



Public Services contribution to smart, sustainable and inclusive growth

Financing Services of General Interest: Solutions

Client: CEEP

Rotterdam, June 6, 2011

The aim of this fact sheet is to provide participants in the conference the 16-17 June with information to grasp the complexity of the various selected topics. As a second step, this document highlights some links with current EU policies and suggest points for debates.

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Financing Services of General Interest:

Final Report

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Executive Summary

One of the major political economy debates that has become increasingly important due to the crisis concerns the levels of financing of public services. The debate is closely linked to short and long-term challenges of financing and the continuous need to finance essential services. This fact sheet presents some “innovative” solutions in financing Services of General Interest (SGIs) in view of the current economic and financial challenges being faced by Member States (MS) in the European Union (EU).

For financing of SGIs, general (or more traditional) solutions may vary from efficiency gains, among them through innovation, to (increased) financing through increased tax revenues (e.g. road pricing in the case of public transport). However, the recent crisis has put pressure on the government budgets pushing them to increasingly look outside their own house to fund these services. In this backdrop, the significance of private sector involvement in the provision of SGIs is becoming more important.

In addition to this, the Eurovignette, the Europe Project Bond Initiative, European Investment Bank (EIB) and the European Bank for Reconstruction and Development (EBRD) have also been discussed as potential instruments in financing the provision of SGIs. Three sectors (public transport, healthcare and child care) have been reviewed to assess some of these financing instruments and their use in MS in the EU.

Discussion points

- Should Governments/public authorities seek the involvement of private financiers and operators in the provision of SGIs?
- What kind of new financing tools have you or would you envisage in your enterprise(s)?
- Depending on the sectors you operate, what would be the key criteria to define a “good” financing mechanism

1 Introduction

This fact sheet aims to present some “innovative” solutions in financing Services of General Interest (SGI)¹ in view of the current economic and financial challenges being faced by Member States (MS) in the European Union (EU). It briefly presents a number of potential solutions bearing in mind the subsidiarity principle and looks at some pragmatic applications in the issues in financing SGIs in three important sectors of public interest – transport, health care and childcare.

One of the major political economy debates that has become increasingly important due to the crisis concerns the levels of financing of public services. The debate is closely linked to short and long-term challenges of financing and the continuous need to finance essential services. On the other hand, we have just experienced a severe economic crisis, the aftermath of which is still to be fully seen.

1.1 Fiscal solutions

According to the IMF², while improvements in expenditure prioritisation are necessary to adjust fiscal imbalance, steps on the revenue side would be as important. In this respect, broadening the tax base by fighting tax evasion but also reducing exemptions or increasing coverage will play an important role. Depending on the needed strength of the adjustment, the initial size and efficiency of the state, and societal preferences, tax rate hikes (or new taxes such as carbon taxation or the sale of emissions rights) may also be necessary. Country-specific circumstances would help determine which taxes could be raised with the least distortionary impact.

For financing of public services, general solutions may vary from efficiency gains, among them through innovation, to (increased) financing through increased tax revenues, to finance via increased fees, increased publicities, etc. Alternative options are reallocation of funds, based on (strategic) prioritisation as well as (increased) use of non-public resources and mechanisms.

1.2 Public Private Partnerships

Public Private Partnerships (PPPs) come in many forms. They normally include a long-term contractual arrangement between the public sector and a private entity whereby the private entity is responsible for Design, Build, Finance and Maintain (DBFM) and in some occasion also Operate (DBFMO) of an infrastructure asset. Operate means that the private entity charges the user a fee for the use of the asset (e.g. toll roads).

The main attraction of PPPs lies in the budgetary advantages to “spread” the cost of PPPs in several budgetary years. It also lies in the increased efficiency and effectiveness achieved by sharing a project’s risks. In addition, PPPs enable public authorities to create public service

¹ According to the EC Communication (COM(2007)725) Services of general interest cover a broad range of activities, from the large network industries such as energy, telecommunications, transport, audiovisual broadcasting and postal services to education, water supply, waste management, health and social services. Although their scope and organisation vary significantly according to histories and cultures of state intervention, they can be defined as the services, both economic and non-economic, which the public authorities classify as being of general interest and subject to specific public service obligations.

² IMF (2010), “Strategies for Fiscal Consolidation in the Post-Crisis World”.

infrastructure, while staggering the burden of their investment over time and, in certain cases, allowing off-balance sheet commitments.

Having said that, critics have argued that the benefits of PPPs are limited and in fact, form a 'counter taxation' by private companies on the State. Governments has been warned to be careful in blindly adopting PPPs.³ It is argued that contrary to PPPs bringing in private money so that governments could spend on something else, a number of them actually rely on a stream of income from payments by government. Also, governments are expected to provide some form of guarantee or agreement to carry risks thereby providing greater security to private investors. According to Hall (2010) "governments and international institutions have used PPPs as an 'approved' way of maintaining infrastructure investment within fiscal rules" ... thereby being able to move debts off-balance sheets.

The European Investment Bank (EIB) has been a traditionally prominent player in the PPP market. However their involvement has been largely in transport, energy, environment and SMEs. EIB's involvement in the provision of public transport services has been discussed briefly under the public transport case study below.

1.2.1 *Eurovignette*

The EU first presented a directive enabling countries to introduce tolls on motorways in order to finance the cost of infrastructure deterioration caused by heavy road vehicles in 1993 which came into force in 1999. However, it was argued that road charges and tolls on heavy commercial vehicles varied widely across EU member states, regarding both the amounts charged and the systems used to calculate the levy.

The so-called 'Eurovignette directive' was presented in July 2003 which aimed at harmonising the EU framework for charging heavy goods vehicles on European motorways. It also aimed at extending the previous directive's scope to more roads, more vehicles and more costs, with a view to meeting the objectives laid down in the 2001 Transport White Paper on "European Transport Policy for 2010: Time to decide".

CEEP provided its opinion on the revision of the Eurovignette Directive stating that:

- MS should have the flexibility to elaborate the infrastructure cost and external costs mix that is most suitable to their national, regional and local situations.
- MS should be guided into using the revenue of road pricing to improve the environmental record of the overall transport system.

CEEP is of the opinion that the Eurovignette directive should be modified to include the social and environmental costs in the infrastructure charging of heavy goods vehicles and will consequently draw the attention of policy makers to this issue.

1.2.2 *Europe Project Bond Initiative*

To underpin the Europe 2020 Strategy for smart, sustainable and inclusive growth and in order to complete the internal market, massive investments are expected to be needed over the next decade in Europe's transport, energy, and information and communication networks. Preliminary estimates suggest an investment need of € 1.5 to 2 trillion. Given this requirement together with the fact that government budgets face severe pressures makes the EC believes that it is "it is crucial to

³ See Hall (2010), "Why we need public spending", University of Greenwich.

foster the participation of the private sector in the financing of infrastructure projects”.⁴

It is against this background that the EC announced the Project Bond Initiative in 2010⁵. The principal idea behind the Europe 2020 Project Bond Initiative is to provide EU support to project companies issuing bonds to finance large-scale infrastructure projects. The Initiative aims to attract additional private sector financing of individual infrastructure projects by improving the rating of the senior debt of project companies, thereby ensuring that this can be placed as bonds with institutional investors. The Commission's key role will be risk-sharing with the EIB or other financing partners, enabling them to provide the described credit enhancement. No bond issuance will be required by Member States' governments, the EU or the EIB for this purpose.

This initiative by the EC is welcomed by various stakeholders. In their response to the consultation, CEEP welcomed the EC's initiative to encourage infrastructure investments, however at the same time, state that such investments raises a few concerns such as project bonds not being an end in themselves. In addition, they should not be “allowed to hamper the normal recovery of capital markets in relation to the financing of infrastructure projects”, “Project bonds should complement existing sources of finance such as bank loans and grants”. In the response it is highlighted that it is less convincing how issuing project bonds will incentivise investors in the sectors such as energy where the costs of new technologies and timescales are untested. Also, it is unclear whether the initiative should be restricted to a few sectors or should include sectors such as health and education.

The next sections in this fact sheet focuses on the issues of financing services in three different SGIs – public transport, health care and childcare. The aim of these sector analyses is to present the different financing options that have been adopted in MS in the provision of selected SGIs. A more detailed analysis of these sectors is presented in [separate annexes](#) of this fact sheet. For each sector we briefly present the main challenges faced in funding the provision of the respective service together with potential solutions and country examples.

1.3 Cases from Public transport

Public transport plays a vital role in regional development and urban mobility. It is also largely relevant for sustainable development. However, the financial resources allocated to its development and maintenance is always under pressure. Ensuring proper financing mechanisms is important not only for the development of public transport networks but also to the sustainable development of regions as well as cities and rural areas.

Financing public transport and transport infrastructure is faced with many challenges. Some of these include growing welfare, car ownership, urban sprawl and individualisation with complex patterns of activity have had an influence on decreasing public transport patronage; declining public funds for public transport due to general budget restrictions; identifying “new” measures and options to generate additional revenues, e.g. by commercialising stations or other real estate assets or by applying new business models (advertising, freight transport etc.).

⁴ European Commission (2011), “Commission Staff Working Paper on the Europe 2020 Project Bond Initiative”

⁵ The EC is currently carrying out a stakeholder consultation to obtain market participants' and decision makers' feedback on the chosen mechanism and its essential terms and conditions. It aims to also gauge demand for the initiative in terms of market volumes and the depth of the investor base.

Increasingly governments have found public funding methods to be less attractive as infrastructure projects, such as public transport networks, are quite capital intensive and put significant strain on the balance sheet – this limits the government’s ability to undertake other projects. Therefore, governments have been exploring alternative options for financing capital investments in infrastructure.

Below we present some of the methods of financing public transport and transport infrastructure. These include road pricing, EIB and the EBRD as financiers of sustainable urban transport projects and Public-Private Partnerships (PPPs). In the annex on “Financing public transport and transport infrastructure” we look at these methods of financing in more detail with interesting country examples.

1.3.1 Road pricing

Road pricing has a long history in the form of tolled bridges, tunnels, and turnpikes designed to generate revenue to pay for the construction, operation, and maintenance of these facilities. It has been instituted on a broader basis in many countries, notably the Czech Republic, Germany, Singapore, Sweden, and the United Kingdom, and the Netherlands.

Road pricing has traditionally been an important source of generating revenues to fund public transport infrastructure. However it has often proven to be inadequate to meet the growing demands of investment requirements and mostly plays an important role in reducing the use of private cars instead of public transport.

1.3.2 EIB as a financier of sustainable urban transport projects

The EIB is also active in assisting public authorities with, among others, investing in infrastructure needed to provide SGIs, in particular public transport networks. In 2008, the EIB lent € 57.6 billion for capital investment projects, over 89 per cent of which was in the EU and the remainder in partner countries. Urban transport accounted for € 2.8 billion, about a fifth of EIB direct lending in the transport sector as a whole and 6 per cent of total individual loans. Between 2004 and 2008, EIB support for the urban transport sector amounted to over € 14 billion of direct financing.⁶

A major challenge for the EIB’s involvement in public transport is to support solutions that strike a balance between the growing demand for mobility and the quality of the urban environment.⁷ Urban public transport projects are only rarely financially self-supporting and usually face substantial operating deficits. While tariffs are a common source of revenue, they typically have to be set at acceptable levels, as mobility is considered a common good.

To meet their financing needs, both for new investment and to cover operating deficits, most cities use a mix of contributions from central, regional and municipal governments. However, there is a growing need for new approaches to mobilising the required financial resources, not only to ensure a quality service, but also to increase the supply of services to meet changing societal needs.

1.3.3 European Bank for Reconstruction and Development (EBRD)

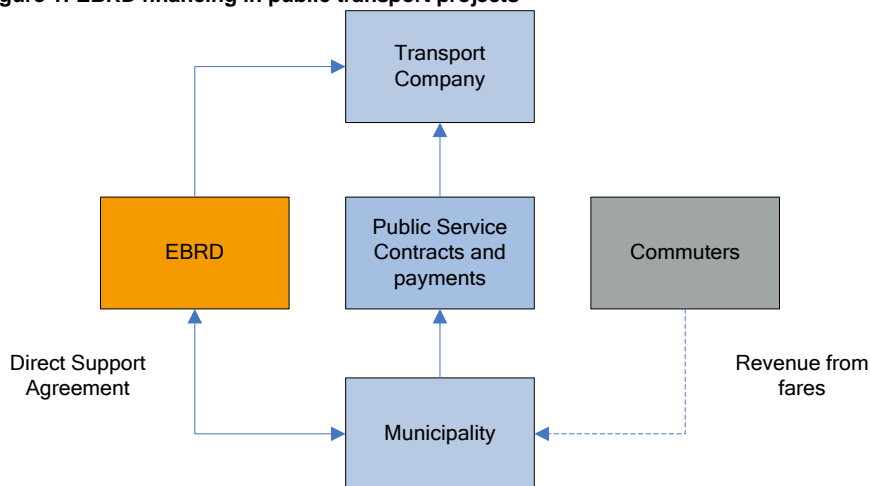
The EBRD is also active in the financing of public transport projects in the EU. The main three financing structures the EBRD offers with regard to public transport projects are corporate loans, municipal loans and performance guarantees. Each of these structures are presented briefly in the annex with examples of EBRD support in Sofia and Bishkek.

⁶ EIB (2009), “The EIB’s Role in Financing Sustainable Urban Transport Projects”.

⁷ Ibid.

Figure 1 below presents one of the forms of EBRD financing in public transport.

Figure 1: EBRD financing in public transport projects



Source: EBRD (2008), "Financing Public Transport Projects by EBRD"

1.3.4 Public Private Partnerships

During 1990-2009, the UK accounted for about two-thirds of all European PPP projects. With 10 per cent of the total number of projects, Spain remains the second-biggest PPP market; and it has gained slightly in importance in recent years. France, Germany, Italy, and Portugal all represent 2-5 per cent of the total number of projects, respectively. The UK, Portugal, France, Germany, Spain and Italy together account for some 92 per cent of all European PPPs. Overall, this suggests that the PPP market in Europe continues to slowly expand towards other countries.⁸

The sectoral distribution of PPPs in the UK has been largely concentrated in transport, education and health. Over the past 5 years, the transport sector represented 41 per cent of the number and 76 per cent of the value of PPPs in continental Europe (outside the UK). Also, the composition of PPPs in the transport sector outside the UK is largely in the road sector followed by urban public transport.

1.4 Cases from healthcare

Healthcare systems are a fundamental component of social security as they assist in preventing and treating ill health and cover the associated costs. Financing of healthcare services has always been a point for discussion in terms of extent of public and private financing.

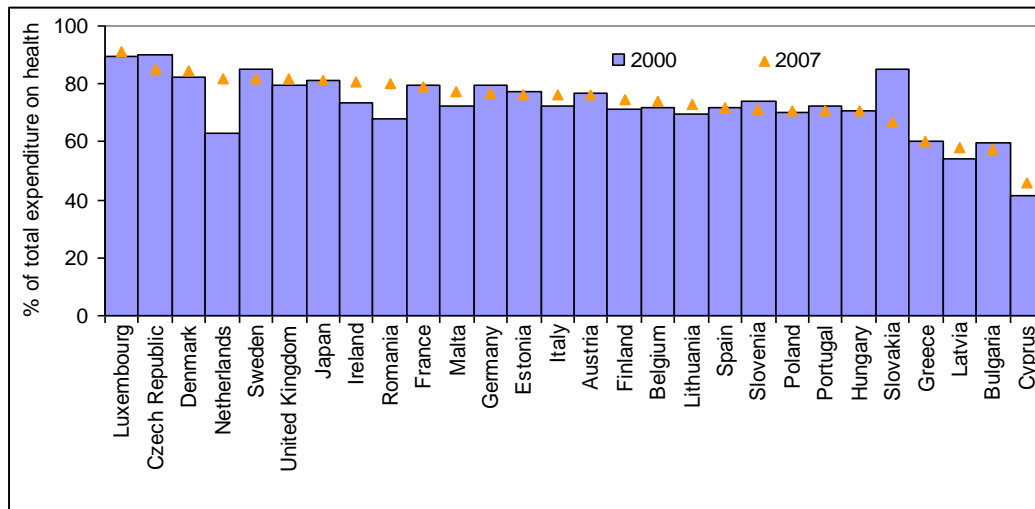
Healthcare financing can take various forms. The most commonly adopted forms of financing include out-of-pocket (OOP) expenditure, social insurance, private insurance and general taxation. The last three forms of payment are "prepaid" in nature and are considered to provide better financial protection for households and pool health risks across individuals. Of these prepaid financing mechanisms, general government revenues are the most widespread, providing substantial funding for health services in almost every country.

In all EU Member States, healthcare systems receive a large share of their funding in the form of public revenue. From Figure 2 we observe that for 21 countries, public funding of healthcare spending exceeds 70 per cent while the share is between 50 per cent and 70 per cent for only 4

⁸ EIB (2010), "Public-Private Partnerships in Europe – Before and During the Recent Financial Crisis".

countries. Cyprus is the only exception with private financing contributing to over 50 per cent of its healthcare expenditure.

Figure 2: Government expenditure on health as a percentage of total expenditure on Health in 2007



Source: WHO, World Health Statistics, 2010

In the annex on “Financing healthcare” we look at the trends in government investments in the provision of healthcare and the role of public and private sectors in the financing of healthcare services with some country examples.

Private financing of healthcare services has been a bone of contention for a long time. Many countries from across the world have experimented with adopting private finance. In some countries of central and eastern Europe (in particular Latvia, Bulgaria and Romania), the share of private funding (essentially of direct out-of-pocket (OOP) payments from households and, to a lesser degree, private insurance) for healthcare grew during the 1990s. Germany, Sweden and France too encouraged private sources of finance for capital investment in health organisations. Greater private sector involvement has its potential benefits such as reduced administrative and financial burden for the public services, greater value for money, and enhanced innovation.

Critics, though, have argued that private-sector involvement has yet to demonstrate benefits, and as markets for healthcare and insurance deviate from perfectly competitive markets, have warned of risks of market failure with adverse consequences for equity.^{9,10} Public financing, on the other hand, provides the need to secure sustainability without undermining values such as equity in finance or equity of access to health. Publicly generated finance contributes to efficiency and equity by providing protection from financial risk and by detaching payment from risk of ill health. The most common form of public financing is by generating tax-based revenues. Tax-based revenues are advantageous as they avoid problems common to voluntary insurance markets and benefit from economies of scale in administration and risk management. On the other hand, such a system may also be plagued with inefficiencies that emerge from serving multiple objectives, political pressures to serve privileged groups, challenges of effective management in public services, and problems associated with instability and weak accountability.¹¹

⁹ See Besley, T. and Gouveia, M. (1994), “Alternative systems of health care provision”, *Economic Policy*;19:200–58.

¹⁰ Atun, R. (2008), “Public-private partnerships in health: time for evidence-based policies”.

¹¹ WHO (2004), “Tax-Based Financing for Health Systems: Options and Experiences”, Discussion Paper No. 4

In the context of the EU, the issue of financing healthcare systems has come under the scanner for several reasons:

- Older people usually account for a large proportion of healthcare spending. The EU is rapidly facing the problem of ageing population and its associated healthcare costs. As a result, the demand for healthcare is expected to be higher than the capacity of health systems able to meet it.
- Keeping up pace with the introduction of new technologies are likely to increase costs.

The combination of both issues where it is assumed that older people are the main recipients of innovations in healthcare systems, the costs are multiplied. Thus, controlling costs and securing better value from the money invested in healthcare will be more challenging as patient choice expands and demand grows faster than the available finances.

1.5 Cases from Early Childhood Education and Care

The Europe 2020 strategy aims for smart, sustainable and inclusive growth. In this strategic context, which deals with influencing future outcomes, Europe's youngest population should be a definite focus. The recent communication from the EC¹² notes that improvement in education sector is essential to all three growth dimensions set by Europe 2020 strategy. More specifically, the communication focuses on the idea that "Early Childhood Education and Care (ECEC) is the essential foundation for successful lifelong learning, social integration, personal development and later employability", all of which can be linked to Europe 2020 agenda.

Investment in ECEC has its social, economic and educational benefits, which are closely related. In terms of social impact, ECEC has potential for breaking the "cycle which transmits disadvantage from one generation to another"¹³. Looking from a parent perspective, ECEC is a way to increase labour market participation, especially that of women. In terms of economic benefits, improvement in ECEC is likely to increase employment generating greater taxpayer income and in the longer-term potentially lower support expenditure needed for education, healthcare and also police. In terms of educational benefits ECEC is seen as an effective tool to potentially reduce early school dropouts, improve the equity of educational outcomes, and reduce chances of lost talent.

Gordon and Krashinsky (2003) highlight that all and any public expenditure on ECEC will not generate benefits that is higher than costs. What matters is the design of ECEC financing programmes, with an emphasis on the quality of ECEC. Benefits to children are very much affected by the quality level of ECEC, and they are said to increase with quality rise without an obvious limit. However, higher quality comes at price. As a general rule, financing schemes should be designed "to maximise the excess of benefits over costs for any child, and should include all children and families for whom benefits exceed costs". The designing of ECEC services increases benefits over costs when focusing on parental work schedules and requirements.

Box 1: Key conclusions of "The provision of childcare services: A comparative review of 30 European countries"¹⁴

Traditionally, an important reason for countries to invest in the provision of childcare is to increase the (female) labour force participation. A higher participation rate may increase gender equality, foster economic growth and

¹² European Commission: [Communication on Early Childhood Education and Care \(pdf format\)](#) (17 February 2011)

¹³ Ibid.

¹⁴ Accessible from <http://ec.europa.eu/social/main.jsp?langId=en&catId=89&newsId=545&furtherNews=yes>

help improve the sustainability of the present-day welfare state, especially in the light of an ageing population. Another argument points to the fact that childcare services might increase fertility rates by making a child less costly in terms of income and career opportunities. Higher labour force participation reduces the risk of poverty over the life course and especially in old age. The improved well-being of parents may also reduce child poverty and thus improve future outcomes for children. The effect on children may even be more direct: good-quality childcare services may serve a child-development purpose, providing the child with a rich, safe and stimulating environment.

The report highlights that throughout Europe the availability, the quality and affordability of childcare differ extensively. In the category 0–2 years, the use of formal childcare arrangements varies from 73 per cent in Denmark to only 3 per cent in Poland. It appears that seven EU MS (Denmark, Netherlands, Sweden, Belgium, Spain, Portugal and United Kingdom) and Iceland and Norway have already met the Barcelona target, which states that Member States should provide childcare by 2010 to at least 33 per cent of children below 3 years of age. Belgium ranks highest, with a use of formal childcare arrangements in the age category 3 years to the mandatory school age of almost 100 per cent. At the other end is Poland, with a use of 28 per cent.

In most countries childcare services are subsidised by one means or another. There are large differences, however, in the actual financial programme. In most countries costs of childcare depend upon family income. The Nordic countries (with the exception of Iceland) have set a maximum to the childcare fee; in other countries low-income groups may attend childcare for free. There are, however, also countries where low-income families pay relatively more than medium and high-income groups. In a few countries childcare is considered to be expensive. In addition, public childcare may be affordable (but hardly available), whereas private childcare is available, but expensive. A final issue refers to openings hours, school holidays and the overall flexibility that is offered. Opening hours are often part-time and hardly compatible with a full-time working week. Also the coverage of school holidays is problematic in quite a number of EU MS.

When assessing the optimal level of spending on ECEC it is important to assess externalities associated with children and parents employment and remember of potential market failures, such as in relation to taxation of income used for purchasing ECEC services. Countries have to weigh the benefits against the costs and this will depend on prevailing views on the roles of government and family as well as on the roles of women and men in the society and family.

By giving subsidies on the demand side (to parents) it is assumed that their private interests are in line with public interests and that they are able to make best education choices for their children (this lays on an assumption that they are able to judge on the quality of ECEC and needs of their children accurately). Subsidies on the demand side increase a need to monitor the results of parental choices. By giving subsidies on the supply side (through financial assistance to or direct provision of ECEC services), a more restricted range of levels of quality of ECEC services is being encouraged. Issues are similar to the ones of the debate over vouchers in education

There is also the issue of whether ECEC services be provided through the public or private sector. This issue is similar to a corporate decision of “make-it-or-buy-it”, and therefore transaction costs are important to keep in mind. If monitoring and control of quality of ECEC services by private providers raises much difficulties and costs, public provision is encouraged, and vice versa.

Competition forces tend to be beneficial mostly when for-profit activities are allowed. On the other hand, for-profit provision increases the risk of opportunistic behaviour, as for-profit providers will most likely show as if they are of superior quality (even if they are not). It is therefore important to have in place incentive structures for non-profit providers in order to assure (as well as show to the public) that they too care about the quality of ECEC services.

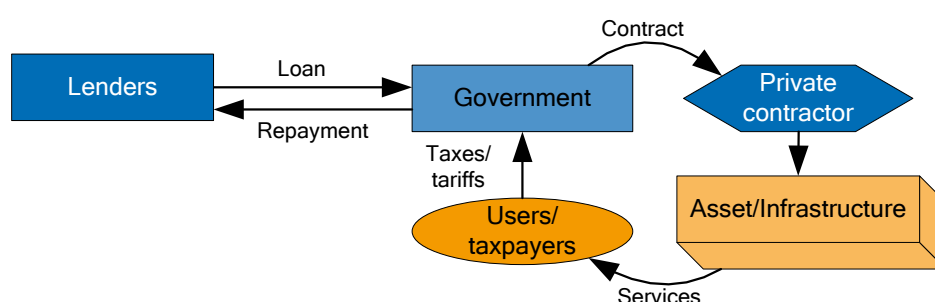
More information on designing financing ECEC options and country examples is presented in the annex on “Financing Early Childhood Education and Care”.

Annex I: Financing public transport and transport infrastructure

Public transport plays a vital role in regional development and urban mobility. It is also largely relevant for sustainable development. However, the financial resources allocated to its development and maintenance is always under pressure. Ensuring proper financing mechanisms is important not only for the development of public transport networks but also to the sustainable development of regions as well as cities and rural areas.

Traditionally large-scale infrastructure projects have been financed through public sector resources. A sovereign government uses existing surplus funds, or borrows funds to finance an infrastructure project. Lenders analyse the government's total ability to raise funds through taxation and general public enterprise revenues, including new tariff revenues from the project. Normally, the government gives a sovereign guarantee for the repayment of the loans and this guarantee shows up as a liability on the government's list of financial obligations.

Figure 3: Financing of infrastructure projects



The new economic environment presents a number of concerns in funding of SGIs. Public sector budgets have been reduced across the world while infrastructure demand has been constantly rising, cost of funding has increased and competition to obtain funding has increased significantly as banks have become more selective.

Some of the challenges faced in financing public transport and transport infrastructure are:

1. Growing welfare, car ownership, urban sprawl and individualisation with complex patterns of activity have had an influence on decreasing public transport patronage. The degree of costs covered through passenger fares is proving to be insufficient. An increasing challenge in this regard is to create acceptance for the fact that in most cases fare revenues alone cannot fund a public transport system.
2. European cities are witnessing a decline in public funds for public transport due to general budget restrictions. Cities are finding it difficult to establish reliable and sustainable funding mechanisms for urban public transport enabling public transport operators to work within fair framework conditions.
3. The increasing constraints on public investments in transport need to be offset by innovative financing models and alternative sources of revenues. While the traditional forms of financing include taxes (e.g. fuel tax), toll charge, road-user charges, ticket fares, etc., the innovative forms adopted lately include congestion charges, public private partnerships (PPPs), project bonds, financial assistance from the EIB and the European Bank for Reconstruction and Development (EBRD), etc.
4. Other challenges include identifying measures and options to generate additional revenues, e.g. by commercialising stations or other real estate assets or by applying new business models

(advertising, freight transport etc.) and to find ways and means to finance the urgent renewal of neglected infrastructure, equipment and creation of new services.

Increasingly governments have found public funding methods to be less attractive as infrastructure projects, such as public transport networks, are quite capital intensive and put significant strain on the balance sheet – this limits the government’s ability to undertake other projects. Therefore, governments have been exploring alternative options for financing capital investments in infrastructure. Some of these methods have been presented below together with interesting country examples.

Road pricing

Road pricing has a long history in the form of tolled bridges, tunnels, and turnpikes designed to generate revenue to pay for the construction, operation, and maintenance of these facilities. It has been instituted on a broader basis in many countries, notably the Czech Republic, Germany, Singapore, Sweden, and the United Kingdom, and the Netherlands.

The objective of road pricing is two-fold: (i) manage demand by reducing traffic congestion, promoting environmental goals, improving cost of doing business, and supporting liability and quality of life with road charges based on amount of traffic reduction sought (i.e., congestion pricing, cordon/urban area pricing, facility pricing); and generate revenue – pay for road infrastructure, operations and/or transportation system capacity with road user charges (i.e., flat toll rates, variable charges, or distance-based user fees).¹⁵

Box 2: London’s Congestion Charge

London launched a bold initiative in 2003 to designate a congestion charging zone in central London and charge vehicles to travel within the 20.7 km² area. With London roads congested most of the day before the congestion charge, it was estimated that 40 per cent of England’s congestion was in greater London, with central London the most congested. Average all-day speeds were less than 14.4 kilometres per hour in central London with delays costing people and businesses £4 million to £6 million per week in time and money. Thus, the objective of the congestion charge was to reduce traffic, improve travel times for buses, generate new revenues for public transit, and enhance the quality of life in central London. The flat weekday charge was set at £5 initially and raised to £8 in August 2005.

After implementation of the London congestion charge, the number of vehicles (four or more wheels) entering the charging zone decreased by 25 per cent, or 70,000 fewer vehicles per day, and has remained constant. Travel speeds increased by 30 per cent, trip times decreased by 14 per cent, and traffic delays plummeted by 25 per cent in the charging zone.

Revenues from the congestion charge were £268 million in 2008. When accounting for expenses (about 50 per cent), the congestion charge generated about £137 million (US\$222 million) in the same year, which by law must be spent on transportation in greater London. Of the 2008 net revenues, 82 per cent went for bus improvements, 9 per cent for roads and bridges, and the remaining 9 per cent for road safety, pedestrian and cycling facilities, borough plans, and environmental improvements.

Road pricing has traditionally been an important source of generating revenues to fund public transport infrastructure. However it has often proven to be inadequate to meet the growing

¹⁵ Also see “Reducing Congestion and Funding Transportation Using Road Pricing in Europe and Singapore”, 2010, International Technology Scanning Program.

demands of investment requirements and mostly plays an important role in reducing the use of private cars instead of public transport.

Box 3: The Netherlands' Distance-based tax

The Dutch Cabinet has been considering a distance-based road-user fee to be a more transparent and equitable method to fund the transportation system and effectively manage congestion. The new system is designed to be revenue neutral by phasing out high license fees and other vehicle ownership taxes and introducing a per-kilometre charge in their place. The fee structure of such a distance-based tax is based on distance and vehicle type with the option to include emissions class and time of day. The 2020 forecasts for such a tax would result in a 10-15 per cent reduction in kilometres travelled, a time saving of 40-60 per cent and a 6 per cent increase in kilometres using public transport. Due to a change in government in late 2010 this proposal has been delayed and its implementation is still under consideration.

We now turn our attention to some of the alternative sources of financing public transport systems in the EU viz. the EIB, Public-Private Partnerships (PPPs) and the EBRD.

EIB as a financier of sustainable urban transport projects

Among other, the EIB is also active in assisting public authorities with investing in infrastructure needed to provide SGIs, in particular public transport networks. In 2008, the EIB lent € 57.6 billion for capital investment projects, over 89 per cent of which was in the EU and the remainder in partner countries. Urban transport accounted for € 2.8 billion, about a fifth of EIB direct lending in the transport sector as a whole and 6 per cent of total individual loans. Between 2004 and 2008, EIB support for the urban transport sector amounted to over € 14 billion of direct financing.¹⁶

Box 4: Gdansk urban transport project



A case in point is the Gdansk urban transport project in Poland which was funded by multiple agencies. The project cost amounted to € 50 million of which 32 per cent was covered by the City of Gdansk, 39 per cent by the EU and 29 per cent by the EIB. The scope of the project included modernising 26 km of existing tram infrastructure, construction of a new tramway line to Chelm district and purchase of rolling stock of 3 trams. The project aimed at saving € 1.3 million per annum in addition to other economic and social benefits.

Source: EIB (2008), "Urban Transport, Funding and Financing solutions of the European Investment Bank".

A major challenge for the EIB's involvement in public transport is to support solutions that strike a balance between the growing demand for mobility and the quality of the urban environment.¹⁷

Urban public transport projects are only rarely financially self-supporting and usually face substantial operating deficits. While tariffs are a common source of revenue, they typically have to be set at acceptable levels, as mobility is considered a common good.

To meet their financing needs, both for new investment and to cover operating deficits, most cities use a mix of contributions from central, regional and municipal governments. However, there is a growing need for new approaches to mobilising the required financial resources, not only to ensure a quality service, but also to increase the supply of services to meet changing societal needs.

¹⁶ EIB (2009), "The EIB's Role in Financing Sustainable Urban Transport Projects".

¹⁷ Ibid.

Public Private Partnerships

During 1990-2009, the UK accounted for about two-thirds of all European PPP projects. With 10 per cent of the total number of projects, Spain remains the second-biggest PPP market; and it has gained slightly in importance in recent years. France, Germany, Italy, and Portugal all represent 2-5 per cent of the total number of projects, respectively. The UK, Portugal, France, Germany, Spain and Italy together account for some 92 per cent of all European PPPs. Overall, this suggests that the PPP market in Europe continues to slowly expand towards other countries.¹⁸

The sectoral distribution of PPPs in the UK has been largely concentrated in transport, education and health. Over the past 5 years, the transport sector represented 41 per cent of the number and 76 per cent of the value of PPPs in continental Europe (outside the UK). Also, the composition of PPPs in the transport sector outside the UK is largely in the road sector followed by urban public transport.

Box 5: Millau Viaduct, France: Quick project procurement and delivery

The Millau suspension bridge spanning the Tarn River in the south of France was inaugurated on the 14th December 2004. It is one of the longest and highest bridges of its kind in the world: 2.46km long and 270m above the Tarn River with a total height of 343m to the top of the pylons.

The bridge was designed and built in less than three years. The circa € 394 million PPP-type project involved the construction of a 2.46 km tolled section of the A75 Millau Viaduct motorway between Clermont-Ferrand and Beziers. The formal bid process for this Design-Build-Finance-Operate (DBFO) project was launched early 2000, on the basis of a real toll stand-alone concession following the French standard approach of “Délégation de Services Publics”. The preferred bidder was announced in March 2001 and the concession agreement was signed only a few weeks later in May 2001 with Eiffage SA. Construction began in December 2001 and was completed in May 2004. The project commenced operations on the 16th December 2004, only four years after the launch of the public tender. The Millau project is not only an example of the private sector delivering a project on time but also of structuring the project to achieve optimal risk transfer without significant cost to the public sector. Bidders were allowed to propose the length of the concession period, with the aim of minimising the Net Present Value of government payments and toll receipts. The bid was awarded on the basis of a 75-year concession with no government support. Demand risk was transferred entirely to the private operator, based on Eiffage’s traffic and toll assumptions.

Source: PWC, “Delivering the PPP promise: A review of PPP issues and activities”

Box 6: N4/N6 Kinnegad-Kilcock Motorway, Ireland

Working within affordability constraints the N4/N6 project involved a 39 km stretch of road, including 35 km of new construction, from Dublin to the northwest of Ireland. This was the first PPP road project signed as part of the €52 billion 2000 – 2006 National Development Plan and the third PPP scheme to close in Ireland. The EuroLink Consortium, comprising Cintra and SIAC and financed by Banco Bilbao Vizcaya Argentaria, Banco Santander Central Hispano and the European Investment Bank, arranged a €235 million project financing package for the 30-year DBFO real toll scheme.

This included an EIB guarantee facility of €85 million after two years of operation. The contract was awarded in March 2003 and the 3.5 year construction period began in May 2003. Upfront capital costs on the project were estimated at €320 million, and total investment over the life of the concession was put at €400 million. Before procuring the project, the National Roads Authority (NRA) set a maximum €170 million subsidy limit (with €70 million relating to land purchase) which would supplement the hard toll payments during the project’s

¹⁸ EIB (2010), “Public-Private Partnerships in Europe – Before and During the Recent Financial Crisis”.

construction and operational phases, thereby ensuring that the project was affordable to the NRA. Budgetary certainty was also assured.

The final contract apportioned real toll risk to the concessionaires, and therefore the greater part of the affordability risk has been transferred to the private sector. Cost overruns, for instance, would have to be funded by lenders and repaid from tolls. There are no guarantees against competing toll-free routes and there is no compensation payable on termination. In spite of the significant risk transfer to the private sector, the project has been competitively priced.

Source: PWC, "Delivering the PPP promise: A review of PPP issues and activities"

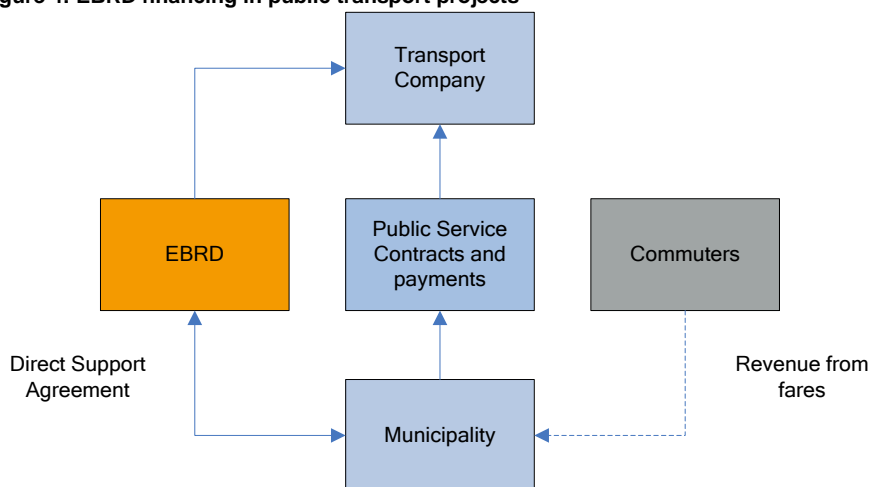
European Bank for Reconstruction and Development (EBRD)

The EBRD is also active in the financing of public transport projects in the EU. The main three financing structures the EBRD offers with regard to public transport projects are corporate loans, municipal loans and performance guarantees.

1. In case of *corporate loans*, the borrower is a transport company, public or private. The Public Service Contract (PSC), including financial service payments from the municipality or Transport Authority to the transport company, is the foundation. The transport company should be able to repay the EBRD loan through the service payments it receives under the PSC. In principle, the loan is backed by a Municipal Guarantee, which depends on the credit risk. A corporate loan is preferred to a loan to a city as it makes the public transport company responsible for its own investments.
2. *Municipal loans* are non-sovereign loans to a municipal client (without a guarantee from central government), which could be used to finance, for example, the rehabilitation of tram tracks, traffic management systems, ticketing systems, refurbishment of depots including workshop equipment, line extensions and occasionally fleet renewal etc.
3. The EBRD *Performance Guarantee* to the private contractor guarantees contractual payment obligations of the client (e.g. a municipality). This encourages private companies (for example transport operators or lease companies) to enter into business as well as cut their prices because of the reduced risk.

Figure 4 below presents one of the forms of EBRD financing in public transport.

Figure 4: EBRD financing in public transport projects



Source: EBRD (2008), "Financing Public Transport Projects by EBRD"

Box 7: EBRD municipality loan agreement with City of Sofia

In 2002, the EBRD signed a loan agreement with the City of Sofia for the purchase of new buses and trolleybuses and the refurbishment of trams. The loan amount was € 35 million. In addition, a € 2.5 million grant was received from the Dutch government for a new ticketing system. Consultants provided the city with an advice on the privatisation of the main workshop for tram and bus. An Environmental Action Plan was developed for all eight depots of the transport company in order to reduce pollution and improve health and safety.

Source: EBRD project sheet¹⁹

Box 8: Bishkek public transport project

The EBRD is considering providing a loan of up to US\$ 10 million to the Kyrgyz Republic, to be on-lent to the City of Bishkek for the benefit of the municipal trolleybus company. A further US\$ 5.5 million grant to co-finance the project is envisaged from an international donor. It is planned the project will finance

- (i) purchase of new trolleybuses and
- (ii) a partial rehabilitation of the related infrastructure.

In addition, the project will support the introduction of e-ticketing in the municipally operated public transport sector in the City of Bishkek.

Source: EBRD project sheet²⁰

Successful ingredients for EBRD financing in the public transport sector are:

- *Corporatisation* with a sound business plan and acting as a corporate entity;
- *Commercialisation* of projects; and
- *Sound regulatory framework* with Public Service Contracts (PSCs) that enable companies to plan, invest and operate professionally.

¹⁹ Accessible from <http://www.ebrd.com/pages/project/psd/2011/42140.shtml>

²⁰ Accessible from <http://www.ebrd.com/pages/project/psd/2011/41492.shtml>

Annex II: Financing healthcare

Healthcare systems are a fundamental component of social security as they assist in preventing and treating ill health and cover the associated costs. Financing of healthcare services has always been a point for discussion in terms of extent of public and private financing.

Healthcare financing can take various forms. The most commonly adopted forms of financing include out-of-pocket (OOP) expenditure, social insurance, private insurance and general taxation. The last three forms of payment are “prepaid” in nature and are considered to provide better financial protection for households and pool health risks across individuals. Of these prepaid financing mechanisms, general government revenues are the most widespread, providing substantial funding for health services in almost every country. Table 1 presents an overview of the different financing options used by the EU Member States in 2000 and 2007.

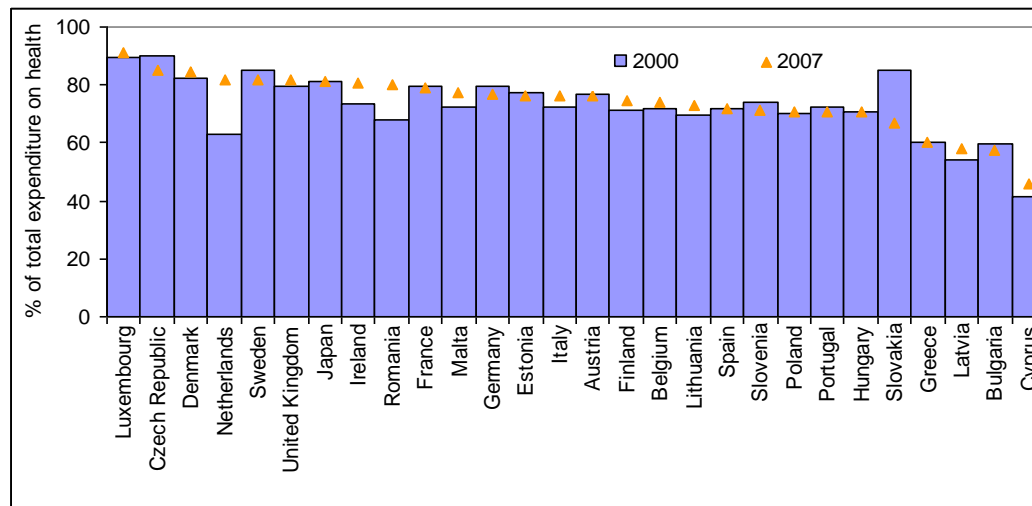
Table 1: Healthcare expenditure in the EU Member States, Japan and the USA (%)

	Total exp. on health as % of GDP		General govt. exp. on health as % of total exp. on health		Private exp. on health as % of total exp. on health		General govt. exp. on health as % of total govt. exp.		Social security exp. on health as % of general govt. exp. on health		Out-of-pocket exp. as % of private exp. on health	
	2000	2007	2000	2007	2000	2007	2000	2007	2000	2007	2000	2007
Austria	10	10	77	76	23	24	15	16	59	59	66	65
Belgium	9	9	72	74	28	26	13	14	79	88	85	76
Bulgaria	6	7	60	57	40	43	9	11	13	63	100	86
Cyprus	6	7	42	46	58	54	6	7	0	0	96	84
Czech Republic	7	7	90	85	10	15	14	14	90	90	100	89
Denmark	8	10	82	85	18	16	13	16	0	0	91	89
Estonia	5	5	78	77	23	24	4	4	88	85	89	94
Finland	7	8	71	75	29	25	11	13	20	20	77	74
France	10	11	79	79	21	21	16	17	94	93	34	33
Germany	10	10	80	77	20	23	18	18	87	88	55	57
Greece	8	10	60	60	40	40	10	13	46	52	95	95
Hungary	7	7	71	71	29	29	11	11	84	83	90	85
Ireland	6	8	74	81	27	19	15	17	1	1	41	51
Italy	8	9	73	77	28	24	13	14	0	0	89	86
Latvia	6	6	54	58	46	42	9	10	0	0	97	97
Lithuania	7	6	70	73	30	27	12	13	88	81	86	98
Luxbrg.	6	7	89	91	11	9	14	17	83	77	65	69
Malta	7	8	73	78	28	23	12	14	0	0	97	89
Netherlands	8	9	63	82	37	18	11	16	94	93	24	34
Poland	6	6	70	71	30	29	9	11	83	83	93	83
Portugal	9	10	73	71	28	29	15	15	1	1	81	78
Romania	5	5	68	80	32	20	9	10	89	83	100	99
Slovakia	7	8	85	67	15	33	28	30	87	90	76	79
Slovenia	8	8	74	72	26	28	13	13	94	93	44	49
Spain	7	9	72	72	28	28	13	16	10	7	83	75
Sweden	8	9	85	82	15	18	13	14	0	0	91	87
U.K.	7	8	79	82	21	18	14	16	0	0	65	63
<i>Japan</i>	8	8	81	81	19	19	16	18	81	79	90	81
<i>USA</i>	13	16	43	46	57	55	17	20	34	28	26	23

Source: WHO, World Health Statistics, 2010

In all EU Member States, healthcare systems receive a large share of their funding in the form of public revenue. From Figure 5 we observe that for 21 countries, public funding of healthcare spending exceeds 70 per cent while the share is between 50 per cent and 70 per cent for only 4 countries. Cyprus is the only exception with private financing contributing to over 50 per cent of its healthcare expenditure.

Figure 5: Government expenditure on health as a percentage of total expenditure on Health in 2007



Source: WHO, World Health Statistics, 2010

Private financing of healthcare services has been a bone of contention for a long time. Many countries from across the world have experimented with adopting private finance. In some countries of central and eastern Europe (in particular Latvia, Bulgaria and Romania), the share of private funding (essentially of direct out-of-pocket (OOP) payments from households and, to a lesser degree, private insurance) for healthcare grew during the 1990s. Germany, through the leaner state programme, encouraged contracting out, outsourcing and a growth of private finance. Sweden aimed to reduce expenditure by increased outsourcing. France too encouraged private sources of finance for capital investment in health organisations, such as hospitals. Since 2006, some European countries such as Czech Republic, Hungary, Poland and Slovakia tried to introduce a combination of patient fees, commercialisation of hospitals and clinics, and a switch from state insurance to private insurance funds. Similar changes were observed in the UK with widespread privatisation, restructuring, outsourcing and PPPs.

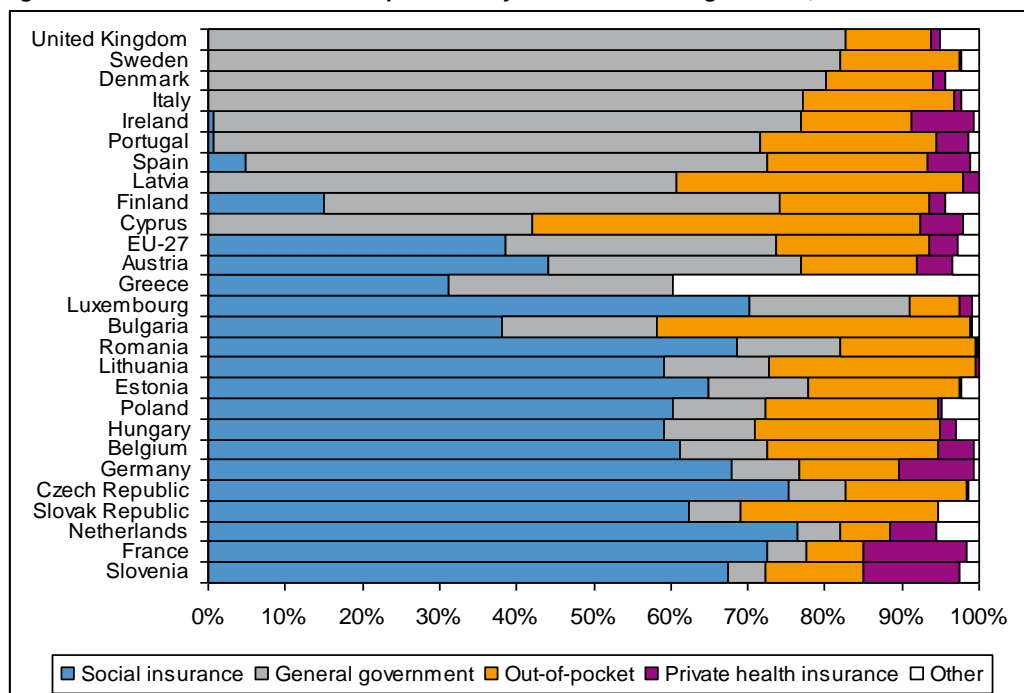
A higher involvement of the private sector has its potential benefits such as reduced administrative and financial burden for the public services, greater value for money, and enhanced innovation. Critics, though, have argued that private-sector involvement has yet to demonstrate benefits, and as markets for healthcare and insurance deviate from perfectly competitive markets, have warned of risks of market failure with adverse consequences for equity.²¹²² However, as discussed earlier, involvement of private sector in the provision of public services (whether healthcare or any other public service) ought to be carefully assessed (see section on PPPs under public transport

Public financing, on the other hand, provides the need to secure sustainability without undermining values such as equity in finance or equity of access to health. Publicly generated finance contributes to efficiency and equity by providing protection from financial risk and by detaching payment from risk of ill health. The most common form of public financing is by generating tax-based revenues. Tax-based revenues are advantageous as they avoid problems

common to voluntary insurance markets and benefit from economies of scale in administration and risk management. On the other hand, such a system may also be plagued with inefficiencies that emerge from serving multiple objectives, political pressures to serve privileged groups, challenges of effective management in public services, and problems associated with instability and weak accountability.²³

Figure 6 below presents the combination of the funding options in selected EU Member States.

Figure 6: Breakdown of health care expenditure by source of financing in EU-27, 2008



Source: OECD (2010) "Health at a Glance Europe 2010. Note: Bulgaria, Denmark, Greece, Latvia -2007; Luxembourg, Portugal- 2006; no data on out-of-pocket and private health insurance expenditure for Greece.

In the context of the EU, the issue of financing healthcare systems has come under the scanner for several reasons:

- Older people usually account for a large proportion of healthcare spending. The EU is rapidly facing the problem of ageing population and its associated healthcare costs. As a result, the demand for healthcare is expected to be higher than the capacity of health systems able to meet it.
- Keeping up pace with the introduction of new technologies are likely to increase costs.

The combination of both issues where it is assumed that older people are the main recipients of innovations in healthcare systems, the costs are multiplied.

Thus, controlling costs and securing better value from the money invested in healthcare will be more challenging as patient choice expands and demand grows faster than the available finances.

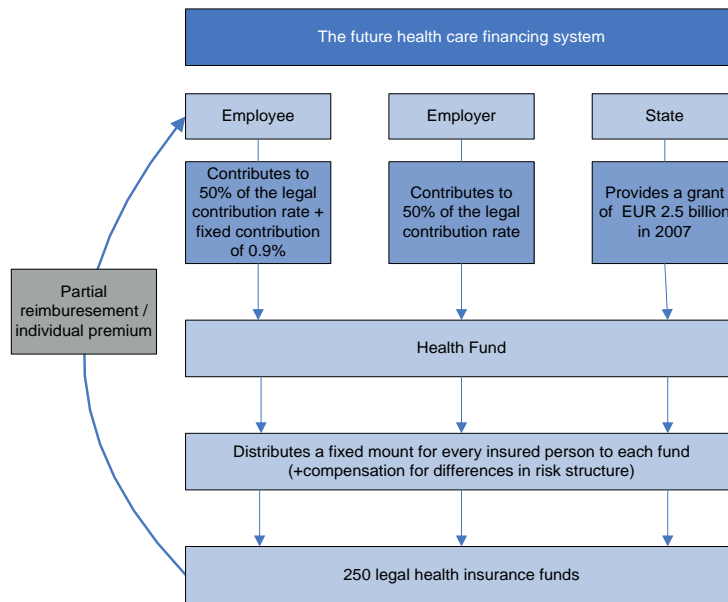
Below we present a few examples of different financing option adopted in the EU.

²³ WHO (2004), "Tax-Based Financing for Health Systems: Options and Experiences", Discussion Paper No. 4

Box 9: Financing healthcare in Germany: Mixed means of Funding

Founded on the principles of professional insurance in the framework of business and social welfare, the German healthcare system has found itself in a process of continuous reform since the late 1980s. In 2003, a reform on the modernisation of the healthcare system already provided for taxes to finance the system in part. The law stipulated that a certain number of services (pregnancy-related benefits and care, voluntary termination of pregnancy, benefits for sick children, and death benefits) would be financed by taxes. Tobacco taxes were raised to this effect and allocated in part to health insurance.

In February 2007, a new reform furthered the transformation of the healthcare system and modified its means of funding. The law called into question some of the autonomy of health insurance funds, which could freely set their dues, by centralising the definition of a legal contribution rate for wage earners and employees at the level of the Federal State. This law, designed to make up for the disparities between the different public health insurance funds, introduced in April 2007 a system of equalisation between the insurance funds. Taxes will also play a more important role in financing the healthcare sector.



Overall government spending in Germany was 74.6 per cent of total health expenditure in 2008. Meanwhile, out-of-pocket health expenditure as a share of total health expenditure decreased marginally to 53.9 per cent in 2008 from 55.1 per cent in 2004. Private expenditure on health was 22 per cent of GDP as a share of total health expenditure in 2008.

Source: Dexia (2009), "Hospitals in the 27 Member States in the EU".

Table 2: Germany healthcare financing, basic indicators (%)

	2008	2004
Total expenditure on health as % of GDP	10.5	10.6
Per capita health expenditure in USD (at exchange rate)	4720	3499
General government expenditure on health as % of total expenditure on health	74.6	74.4
Out-of-pocket expenditure as % of total expenditure on health	53.9	55.1
Private Expenditure on Health of Total Health Expenditure	22.0	21.9

Source: WHOSIS

Box 10: Financing healthcare in the Netherlands: from supply- to demand-side control

Healthcare financing in the Netherlands is predominantly organised on the basis of social health insurance. Furthermore, there are contributions from general government revenue and, fairly limited, from direct payments. The 2006 reforms in the Dutch health financing scheme represent a systemic shift from supply- to demand-side control. The new model is referred to as *regulated competition*. It implies enhanced competition between insurers and between providers, but within the boundaries of a legal framework. The 2006 reform ended the coexistence of public and private plans. The reform has loosened the purchase of certain types of health care by authorising insurers and providers to negotiate prices more freely.

A preliminary study by Muiser (2007)²⁴ finds that the new Dutch model provides opportunities for the achievement of the health system goals and increases efficiency, particularly in terms of improved levels of mandatory membership and the fact that there is open enrolment with respect to the basic benefit package for all. However, the new model does not give guarantees for high quality performance; it rather brings additional risks of market failure (compromised quality) that require constant monitoring and may result in higher transaction and administrative costs than the previous scheme. Many regulatory measures continue to affect the Dutch health care market. The reform does not go far enough in opening to competition or in getting players in this market to take on more responsibility. Also, the freedom to choose insurers remains highly regulated. For example, the basic basket of health care covered by compulsory basic insurance is set by the State. Therefore, insured persons are unauthorised to modify the basket as a way to reduced its costs.²⁵

Overall government spending has been increasing in the Netherlands in recent years and accounted for 64.5 per cent of total health expenditure in 2008. Meanwhile, out-of-pocket health expenditure as a share of total health expenditure decreased marginally to 22.3 per cent in 2008 from 34.9 per cent in 2004. Private expenditure on health has increased to 35.5 per cent of GDP as a share of total health expenditure.

Table 3: The Netherlands healthcare financing, basic indicators (%)

	2008	2004
General Government Expenditure on Health of Total Health Expenditure	82.1	64.5
General Government Expenditure on Health of Total General Government Expenditure	16.4	12.6
Social Security Expenditure on Health of General Govt Expenditure on Health	93.3	96.3
Private Expenditure on Health of Total Health Expenditure	17.9	35.5
Out-of-Pocket Payments of Private Expenditure on Health	34.9	22.3

Source: WHOSIS

Box 11: Financing healthcare in Latvia: funding from general government taxation

Latvia spent 6.5 per cent of its GDP on health in 2008, the highest of all the Baltic countries (6.2 per cent for Lithuania and 5.3 per cent for Estonia). Per capita health expenditure was USD 971 (approximately € 677). The state compulsory health insurance scheme covers the whole population. Unlike other national insurance systems where the main funding is from payroll tax and other contributions, in Latvia since 2005, national insurance is funded from general government taxation.

Overall government spending has been increasing in Latvia in recent years and accounted for 59.6 per cent of total health expenditure in 2008. Meanwhile, out-of-pocket health expenditure as a share of private health expenditure decreased marginally to 96.7 per cent in 2008 from 98.1 per cent in 2004. However, the share of

²⁴ Muiser, J. (2007), "The new Dutch health insurance scheme: challenges and opportunities for better performance in health financing", WHO Discussion Paper No. 3.

²⁵ Petkantchin, V., (2010), "Health care reform in the Netherlands", IEM's Economic Note, June 2010.

out-of-pocket payments in total health expenditure in Latvia is higher than in Estonia (94.1 per cent) but lower than in Lithuania (98.3 per cent).

Xu et al. (2009)²⁶ assess the health case financing situation in Latvia. Health financing scheme in Latvia is organised principally through public health insurance. Voluntary health insurance is very small scale. However, the health services covered by the public insurance scheme are not clearly defined. All services require cost-sharing, which is referred to as patient fees. A ceiling exists on patient fees, with each person liable for up to Ls 150 (€ 210) per year; if any additional fees are incurred, the patient is exempt. However, the exemption only applies to services, not to drugs.

Patients pay the full price of all over-the-counter drugs and a significant number of prescription drugs for outpatient use. Outpatient drugs covered by the insurance are limited to certain medical conditions, such as diabetes, cancer and mental disorders. Inpatient drugs are covered by the insurance as part of the treatment cost. Latvia reached universal population coverage by national health insurance, but around 30 per cent of people still cannot access healthcare when they need it mainly due to financial reasons.

Table 4: Latvia healthcare financing, basic indicators (%)

	2008	2004
Total expenditure on health as % of GDP	6.5	6.1
Per capita health expenditure in USD (at exchange rate)	971	367
General government expenditure on health as % of total expenditure on health	59.6	52.8
Out-of-pocket expenditure as % of private expenditure on health	96.7	98.1
Private prepaid plans as a percentage of private expenditure on health	2.6	1.9

Source: WHOSIS

In addition to the traditional methods of financial risk protection, there are a variety of **other financing mechanisms** being experimented by many countries. The need for these additional sources of funds is driven by the issues mentioned above.

Some of these methods that are nationally based are:

- hypothecated taxes, e.g. 'sin taxes' for tobacco and alcohol; and
- national and state lotteries dedicated to support the health sector.

Annex III: Financing Early Childhood Education and Care

The Europe 2020 strategy aims for smart, sustainable and inclusive growth. In this strategic context, which deals with influencing future outcomes, Europe's youngest population should be a definite focus. The recent communication from the EC²⁷ notes that improvement in education sector is essential to all three growth dimensions set by Europe 2020 strategy. More specifically, the communication focuses on the idea that "Early Childhood Education and Care (ECEC) is the essential foundation for successful lifelong learning, social integration, personal development and later employability", all of which can be linked to Europe 2020 agenda.

Investment in ECEC has its social, economic and educational benefits, which are closely related. In terms of social impact, ECEC has potential for breaking the "cycle which transmits disadvantage

²⁶ Xu, K., Saksena, P., Carrin, G., Jowett, M., Kutzin, J. and Rurane, A. (2009), "Access to Health Care and the Financial Burden of Out-Of-Pocket Health Payments in Latvia", WHO *Technical Briefs for Policy Makers* No.1

²⁷ European Commission: [Communication on Early Childhood Education and Care \(pdf format\)](#) (17 February 2011)

from one generation to another”²⁸. It is widely recognised that ECEC is complementary to the central role of family in the earliest stage of the development of individuals, and can contribute to their well-being and integration into society. Looking from a parent perspective, ECEC is a way to increase labour market participation, especially that of women. In terms of economic benefits, improvement in ECEC is likely to increase employment generating greater taxpayer income and in the longer-term potentially lower support expenditure needed for education, healthcare and also police. In terms of educational benefits ECEC is seen as an effective tool to potentially reduce early school dropouts, improve the equity of educational outcomes, and reduce chances of lost talent, which should be important for the society aiming to improve innovation and competitiveness.

Although the benefits of ECEC are widely noted, the financing of ECEC is not sufficient. The recent public spending cuts across the European Union due to the economic and financial crisis has highlighted this issue more than ever before. In March 2002, the Barcelona European Council set targets “to remove disincentives to female labour force participation and strive, taking into account the demand for childcare facilities and in line with national patterns of provision, to provide childcare by 2010 to at least 90 per cent of children between 3 years old and the mandatory school age and at least 33 per cent of children under 3 years of age”.²⁹ According to the Joint letter from the European social partners on childcare³⁰ majority of Member States invested more into childcare, but the situation remained unsatisfactory in the majority countries.

Importance of ECEC in public policy

ECEC has both private and public good aspects. Public good aspects require that governments paid increased attention to ECEC. On the one hand this is related to positive externalities of ECEC, such as, large estimated positive external effects on children³¹, young families, and mothers as well as on the general society. On the other hand, there are areas of market failures in ECEC sector that suggest ECEC provision should not be left to be arranged entirely by private market transactions. Gordon and Krashinsky (2003)³² see two broad arguments in this respect:

1. *Care and education of young children*. Generally speaking, an educated workforce has large potential “spill-over” benefits. However, as society we also care about providing equal opportunities. ECEC access and affordability helps to assure a more equal start in life. Left alone, parents with limited resources are likely to make decisions regarding ECEC for their children that are not in the best interests of both children and society.
2. *Employment of parents (especially mothers) when children are young*. Theoretically speaking, in perfect capital markets both young parents and even their children could borrow today to finance the ECEC arrangements and pay back in the future when their prosperity increases. Such perfect capital markets do not exist in reality. Lack of affordable ECEC programmes means that employment of parents (especially mothers) will be disrupted. Additionally, employment is made more unattractive when ECEC is provided by private market through taxation of earnings used to purchase ECEC services as well as benefit-reduction rates for majority of families on social assistance.

²⁸ Ibid.

²⁹ See <http://www.cor.europa.eu/pesweb/barcelona.html>.

³⁰ BusinessEurope / UEAPME / ETUC / CES / CEEP: [Joint letter from the European social partners on childcare](#) (7 July 2008)

³¹ For example, we can look at OECD’s **Program for International Student Assessment (PISA)** 2009 results, which show that in practically all OECD and partner countries, 15-year old students who had attended some pre-primary education outperformed those who had not, even when accounted for their differences in socio-economic background. Accessible at <http://www.oecd.org/dataoecd/37/0/47034256.pdf>.

³² Gordon, C. and Krashinsky, M. (2003) “Financing ECEC Services in OECD Countries”, OECD Occasional Paper Series.

Gordon and Krashinsky (2003) highlight that all and any public expenditure on ECEC will not generate benefits that is higher than costs. What matters is the design of ECEC financing programmes, with an emphasis on the quality of ECEC. Benefits to children are very much affected by the quality level of ECEC, and they are said to increase with quality rise without an obvious limit. However, higher quality comes at price. As a general rule, financing schemes should be designed “to maximise the excess of benefits over costs for any child, and should include all children and families for whom benefits exceed costs”. The designing of ECEC services increases benefits over costs when focusing on parental work schedules and requirements.

Most complete cost-benefit analyses of quality early-education exist for several American programmes. Studies on these programmes conclude that long-term benefits might be significantly higher than the costs, however specific policy implications are hard to draw in a different policy context. Perry Preschool intervention programme was estimated to have delivered long-term benefits of \$12.90 for every \$1 invested. The programme invested in intensive preschooling delivered to at-risk (afro-american) children in Michigan in the 1960s. Among many benefits, it proved to successfully reduce involvement in crime by the treatment group³³.

Box 12: Key conclusions of “The provision of childcare services: A comparative review of 30 European countries”³⁴

Traditionally, an important reason for countries to invest in the provision of childcare is to increase the (female) labour force participation. A higher participation rate may increase gender equality, foster economic growth and help improve the sustainability of the present-day welfare state, especially in the light of an ageing population. Another argument points to the fact that childcare services might increase fertility rates by making a child less costly in terms of income and career opportunities. Higher labour force participation reduces the risk of poverty over the life course and especially in old age. The improved well-being of parents may also reduce child poverty and thus improve future outcomes for children. The effect on children may even be more direct: good-quality childcare services may serve a child-development purpose, providing the child with a rich, safe and stimulating environment.

The report highlights that throughout Europe the availability, the quality and affordability of childcare differ extensively. In the category 0–2 years, the use of formal childcare arrangements varies from 73 per cent in Denmark to only 3 per cent in Poland. It appears that seven EU MS (Denmark, Netherlands, Sweden, Belgium, Spain, Portugal and United Kingdom) and Iceland and Norway have already met the Barcelona target, which states that Member States should provide childcare by 2010 to at least 33 per cent of children below 3 years of age. Belgium ranks highest, with a use of formal childcare arrangements in the age category 3 years to the mandatory school age of almost 100 per cent. At the other end is Poland, with a use of 28 per cent.

In most countries childcare services are subsidised by one means or another. There are large differences, however, in the actual financial programme. In most countries costs of childcare depend upon family income. The Nordic countries (with the exception of Iceland) have set a maximum to the childcare fee; in other countries low-income groups may attend childcare for free. There are, however, also countries where low-income families pay relatively more than medium and high-income groups. In a few countries childcare is considered to be expensive. In addition, public childcare may be affordable (but hardly available), whereas private childcare is available, but expensive. A final issue refers to openings hours, school holidays and the overall flexibility that is offered. Opening hours are often part-time and hardly compatible with a full-time working week. Also the coverage of school holidays is problematic in quite a number of EU MS.

³³ See Belfield, Clive R, Milagros Nores, Steve Barnett, and Lawrence Schweinhart (2006) “The High/Scope Perry Preschool Program: Cost-Benefit Analysis Using Data from the Age-40 Followup”.

³⁴ Accessible from <http://ec.europa.eu/social/main.jsp?langId=en&catId=89&newsId=545&furtherNews=yes>

Designing financing ECEC options

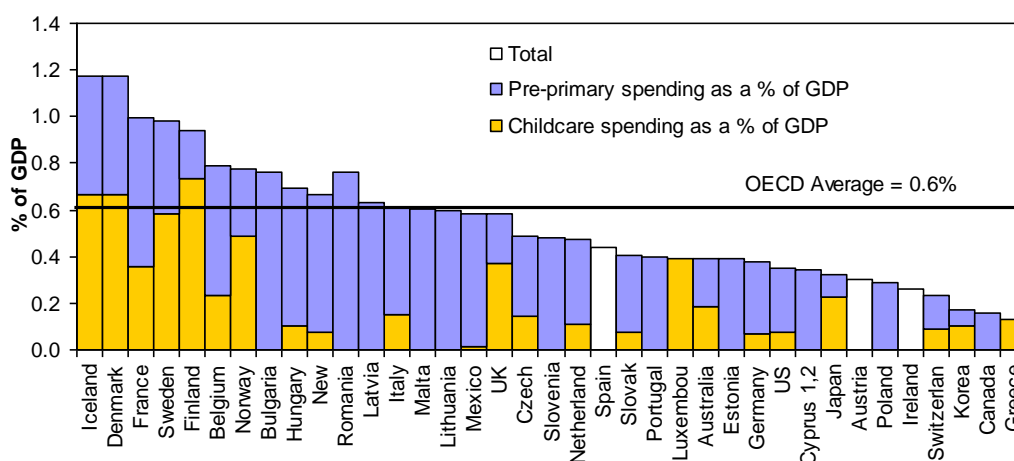
Some of the main issues pertaining to financing ECEC are presented below³⁵:

What is the optimal level of spending on ECEC?

It is important to assess externalities associated with children and parents employment and remember of potential market failures, such as in relation to taxation of income used for purchasing ECEC services. Countries have to weigh the benefits against the costs and this will depend on prevailing views on the roles of government and family as well as on the roles of women and men in the society and family.

Figure 7 presents the expenditure on ECEC services in various OECD countries in 2005³⁶. Germany and the Netherlands have a smallest share in Western Europe in terms of childcare spending as a percentage of GDP. Portugal, Poland and Spain together with most eastern European countries viz. Romania, Latvia, Malta, Lithuania and Estonia have negligible spending on child care. All Scandinavian countries and France spent most in 2005.

Figure 7: Public expenditure on childcare and early education services, per cent of GDP, 2005



Source: OECD database (2010)

Should subsidies for ECEC be on the demand side or the supply side?

By giving subsidies on the demand side (to parents) it is assumed that their private interests are in line with public interests and that they are able to make best education choices for their children (this lays on an assumption that they are able to judge on the quality of ECEC and needs of their children accurately). Subsidies on the demand side increase a need to monitor the results of parental choices. By giving subsidies on the supply side (through financial assistance to or direct provision of ECEC services), a more restricted range of levels of quality of ECEC services is being encouraged. Issues are similar to the ones of the debate over vouchers in education (see Box 13).

Box 13: Vouchers in public services

Vouchers can be seen as demand-side subsidies, which use public funds to provide financial assistance to consumers for purchasing public services of a chosen provider (with an emphasis to also include or focus entirely on private providers). In contrast, supply-side subsidies relate to use of public funds for financial assistance to service providers directly, while consumers are often assigned to a specific service provider. As

³⁵ This section is largely drawn from Gordon and Krashinsky (2003)

³⁶ More recent comparable data is lacking.

such, vouchers introduce market mechanisms linked to an enhanced consumer choice, which is expected to increase competition between service providers and thus, result in efficiency gains. In addition, vouchers are expected to trigger supply responses from private providers. This need arises especially when demand for services is underserved and publicly-run service providers lack capacity. Areas of public services in which vouchers are relatively more common include education (different forms and levels) and housing.³⁷

A study which compared effects of voucher schemes specific for childcare in the Netherlands, Australia and the USA, note on certain issues of vouchers have to be considered. Depending on relative targeting of low income groups of the voucher scheme, it might not provide enough incentives for private sector supply responses in low-income areas (mostly rural areas).

Should ECEC services be provided through the public or private sector?

The issue is similar to a corporate decision of “make-it-or-buy-it”, and therefore transaction costs are important to keep in mind. If monitoring and control of quality of ECEC services by private providers raises much difficulties and costs, public provision is encouraged, and vice versa.

Competition forces tend to be beneficial mostly when for-profit activities are allowed. On the other hand, for-profit provision increases the risk of opportunistic behaviour, as for-profit providers will most likely show as if they are of superior quality (even if they are not). It is therefore important to have in place incentive structures for non-profit providers in order to assure (as well as show to the public) that they too care about the quality of ECEC services.

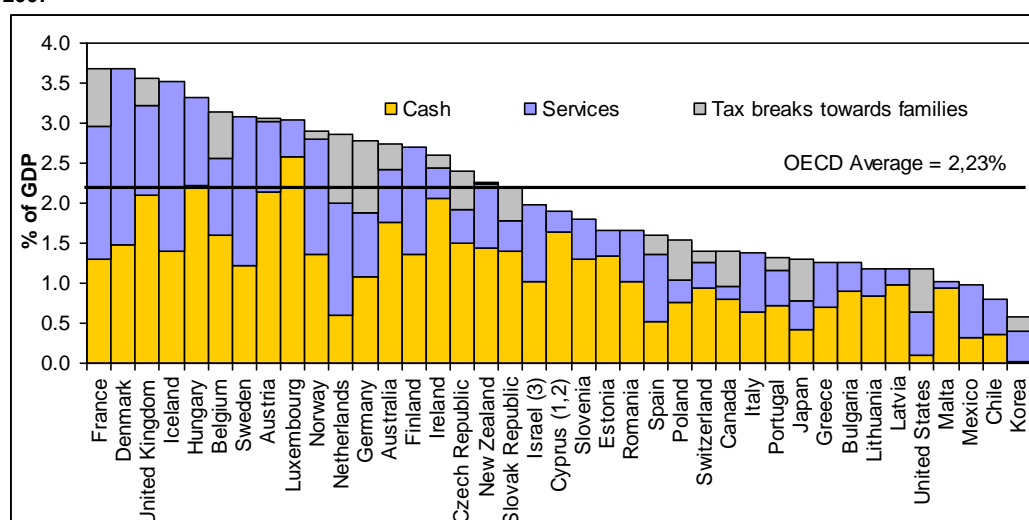
Other issues

There is controversy regarding the age of children starting which the provision of and financial support for ECEC services should be promoted. On the one hand, the younger the children, the more costly it is to provide ECEC services (higher staff to children ratio needed). On the other hand, it might be socially desirable to rather support parents to stay with their (very) young children at home. It is, however, more likely that policies, which encourage the latter outcome, will affect low-wage, low-skilled parents (mothers) more. Paying parents (mothers) to stay at home in any case means both expenses for public money as well as foregone tax income and economic productivity.

When analysing public spending on ECEC, it is important to take into account the total generosity of government expenditure on family benefits, which include payments in cash, provision of services (largely ECEC) as well as tax breaks allowed. Figure 8 provides these break downs for selected countries for 2007.

³⁷ See Valkama, Pekka and Stephen J. Bailey (2001) “Vouchers As an Alternative Public Sector Funding System”, *Public Policy and Administration* 2001 16: 32

Figure 8: Public spending on family benefits in cash, services and tax measures, in per cent of GDP, 2007



Source: OECD Family database (2011)

Types of Financing Instruments

ECEC financing instruments can be grouped according to their type as follows:

- *Child-related leaves and associated benefits* – including maternity, parental, paternity and child-rearing leaves, with or without paid benefits, with or without full job protection;
- *Publicly-provided ECEC services* – including pre-primary education and ECEC services provided by public sector bodies or non-profit agencies (even with user fees so long as these fees are small for all users);
- *Supply subsidies to ECEC services* – operating grants, quality-enhancement grants, wage enhancement grants, capital equipment grants, tax benefits and tax reductions given to ECEC services otherwise normally subject to taxation;
- *Demand-side subsidies for the use of ECEC* – subsidies to low-income families for the use of ECEC services, tax deductions of ECEC expenses or tax credits based on ECEC expenditure, vouchers for the purchase of ECEC services

Table 5 overviews main forms of funding for ECEC services in selected countries. We can see that modes of funding differ across countries. Public supply-side funding is dominant in Denmark, Finland, Norway and Sweden, but these countries also charge parental fees, which are usually set at a low flat-rate. From the EU countries overviewed, subsidies to parents are dominant in the Netherlands and in the United Kingdom. In addition, many countries involve employers in ECEC funding through tax contributions.

Table 5: Main forms of funding for ECEC services (0 to 6 years) in selected countries

	Supply funding to services	Subsidies to parents	Employer contributions
Australia	Limited to public kindergarten	Main form	Yes, tax
Belgium	Main form	Mixed in child care	Yes, employer levy
Canada	In public kindergarten and community services mainly (Provinces and Territories, to varying degrees, use also supply-side grants, operational funding, wage	Mixed. Supply-side funding to community services is usual.	No

	supplements, etc., in support of other services) Main form in Quebec		
Denmark	Main form	No	No
Finland	Main form	Mixed	No
France	Main form	Mixed for ECEC outside the école maternelle	Yes, employer levy
Germany	Main form	Mixed in child care	No
Hungary	Main form in child care and kindergarten	No	No
Ireland	Limited to social nurseries and public early education	Limited, mostly parental contributions	No
Italy	Main form	No	Yes, employer levy
Korea	Limited to public kindergarten, and to public targeted programme in child care centres	Main form of government support, but parental contributions are high	In some cases
Netherlands	Main form in pre-primary and targeted	Main form in child care but high parental contributions	Yes, tax to nearly 30 per cent of costs
Norway	Main form	Mixed	Yes, tax
Portugal	Main form	Yes	Yes
Sweden	Main form	No	No
United Kingdom	Limited to public early education, social nurseries and targeted programmes	Main form for child care, but mostly parental contributions	Yes, tax
United States	Limited to public kindergarten, targeted programmes and Head Start	Main form but mostly parental contributions	Yes, tax

Source: OECD (2006) "Starting Strong II: Early Childhood Education and Care".

Financing child care in Finland: child care voucher-experiment

Finland scored highest in EU on PISA results, which suggests that Finish 15-year olds show extraordinary capabilities in reading literacy, mathematics literacy, and science literacy. Finland is one of the largest public spenders on ECEC as a percentage of GDP (see Figure 7) and provides universal access to formal child care to all children whose parents are willing to participate. Child care is predominantly provided by the public sector. In general, the main forms of provision are municipal day-care centres, family day-care homes/places or pre-school groups. However municipalities may also outsource services to private providers (about 5 per cent of total provision) or support voluntary services, such as activities of church.³⁸

Faced with the aftermath of the severe economic depression in 1990–1993, Finland had to reconsider its high public expenditure. For child care, the pressures were to enhance the effectiveness of public spending, which meant to find ways to reduce government expenditure. Therefore, in the mid-1990s, Finland adopted a quasi-market solution in form of vouchers for private childcare. This was done in an experimental setting with a goal to examine alternatives to publicly-subsidised welfare services, which were facing fiscal constraints.

Municipalities applied to participate in the voucher-experiment. The selected municipalities then issued certificates of amounts which varied by municipality. Parents were provided with these certificates, which allowed them to pay for the formal child care of their children at a chosen service centre. In comparison to publicly provided care, the vouchers cost, on average 50 euros less per

³⁸ OECD (2006) "Starting Strong II: Early Childhood Education and Care".

child per month for the government. Apparently, there was a sometimes significant difference in the cost structures between public and private provision of child care, which could have related to higher administration and overhead costs in the public sector. This could have contributed to the fact that private care provision was found between 60 and 90 percent of the comparative public child care.

By comparing between “treated” and “control group” municipalities over 1995-1997, a study³⁹ estimated the effects of the Finnish voucher-experiment on labour participation as well as the use of public and private child care. It was concluded that:

- The reaction of consumers on the introduction of vouchers for private child care was positive. Parents moved from informal care use to the use of private child care;
- For 0-2 age group, none of the estimates were significant.
- For older pre-school children, the use of private care increased by 3-5 percentage points.
- Use of public child care did not decrease concomitantly. Therefore, it is unclear if private child care provision is able to reduce the dead-weight loss created by public provision. At least in the short-term this was not the case.
- In excess demand areas, the labour participation increased by at least 5 percentage points, while public and private child care use increased by 5-9 percentage points each. Thus, increased use of private child care related to some previously unmet demand, such as greater flexibility.
- The use of combined public and private child care was higher under “dual-provision regime” than under either of the alternative methods of provision only in the areas of excessive demand, but not in other (not the whole country).

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Interviews

Interview with Ms Edith Kitzmantel, Chair of the CEEP Macro-economic Committee

Interview with Mr Juan Pedro Marin Arrese, chair of the CEEP EMC Committee

³⁹ Viitanen, Tarja K.(2010) 'Child care voucher and labour market behaviour: experimental evidence from Finland', Applied Economics.



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