	• Predominantly private market provision before age 4: private childcare centres (of which 70% are for-profit), playgroups and regulated family day care. • Free and full-time early education in primary school nursery classes from age 4 with no private market involvement.
Fee controls	• No direct fee controls or regulation. • Parents who are working, studying or unemployed are compensated for their childcare cost by the tax authorities based on actual payment and income (varying from 0% to 63%), and employers pay one-third of cost for their employees. • Tax allowance reimbursement is subject to a maximum hourly rate (€8.17 for day care and €7.02 for out-of-school care in 2020), which is usually lower than the actual hourly cost charged by the childcare provider. The childcare allowance is for a maximum of 230 hours per month per child.
Sources	European Commission (2019), Hufkens and Verbist (2017), Lloyd and Penn (2010), Naumann et al. (2013), Oberhuemer and Schreyer (2018), Penn and Lloyd (2013), Plantenga (2013) and 2020 maximum rates from https://www.truecolorschildcare.com/calculate-costs/dutch-childcare-allowance-kinderopvangtoeslag/

	Evidence on fee control mechanism
Evidence on impacts	**Penn and Lloyd (2013)**: Summarised evidence on the impacts of the change to demand-side subsidies in 2005 with an employer levy (including the evaluation by Berden et al. 2009): • Parental childcare costs were halved by 2009, while average childcare fees and average profits for day nurseries increased. • Increase in use of formal care (of around 10%) and rise in female labour market participation. • High take-up led to high budget cost and consequent reduction in the tax credit levels. • In 2010, parents paid 22% of their childcare costs, employer contributions covered 25% and the government contributed over half of parents' direct childcare costs. • Average childcare fees rose in line with levels of fiscal support. 70% of providers took the upper qualifying limit into account in setting their annual fees.
Norway	
Context	• Children aged 1-5 have a legal right to a kindergarten place. Municipalities supervise kindergartens and pay a rate per child. • In 2009, 46% of kindergartens were public and 54% private. • 20 free hours for children aged 3 to 5.
Fee controls	• Fees are limited to 6% of household income. Other discounts and free places are based on income or number of children and for children from disadvantaged backgrounds or other groups. • Kindergartens may charge a fee to cover the cost of food. • Parental fees make up around 15%-18% of kindergarten running costs, with municipalities paying the rest. • Regulation covers wages and profits: private kindergartens receive state subsidies only if they operate with no more than "reasonable" profits, and profits are not considered reasonable if the wage share is lower than in public kindergartens.
Sources	European Commission (2019, 2020b), Jacobsen and Vollset (2013), OECD (2017), Stewart and Gambaro (2014), Wheaton and Harding (2017)

	Evidence on fee control mechanism
Evidence on impacts	**Ellingsgaeter (2014)**: Overall commitment to expand access to childcare at a reasonable cost to parents: • Considerable increase in ELC participation: from 37% to 80% between 2000 and 2011 for 1- and 2-year-olds. **Stewart and Gambaro (2014)**: • (Prior to 6% of household income cap): fee cap amounts combined with the fact that income-related bands are not universal means that low income families tend to spend twice or three times more of their income on childcare than higher income families. **OECD (2017)**: • Parental contribution to running costs fell from 37% in 2002 to 15% in 2012. • 6% cap needed because fees had remained a disincentive for ELC participation for low income families. **Wheaton and Harding (2017)**: summary of benefits and challenges of the fee management: • Fee cap manages childcare costs for parents, contributing to a high maternal employment rate. • Strict conditionality rules support quality and good working conditions for staff. • Fee cap stopped high-earning families from overpaying but low income families still spent a greater proportion of their income on childcare. • Fee cap requires a high level of subsidisation.
Serbia	
Context	• Pre-school education from 6 months to 5½ years and compulsory preparatory pre-school programme until the age of 6½. • Pre-school education and preparatory school programmes are approved by the state and implemented at kindergartens and pre-school institutions. • Financing of ELC is divided between the Republic, local level and parents.
Fee controls	• For pre-school education in public institutions, up to 80% of the cost is provided by the municipality and the rest by parents, except for some children who are exempt including those living in financially disadvantaged families. • The pre-school programme in public institutions is free of charge for half-day. • Private pre-school fees are determined by the institutions themselves.
Sources	European Commission (2019, 2020k)
Singapore	
Context	• Childcare centres for children up to age 6 and kindergartens for children aged 3 to 6. • With the exception of a small but expanding number of government kindergartens, all provision is in the private sector (government-supported non-profit and for-profit centres). • Means-tested subsidies to working parents for childcare and kindergarten.

	Evidence on fee control mechanism
Fee controls	• Two government schemes (Anchor Operator Scheme (AOP) for all types of centre-based care and Partner Operator Scheme for childcare operators) provide funding to providers that agree to keep fees low (and subject to maximum monthly fees) and invest in improving quality and professional development. • Just over 50% of pre-school children in centre-based care attend an AOP centre.
Sources	Bull et al. (2018), NCEE (2018)
Slovenia	
Context	• All children are entitled to a full-day place in an early childhood centre from the age of 11 months up to school entry age at 6. • Kindergartens/early childhood centres take children from 11 months to age 6. There are also home-based settings and private settings. • ELC centres mainly public (and mainly funded by the municipalities): 91% of kindergartens were public in 2015/16. • The funding of ELC centres is covered by state subsidies, municipal budgets, donations and parental fees. • Many municipalities are currently finding it difficult to provide a sufficient number of places to meet local needs. Sometimes, the public provider networks offer concessions to private providers to cover the need for places.
Fee controls	• Parental fees in kindergartens vary considerably depending upon the contribution provided by the municipality. Fees are income related: parents in the highest salary grade pay no more than 77% of the costs, whereas parents in the lowest grade of earnings pay no fees at all. Parents pay 30% of the fee for the second child and no fees at all for each further child. • Before-school care and after-school care are provided to parents free of charge. • Parents pay full fees for special services such as out-of-school services or childminders.
Sources	European Commission (2019), Oberhuemer and Schreyer (2018), Naumann et al. (2013)
Spain	
Context	• ELC is divided into two cycles (0-3 and 3-6 years), which can be provided either in separate settings or in integrated settings for both cycles. • All children aged 3 to 6 years are entitled to a free place in ELC provision for 25 hours weekly. Attendance is voluntary but enrolment is close to 100%. • In both cycles, service providers may be public, private non-profit (subsidised) or private for-profit (not subsidised).

	Evidence on fee control mechanism
Fee controls	• Parental fees for the care of children below age 3 are decided by the service provider but may not exceed a monthly ceiling. • Private for-profit settings are not subsidised and are free to set fees. • Primary education for children from 3 to 5 is free.
Sources	European Commission (2019, 2020c), Oberhuemer Schreyer (2018), OECD (2018)
Evidence on impacts	**Save the Children (2015)** (as reported in Oberheumer and Schreyer 2018): • Private subsidised settings are increasingly asking for (voluntary) donations for a variety of reasons, such as material resources, visits and excursions. Some families are finding it very difficult to meet these.
Sweden	
Context	• Full-time pre-school is available from the age of 1 for parents who are working or studying and is available part time for unemployed parents or parents on parental leave with a younger sibling. • Pre-school and school-age childcare are organised by municipalities and financed by state grants, municipal grants and fees. • Almost all childcare is publicly organised but private providers can receive public subsidies. • Availability of pre-school is very high.
Fee controls	• Fees for pre-school and after-school care are capped at 3% of gross income for the first child, 2% for the second, 1% for the third and are free for the fourth, subject to set ceiling amounts. Families with lower incomes or more children pay less or no charges. • The introduction of the fee caps aimed to improve equity in costs across municipalities and improve work incentives by reducing marginal costs. • Government compensates the municipalities for any loss of income from the maximum fee system and all municipalities participate in the scheme even though it is voluntary. • The fee covers most activities, including food.
Sources	European Commission (2019, 2020a), Hufkens and Verbist (2017), Naumann et al. (2013), OECD (2017), Skolverket (2007)

	Evidence on fee control mechanism
Evidence on impacts	Evidence on the impacts of the Maxtaxa reforms in 2001-2003: introduction of the fee caps and an obligation for municipalities to provide part-time pre-school slots for children of unemployed parents and parents on parental leave, and 525 free hours per year for children from the age of four. **Skolverket (2007)**: National Board of Education statistics: • Municipalities' fee systems became simpler and more uniform. • Enrolment in pre-school increased, leading to more even enrolment rates across municipalities and by socio-economic background. **Brink et al. (2007)**: simulated responses to the introduction of the fee cap: • Parents' contribution to childcare costs reduced from 16% to 10%. • Families benefited from reduced childcare costs and from a zero marginal cost once they reached the cap (improved work incentive), but higher income families using more hours benefited more. • Greatest impacts on work for single mothers with smaller effects on mothers and fathers in couples (probably due to high labour force participation prior to the reform and the availability of childcare). • Government cost offset by increased tax revenues (work and consumption taxes) and reduced social assistance and housing allowances: net cost estimated to be 79% of the gross cost. **Lundin et al. (2008)**: analysis using variation in fee changes across municipalities: • Most households had a reduction in childcare price, although there was large variation, and some experienced a rise. • Fee cap had no substantial impact on mothers' employment, possibly due to childcare already highly subsidised and female labour supply already high. **Hanes et al. (2009)**: used pre-reform variation in fee structures to estimate impact of moving to income-based fee caps: • By the end of the 1990s, most municipalities used some form of time-dependent fee using either hourly rates or time intervals. • Municipalities that had applied time rates had larger increases in expenditure and tax rates in comparison to municipalities that had used income-dependent fees. • Consistent with the explanation that the use of time rates restricts demand in terms of the numbers of hours of care relative to the use of income-dependent fees with maximum caps. **Wilkström (2007)**: used pre-reform variation in fee structures to estimate impact of moving to income-based fee caps: • Average time in pre-school increased by 0.4 hours per week, but municipalities that had applied time rates had larger increases in average hours in pre-school in comparison to municipalities that had used income-dependent fees. • Municipalities that had applied time rates had no change in the cost per child in comparison to a slight decrease compared to municipalities that had used income-dependent fees. **Mörk et al. (2013)**: analysis using variation in fee changes across municipalities: • Anticipation of a reduction in childcare costs had a positive impact on fertility: increased the number of first and higher-order births and affected the timing of second births.