Report No: 77723-TR

EXPANDING AND IMPROVING EARLY CHILDHOOD EDUCATION IN TURKEY

March 2013

The World Bank
Human Development Sector Unit
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CURRENCY EQUIVALENTS

(Exchange Rate Effective November 1, 2012)
Currency Unit= TL (Turkish lira)
US$1=TL 1.79

ACRONYMS AND ABBREVIATIONS

AÇEV Mother and Child Education Foundation (*Anne Çocuk Eğitim Vakfı*)
ECA Europe and Central Asia
ECD Early Childhood Development
ECE Early Childhood Education (*or Pre-Primary Education*)
ERI Education Reform Initiative
GDP Gross Domestic Product
MoNE Ministry of National Education
NGO Non-governmental Organization
OECD Organisation for Economic Co-operation and Development
ÖBBS Student Achievement Assessment Examination (*Öğrenci Başarılarının Belirlenmesi Sınavı*)
PISA Programme for International Student Assessment
SABER Systems Assessment and Benchmarking Education for Results
SPO State Planning Organization (*now called the Ministry of Development*)
SHÇEK Social Services and Child Protection Agency (*now closed and converted to Child Services General Directorate under the Ministry of Family and Social Policies*)
TEED Turkish Early Enrichment Project
UNICEF United Nations Children's Fund

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EXECUTIVE SUMMARY

1. Over the past decade, Turkey's population has experienced significant socioeconomic progress and demographic changes. The share of the Turkish population living in poverty dropped from 27 percent in 2002 to 18 percent in 2009, while per capita income nearly doubled. The annual rate of population growth slowed significantly (from 1.7 percent in 1997 to 1.2 percent in 2009), which eased the pressure on many social service fronts. Nonetheless, Turkey remains one of the fastest growing members of the OECD in terms of population. One-third of the country's 75 million residents are under the age of 18, of which nearly 7 million are children younger than 5 years old (World Bank, 2011b).

2. Turkey's children and youth are increasingly the focus of policymakers, as they seek to sustain economic growth, increase productivity, and ensure equality of opportunity for all. Among the five strategic goals that the Government of Turkey set for its Annual Program 2011, the pillar called Strengthening Human Development and Social Solidarity features prominently (SPO, 2011). Education, health, and social protection interventions are critical elements within this pillar, and improving the welfare of children is one of the government's core goals because children continue to face a higher risk of being economically disadvantaged than adults. Turkey has seen significant improvements in key health outcomes in the last decade[1] and infant and maternal mortality and life expectancy have continued to improve and approach OECD averages. By contrast, Turkey's provisions of Early Childhood Education (ECE) has lagged comparator countries. Turkey's per capita income would suggest an ECE enrollment rate of over 60 percent, but fewer than 30 percent of children between the ages of 36 and 72 months[2] currently benefit from pre-primary education in Turkey. Children from economically disadvantaged families have less access to ECE than children from well-off families.

3. Early childhood development (ECD) interventions[3] have been shown to yield many direct and indirect benefits to society. First, the interventions are the single

1- Infant mortality rates (IMR) have declined from 28.5 per 1,000 live births in 2003 to 10.1 per 1,000 live births in 2010. Maternal mortality ratio (MMR) fell from 61 maternal deaths per 100,000 in 2000 to 16.4 deaths per 100,000 live births in 2010 (MOH, 2011a; MOH, 2011b).

2- The ongoing reform under the recently promulgated "4+4+4" education law seeks to lower the minimum starting age for grade 1 from 72 months to 66 months.

3- For the purpose of this report, early childhood development (ECD) programs refer to interventions targeted to children aged between 0 and 72 months (0 to the child's 6th birthday, which is usually the age of primary school entry).

most efficient way for governments to enhance economic productivity by investing in children at a time in their developmental cycle (from the time of birth to 6 years old) when such investments yield the highest returns. Second, they provide a mechanism to enhance equity, as focused early childhood interventions targeted at the vulnerable segments of population have been known to reduce the intergenerational transmission of poverty. Third, ECD policies can greatly improve the personal development and life skills of young children and increase the opportunities available to them later in life by, for example, increasing rates of childhood survival and school readiness. Lastly, policies that focus on young children can have positive externalities that benefit other members of these children's families, as well as society as a whole.

4. In this report, "ECD programs" refer to interventions aimed at children between 0 and 72 months (0 to 5 years old), while ECE programs, refer to a subset of ECD interventions designed to educate children aged between 36 and 72 months (3 to 5 years old). [4]

EARLY CHILDHOOD EDUCATION IN TURKEY

5. In recent years, the Government of Turkey has recognized the critical role played by early lifecycle investments in achieving equitable growth. Turkish policymakers rightly view ECE expansion as a way to have a strong, positive impact on the growing young population. This inclination is supported by recent international research, which has shown that ECE interventions have higher rates of return than education interventions of similar magnitude at later stages of the lifecycle. The benefits of such programs are maximized when the interventions are targeted to children from disadvantaged families; thus they have the additional effect of reducing inequality of opportunity (Halle et al, 2009 and Heckman, 2008).

6. The country has made considerable strides over the past decade in improving the health and education of children aged 0 to 5 years old. The government recently made ECE (designed to educate children aged between 36 and 72 months or 3 to 5 years old) a national priority by committing to ensuring universal access to kindergarten for children aged between 60 and 72 months and to reaching 50

4- In Turkey, children aged between 60 and 72 months are referred to as 5 year olds in the "National Annual Statistics for Formal Education, 2012" published by MoNE.

percent participation in pre-primary education for children aged 36 to 72 months by 2014. These targets are part of a five-year Strategy Action Plan for ECE prepared by the Directorate-General of Pre-school Education in the MoNE during 2009-10 (MoNE, 2010).[5] The government focused initially on the 32 pilot provinces with the highest gross enrollment rates at the kindergarten level - those with over 50 percent participation in kindergarten. This program has already placed 135,000 more children in pre-primary classrooms in the last year and has achieved an average 91 percent gross enrollment rate in these 32 provinces.

7. The MoNE plans for ECE expansion starts with a focus on provinces with the highest enrollment rates. This is based on the rationale that those provinces are less likely than others to need new infrastructure, thus making it easier to accumulate quick gains in reaching enrollment targets. However, this means that the expansion plan will reach the provinces with the lowest enrollment (and therefore the greatest need) last. The overall ECE expansion aims to enroll an additional 600,000 students in the education system, but nearly half of these students, who are located in the provinces with the lowest enrollment rates, are not due to be targeted until the last year (2014).

8. In addition, the Government of Turkey has recently launched the Strengthening Pre-school Education Project. This project will pilot community-based models of ECE delivery and build the capacity of communities and the MoNE for monitoring and managing these models.

9. The Government of Turkey's desire to expand ECE access is in line with international best practice. This report offers some options for increasing the effectiveness of Turkey's ECE strategy in the coming years. The report endorses the goal of the proposed expansion plan and provides detailed recommendations for achieving this ambition in an efficient and equitable manner. By identifying and addressing the key challenges that the government will likely face in the coming years, the study provides the analytical underpinnings for improving Turkey's ECE expansion strategy and proposes specific policy options for the short and medium terms.

5- ECE goals are also set in the 9th Development Plan (SPO 2011, par. 584), quoted later in this document. Laws regulating ECE include the Primary Education Law, No. 222; Basic Law of National Education, No. 1739; and the Law on Organization and Duties of Ministry of National Education, No. 3797.

SUMMARY OF RECOMMENDATIONS

10. The recommendations outlined in this report can be grouped into four broad categories. The first category focuses on ensuring equity in access to ECE services by targeting public spending in a progressive manner, in other words, by targeting the disadvantaged groups within the population. The second encourages the government to put systems in place that will enhance the quality and accountability in Turkey's ECE subsector. The third advises policymakers about how to make ECE management more effective by increasing the involvement of private and not-for-profit actors in the sector. The last category of recommendations describes the levels of financing that will enable ECE programs to achieve Turkey's ambitious goals of expanding ECE coverage.

11. The following options are available to the Government of Turkey for increasing the effectiveness of its ECE program:

i. *Target spending in a progressive manner:* The ECE expansion strategy will be more equitable and will have a greater impact if funds allocated to this initiative are distributed progressively. This can be done in two ways:

a) Targeting low-enrollment provinces.

b) Targeting economically disadvantaged households to ensure equity in access.

ii. *Systematically assess and enforce national quality standards:* To ensure high quality service provision, the government should systematically assess and enforce standards on the curriculum, infrastructure, teacher qualifications, teacher training, teaching materials, and educational supplies. The government should also develop a system for assessing such outcomes as school readiness among ECE students. Some tools for doing this include:

a) School self-evaluations in which schools would evaluate their own performance every year against national standards

b) School external evaluations in which schools would be evaluated every three years by peers and expert groups, including assessing such outcomes as children's school readiness.

iii. *Involve private and not-for-profit actors in the ECE system:* While the bulk of services will have to be delivered by the public sector, the efficiency of ECE provision can be enhanced by

involving the private sector and non-governmental organizations (NGOs). Non-governmental actors and public-private partnerships can support and complement the Government of Turkey's efforts to provide ECE services, deliver targeted support, produce innovative media programs, and conduct external evaluations.

iv. *Ensure adequate funding for ECE:* To achieve this ambitious policy agenda, the resources dedicated to ECE will need to be raised from the current level of 0.03 percent of GDP to 0.23 percent of GDP in 2014.

I. INTRODUCTION

1. Over the past decade, Turkey has experienced significant socioeconomic progress and demographic changes. The growing young population is increasingly the focus of policymakers in Turkey as they seek to sustain economic growth, increase productivity, and ensure equality of opportunity for all. Education, health, and social protection interventions are critical elements of the government strategy. As a result of government effort, Turkey has seen significant improvements in key health outcomes in the last decade[6] and infant and maternal mortality and life expectancy have continued to improve and approach OECD averages. **Investment in Early Childhood Education (ECE) has been shown to have substantial economic and social returns. Turkey's provision of ECE has lagged comparator countries.** Turkey's per capita income would suggest an ECE enrollment rate of over 60 percent, but fewer than 30 percent of children between the ages of 36 months and 72 months[7] currently benefit from ECE in Turkey. Also, significant differences continue to exist between children from economically disadvantaged families and children from better-off families, thus setting the foundation for inequalities later on in life.

2. The benefit of ECE programs is maximized when the interventions are targeted to children from disadvantaged families thus they have the additional effect of reducing inequality of opportunity in the country in question (Halle et al, 2009 and Heckman, 2008). Recognizing this, ECE has become a national priority[8] for Turkey and the government is committed to achieving universal access to kindergarten for children between 60 to 72 months old, and 50 percent participation in pre-primary education for children aged 36 to 72 months by 2014/15. The overall ECE expansion program aims to enroll an additional 600,000 students in the education system, but half of these students are

6- Infant mortality rates (IMR) have declined from 28.5 per 1,000 live births in 2003 to 10.1 per 1,000 live births in 2010. Maternal mortality ratio (MMR) fell from 61 maternal deaths per 100,000 in 2000 to 16.4 deaths per 100,000 live births in 2010 (MOH, 2011a; MOH, 2011b).

7- The ongoing reform under the recently promulgated "4+4+4" education law seeks to lower the minimum starting age for grade 1 from 72 months to 66 months.

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located in the provinces with the lowest enrollment rates (and therefore the greatest need), which are not due to be targeted until 2014, the last year of the action plan.

3. This report examines the ECE provision in Turkey, and offers policy options for improving and expanding the ECE system the future. The report is divided into four sections. Section II presents an analytical framework for analyzing early childhood interventions, section III conducts an in-depth analysis of ECE in Turkey and identifies key challenges, and section IV recommends and outlines proposals for a dual-program strategy for expanding quality ECE in Turkey.

II. ANALYTICAL FRAMEWORK FOR EARLY CHILDHOOD INTERVENTIONS

4. This section outlines the case for early childhood interventions and introduces a framework for analyzing ECD policies.[9] Four processes occur during the critical early years of a child's life that have a lasting influence on outcomes later on in his or her life- physical growth and well-being, cognitive development, linguistic development, and socio-emotional development. ECD policies and programs can directly affect these processes to the benefit of both individuals and societies. It is important to distinguish ECD programs from ECD policies. "Programs" are specific interventions that vary according to their primary objectives (for example, increasing children's physical growth and improving their well-being or fostering their cognitive or socio-emotional development), coverage (small-scale or universal), and other characteristics. In contrast, "policies" refer to the regulatory framework and institutional arrangements for delivering ECD services at the national and/or state level, whose goal is to ensure that the nation's children have access to quality ECD services.

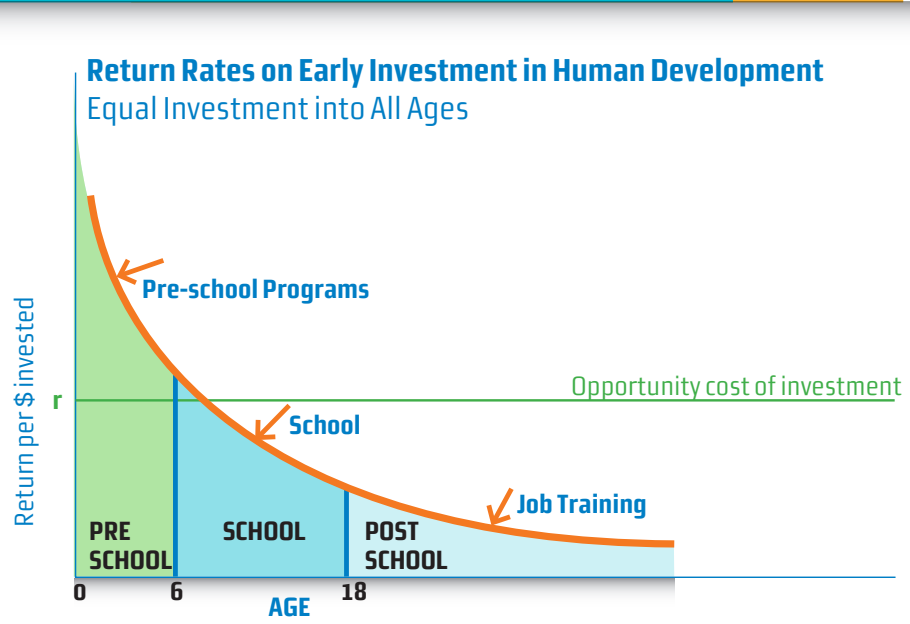
THE CASE FOR EARLY CHILDHOOD INTERVENTIONS

5. There are several arguments for investing fiscal and administrative resources in ECD.[10] One key argument in favor of early childhood investments is that they have been proven to be more economically efficient than investments made at later stages of life. Proper nutrition, cognitive stimulation, and nurturing care during children's early years have lasting positive consequences for their subsequent educational attainment, health, fertility, and earnings (Shonkoff and Phillips, 2000; Cunha and Heckman, 2007; Heckman, 2006; Cunha et al, 2005; and Carneiro and Heckman 2003). Conversely, the lack of these inputs can irreversibly damage a child's potential life trajectory (Heckman and Masterov, 2007). Although remedial interventions are sometimes possible after early childhood, investments in early childhood have better cost-benefit ratios and higher rates of return than those made later in life (Figure 1).

9- See Vegas and Epstein (2011) for a brief analysis of Turkey's ECD policies benchmarked against comparable countries.

10 - This discussion draws heavily on Naudeau et al (2011).

RETURNS ON EDUCATION INVESTMENTS FIGURE 1



Source: Carneiro ve Hackman (2003)

6. Investments in ECD also enhance equity in society. The family environment is central to any child's development of skills and abilities, but economically disadvantaged children frequently do not have access to the resources enjoyed by their wealthier peers. This disparity leads to the early emergence of performance gaps between children from different socioeconomic backgrounds and the widening of these gaps as children grow older (Paxson and Schedy, 2007, cited in Naudeau et al, 2011). By using public resources to put in place a supportive environment for the most disadvantaged children, ECD programs can make up for some early family differences. Research has convincingly shown that early childhood interventions can equalize opportunities for children and reduce the intergenerational grip of poverty and inequality (Heckman, 2006).

7. Another argument in favor of focusing on ECD revolves around key human development indicators in the areas of health and education that can be most easily influenced early in life. The main causes of child mortality are infections, neonatal disorders, and under-nutrition. Therefore, policies aimed at ensuring that children have adequate nutrition, health, and hygiene as well as early cognitive stimulation are crucial for increasing child survival rates and promoting optimal child health

and development (Nadeau et al, 2011). In education, maximizing academic achievement and school completion rates depend, in part, on children's ability to learn and relate to others (Hair et al, 2006). These non-cognitive skills such as the ability to work in groups, exercise self-control, and communicate effectively are developed very early in life and play a significant role in influencing school readiness,[11] or the degree to which a child has been prepared to learn and succeed in school (Ackerman and Barnett, 2005). Moreover, because genetic influences can account for only half of the variation in cognitive abilities (Fernald et al, 2009), ECD programs have considerable scope to affect children's cognitive development as well. Examples of ECD interventions from around the world have demonstrated time and again that they yield significant benefits in terms of later educational achievement. [12]

8. Finally, early childhood programs can generate positive externalities in terms of older female siblings' education and mothers' labor force participation. ECD interventions that also provide childcare can free household members to participate in other productive activities such as education or employment. For example, the expansion of Argentina's pre-school programs increased maternal employment by about 7 to 14 percent (Berlinski and Galiani, 2007). In this way, ECD can create win-win situations whereby there is an immediate payoff in the form of an increase in female labor force participation and a longer-term return in the form of a healthier, more educated, and more productive workforce.

STRENGTHENING ECD POLICIES IN TURKEY

9. Given the imperative for investing in ECD, the World Bank has developed an analytical framework for assessing the extent to which particular ECD policies achieve the intended developmental outcomes. The framework is part of System Assessment and Benchmarking Education for Results (SABER). SABER-ECD collects, synthesizes, and disseminates comprehensive information on ECD policies around the world. This information enables policy makers and World Bank staff to learn from the different means that countries use to address the same policy challenges related to ECD. To do this, SABER-ECD identified three core ECD policy goals to assess the

11- See Naudeau et al (2011:35) for further evidence and detailed development of the school readiness argument.

12- For Bangladesh, see Aboud (2006) for Colombia, see Young (1995), for Argentina, see Berlinski et al (2009), for Turkey, see Kagitcibasi et al (2001), and for the United States, see Schweinhart et al (2005).

level of development of an ECD policy system. [13] The three core SABER-ECD policy goals are:

a) Establishing an Enabling Environment: This goal refers to the existence of an adequate legal and regulatory framework to support ECD; the availability of adequate fiscal resources; and the degree of coordination within sectors and across institutions to ensure that services can be delivered effectively.

b) Implementing Widely: This goal refers to the extent of coverage (as a share of the eligible population) and gaps in coverage, as well as the spectrum of programs offered. A robust ECD policy should include programs in all essential sectors (health, nutrition, education, and social protection), inter-sectoral coordination, and high degrees of coverage.

c) Monitoring and Assuring Quality: This goal refers to the development of standards for ECD services, the existence of systems to monitor compliance with those standards, as well as the implementation of systems to monitor ECD outcomes across children.

13- For more information, see: http://www.worldbank.org/education/saber.

10. Based on evidence from impact evaluations, institutional analyses, and a benchmarking exercise of top-performing systems, a set of actions, or policy levers, that decision-makers can act upon to strengthen ECD are identified for each policy goal. Taken together, the three policy goals and the eight policy levers comprise a coherent ECD policy system, which should lead to the desired outcome of ensuring that all children have the opportunity to reach their full potential (see Figure 2). For each policy goal and lever, SABER-ECD classifies systems by four levels of development, ranging from less developed (or "latent") to emerging, established, and fully developed (or "advanced"). ECD policies in a country would be classified as "advanced" for all three policy goals when one can observe: (a) a solid legal framework for ECD, sustained financing for attaining ECD goals, and a high degree of inter-institutional coordination; (b) coordinated interventions in all essential ECD sectors and universal coverage in key ECD services such as maternal and child health and preschool education, resulting in integrated services for all young children (some services universally provided, others tailored to young children's unique needs); and (c) information on ECD outcomes at individual, national, regional, and local levels and well-defined quality standards and mechanisms to monitor compliance with established standards. In a majority

of World Bank client countries, an "advanced" level of ECD policy development is attainable in the medium- and long-term. In the meantime, the framework can be used to identify the key dimensions where a country is falling behind this ideal and develop strategies to address the lagging areas. This exercise is, by definition, country-specific and should be country-led.

11. Table 1 presents the preliminary findings from the SABER-ECD assessment of ECD policy in Turkey. As the analysis suggests, with respect to the first ECD policy goal (Establishing an Enabling Environment), Turkey has established an adequate legal framework for ECD, although challenges related to inter-sectoral coordination and finance remain. In the goal of Implementing Widely, Turkey has achieved a comprehensive policy focus across sectors, but important coverage challenges remain and are in the process of being addressed. Finally, in the goal of Monitoring and Assuring Quality, Turkey has progress to make in the quality of ECD information as well as in efforts to ensure compliance with the quality standards among ECD service providers.

12. In a number of specific areas of ECD policy, Turkey can improve policies to move beyond the Emerging and Established stages and into the Advanced stage. To meet the goal of Establishing an Enabling Environment, attention must be paid to improving inter-sectoral coordination and finance. Without a strong and capable national ECD authority, the promotion of inter-sectoral

FIGURE 2 **THREE ECD POLICY GOALS:** FROM POLICY ACTION TO OUTCOME

Source: SABER-ECD Country Report: Turkey (Vegas et. al,2011).

BENCHMARKING EARLY CHILDHOOD DEVELOPMENT POLICY IN TURKEY

TABLE 1

ECD POLICY GOALS	LEVEL OF DEVELOPMENT	POLICY LEVERS	LEVEL OF DEVELOPMENT
Establishing an enabling environment	Emerging	Legal framework	Established
		Intersectoral coordination	Emerging
		Finance	Emerging
Implementing widely	Emerging	Coverage and programs	Emerging
		Area of focus	Established
Monitoring and assuring quality	Emerging	ECD information	Emerging
		Quality standards	Established
		Compliance with standards	Emerging

coordination will be difficult. Turkey recently has taken a significant positive step in this direction by combining the Primary Education General Directorate and Pre-Primary Education Directorate and creating a new Basic Education Directorate. This positive initiative will make policy making for ECD more coherent. Increased financing is essential to meet the ambitious goals the Government of Turkey has set. Significant progress has been made to improve ECD health, education, and social protection in recent years in Turkey, but many programs currently are underfunded and consequently unable to reach all children in need. According to MoNE, 13,500 qualified and trained preschool teachers are waiting for jobs. The lack of financing to provide sustained salaries for these qualified teachers is preventing them from serving children in need.

13. The Government of Turkey has made massive strides in the last decade to improve coverage and programs within the goal of Implementing Widely.[14] However, significant gaps in coverage persist based on regional and socio-economic differences. Increased funding and attention to marginalized regions and populations is essential to close these gaps. Turkey's ECD program portfolio includes well-established programs in multiple sectors, including health, nutrition, and education. Considerable progress has been made to increase preschool enrollment for children aged 5-6 in the last five years. These efforts could be expanded to include quality daycare for younger children. Moreover, despite a recent upward trend, female labor force participation remains well

14 - See Annex 2 for a summary of all ECD interventions in Turkey.

SOME PRELIMINARY POLICY OPTIONS FOR STRENGTHENING ECD IN TURKEY

TABLE 2

ECD Policy Goals	Policy Options for Consideration
Establishing an Enabling Environment	• Consider developing a comprehensive ECD strategy that integrates and coordinates interventions in different areas, thus providing a clear organizational framework for ECD. • Define the roles and responsibilities of public agencies involved in ECD (including the coordinating body) and also NGOs and the private sector. • Increase funding for ECD to expand coverage, particularly to disadvantaged children.
Implementing Widely	• Expand coverage of ECD interventions, especially for disadvantaged children. • Expand private sector and community partnerships to provide ECD. • Consider introducing comprehensive ECD programming capable of assessing and meeting the needs of each individual child.
Monitoring and Assuring Quality	• Set clear standards for ECD above and beyond infrastructure. • Strengthen the quality assurance system to monitor and ensure compliance with these standards.

below the OECD average. The high cost of childcare services, particularly in urban areas, may limit opportunities for women to re-enter the labor force after childbirth. The Government of Turkey has emphasized policies to increase job opportunities;[15] measures to increase the availability of affordable daycare could be highly complementary to these ongoing efforts. A number of channels would help to achieve the goal of expanding affordable daycare, including scaled-up, low-cost community models, increased public financing, and less stringent infrastructure requirement to allow more private providers to enter the market.

14. Within the policy goal of Monitoring and Quality Assurance, the introduction of the Family Doctor Scheme, to provide health care and to monitor young children's growth and cognitive development, is a notable step towards ensuring that ECD outcomes are available not just at the national level but at the regional, local, and individual child level. The program should continue to be scaled up and the monitoring tools of

15 - The Ministry of Family and Social Policy is working on a project which subsidizes the costs of attending ECE and care facilities for children of working mothers. This project is jointly being prepared in partnership with ACEV, TUSIAD and the World Bank.

the Ministry of Health should be further refined to ensure a robust capability to support holistic development and monitoring for all children throughout their early years. Quality standards and compliance are improving in Turkey across different sectors, and that evolution should continue. The strict infrastructure requirements imposed on private providers of daycare could be examined. While some infrastructure requirements are certainly necessary, it is possible that the current requirements place too heavy an emphasis on infrastructure and constitute too high a barrier for entry into the market. Given the significant need for preschool and daycare facilities (particularly for children below the age of 5), the government may consider less stringent infrastructure requirements while increasing the focus on learning standards and the learning environment in which children are placed. Table 2 summarizes policy options to strengthen Turkey's ECD System.

III. AN ANALYSIS OF EARLY CHILDHOOD EDUCATION IN TURKEY

15. Building on this analysis of Turkey's ECD policies based on the SABER-ECD tools, the rest of this report focuses on four key areas in the Government of Turkey's plan to expand ECE coverage. The first is the government's commitment to implement ECD widely by expanding access to ECE. The second is its goal of assuring quality and accountability in ECE by putting in place a rigorous system of monitoring and evaluation. The third is the extent to which the government establishes an enabling policy environment by encouraging non-governmental actors to participate in the ECE sector. And the fourth is the need to ensure adequate financing for the expanded provision of ECE in Turkey. This section conducts a detailed analysis of each of these four policy areas and identifies important challenges that policymakers will need to address to ensure these goals are achieved.

16. Most strategies for cultivating human capital involve tradeoffs so governments need to decide where to invest and how to sequence their investments. The latest information from the Turkey Demographic Health Survey (DHS), 2008 shows that over 90 percent of births are attended by skilled health staff, a rate that is consistent with Turkey's per capita income level. ECE provision, by contrast, is much lower than that predicted by Turkey's level of development. Turkey's per capita income would predict an ECE enrollment rate of over 60 percent, but fewer than 30 percent of children between the ages of 3 and 5 currently benefit from pre-primary education in Turkey (Figure 4).[16]

17. As noted earlier, there are good arguments for prioritizing ECE among the different types of early childhood interventions in Turkey. There is evidence that ECE helps disadvantaged students bridge the gap that separates them from students from better-off families at the time of primary school entry. In addition, ECE is the most important tool at the disposal of governments for ensuring school readiness. Therefore, high-quality ECE goes a long way towards creating a more equitable education system. Every dollar invested in ECE has a much higher return than a dollar invested at any other stage of the education system. These returns include better learning

16- Countries with similar per capita income in Eastern Europe and elsewhere have ECE coverage rates two to three times higher than Turkey.

throughout the educational cycle, higher lifetime earnings, lower long-term social assistance costs, increased probability of school graduation, and several externalities such as increasing women's participation in the labor force. These benefits are especially high when ECE is provided to children from economically disadvantaged families. **The importance of ECE has been widely accepted and promoted in recent Turkish research.** Various studies have been published that document the positive impact that ECE can have on early social and cognitive development. The most prominent among these include a 2005 report by the Turkish Industry and Business Association (TUSIAD) titled Right Start: *Pre-Primary Education in Turkey* (TUSIAD, 2005), various publications of the Mother and Child Education Foundation (AÇEV), and a 2007 study by the Turkish Education Association (TED, 2007), as well as numerous academic papers and Master's theses.[17] Analysts also see ECE as crucial for overcoming the developmental barriers faced by children from disadvantaged backgrounds. For example, Gökşen et al (2006) argued that pre-primary education can provide critical support for children who are at risk of dropping out of school in Turkey.

18. Recognizing the importance of investing early in the lifecycle, the Government of Turkey has decided to make ECE a national priority and has taken initial steps to increase the coverage and improve the quality of ECE in Turkey. The 9th Development Plan (2007-2013) sets out the government's ECE goals, stating that the "aim of expanding pre-school education, teacher and physical infrastructure requirements will be met, education services will be diversified, the public awareness level will be raised, and training towards early childhood and awareness will be increased." In addition, the MoNE prepares a Strategy Action Plan for ECE every five years. In 2009-10, the MoNE outlined its ambitious plan to expand ECE by setting out two targets to be reached by the start of the 2014-15 school year: (i) universal enrollment in kindergarten (for students aged 60 to 72 months old) and (ii) 50 percent participation in pre-primary education (for students aged 36 to 72 months old). As discussed above, the government focused initially on the 32 pilot provinces with the highest gross enrollment rates at the kindergarten level, those with over 50 percent participation in kindergarten. This program placed 135,000 more children in pre-primary classrooms in the last year and has achieved an average 91 percent gross enrollment rate in these 32 provinces. [18]

17- See Beckman and Gürlesel (2005), AÇEV (2009), and Karip (2007). These and other examples are discussed in greater detail in ERI (2011).

18- These provinces, however, were among the least populated. In 2010-11, the government reached out to 25 additional provinces, though the most disadvantaged (including the city of Istanbul) were not included in this group.

19. The MoNE plans for ECE expansion start with a focus on provinces with the highest enrollment rates. This is based on the rationale that those provinces are less likely than others to need new infrastructure, thus making it easier to accumulate quick gains in reaching enrollment targets. However, this means that the expansion plan will reach the provinces with the lowest enrollment (and therefore the greatest need) last. The overall ECE expansion aims to enroll an additional 600,000 students in the education system, but nearly half of these students, who are located in the provinces with the lowest enrollment rates, are not due to be targeted until the last year (2014).

EXPANDING ACCESS TO ECE

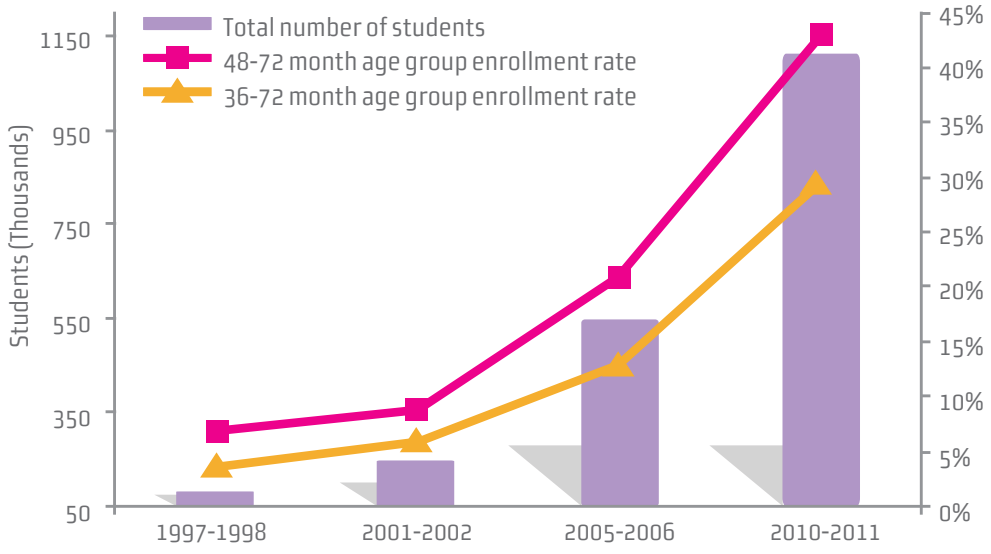
20. Turkey has made significant progress in extending the coverage of ECE in the past 20 years, increasing the number of children enrolled in pre-primary education by approximately 800 percent (MoNE, 2011). These trends were most dramatic in the past five school years when about 113,000 students were added to the system annually, resulting in a significant increase in the gross enrollment rate of children aged between 36 and 72 months (see Figure 3). The absolute increase in enrollment at this level of education was by far the highest increase in all levels of education in the country during this five-year period.

21. Despite this increase in coverage of ECE in Turkey, participation remains low and inequitably distributed. At 30 percent, pre-primary education coverage of children aged 3 to 5 years old (or 36 to 72 months old) remains far lower than in most countries with similar levels of per capita GDP such as Mexico and Bulgaria (Figure 4). There are two key reasons behind this relatively low coverage: first, pre-primary education is not compulsory in Turkey and, second, pre-primary students are not currently eligible for the student transportation subsidies that are available for other levels of education. This low coverage is compounded by sharp differences in access between children from different socioeconomic backgrounds. Although the most economically disadvantaged families have on average, four more children than the richest, the richest households are 60 times more likely than the former to have at least one child enrolled in kindergarten (Aran et al, 2009). In other words, most children enrolled in ECE institutions are not those who would benefit the most from early education (Figure 5). As a result, children born into disadvantaged families begin primary school without any preparation and thus start their educational life lagging behind their better-off peers.

NUMBER OF STUDENTS AND INCREASE IN ENROLLMENT RATE IN PRE-PRIMARY EDUCATION IN TURKEY, 1997/98-2010/11

FIGURE 3

Source: World Bank (2011a)



22. Significant provincial disparities in enrollments also persist. The highest enrollment rates are in Amasya in the Black Sea Region (86.6 percent for 4 to 5 year olds and 59.2 for 3 to 5 year olds) and the lowest in Hakkari in Eastern Anatolia (18.5 percent for 4 to 5 year olds and 12.9 for 3 to 5 year olds) (MoNE, 2011). Regrettably these differences in pre-school enrollment are correlated with the provinces' overall level of human development, which implies that these disparities will persist over the long term if the status quo remains in effect. If the Government of Turkey wishes to close the developmental gap between its provinces, it should consider targeting the scarce resources allocated to ECE to the worst-performing regions as this would generate the highest returns, in terms of both educational attainment and long-term growth and productivity.[19]

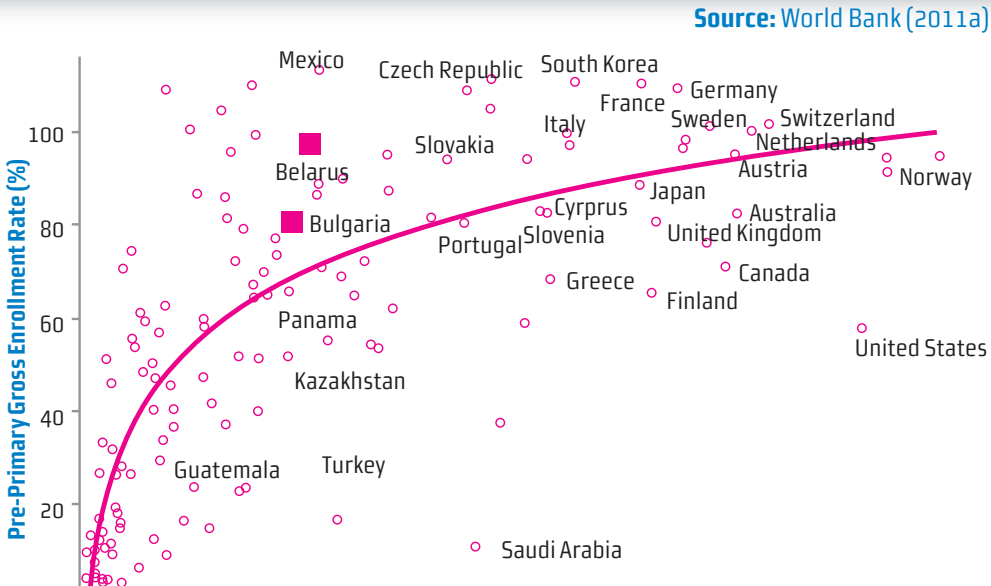
23. Finally, as Table 3 makes clear, the vast majority of ECE services in Turkey are provided by government-run public institutions. Within the government, MoNE pre-schools account for 90 percent of ECE enrollments, while pre-schools run by SHÇEK[20] (the Social Services and Child Protection Agency)

19- For more information on the geographic disparities in ECE coverage in Turkey, see Beckman and Gürlesel (2005), AÇEV (2009), Polat (2009), and Ural and Ramazan (2007).

20- While the report was being finalized SHCEK was closed and converted into Child Services General Directorate under the Ministry of Family and Social Policies.

FIGURE 4 PRE-PRIMARY EDUCATION GROSS ENROLLMENT RATES AMONG CHILDREN AGED 3-5-YEARS (PERCENT)

Source: World Bank (2011a)



and the special institutions opened under Law 657[21] account for only 5 percent of ECE enrollments. Private institutions account for the remaining 5 percent of ECE enrollments, but most of these are located in more affluent areas.

24. The government's initial focus on expanding ECE in the 32 provinces with the highest gross enrollment, is a practical approach that takes into account the time needed to provide infrastructure in the less advanced provinces.

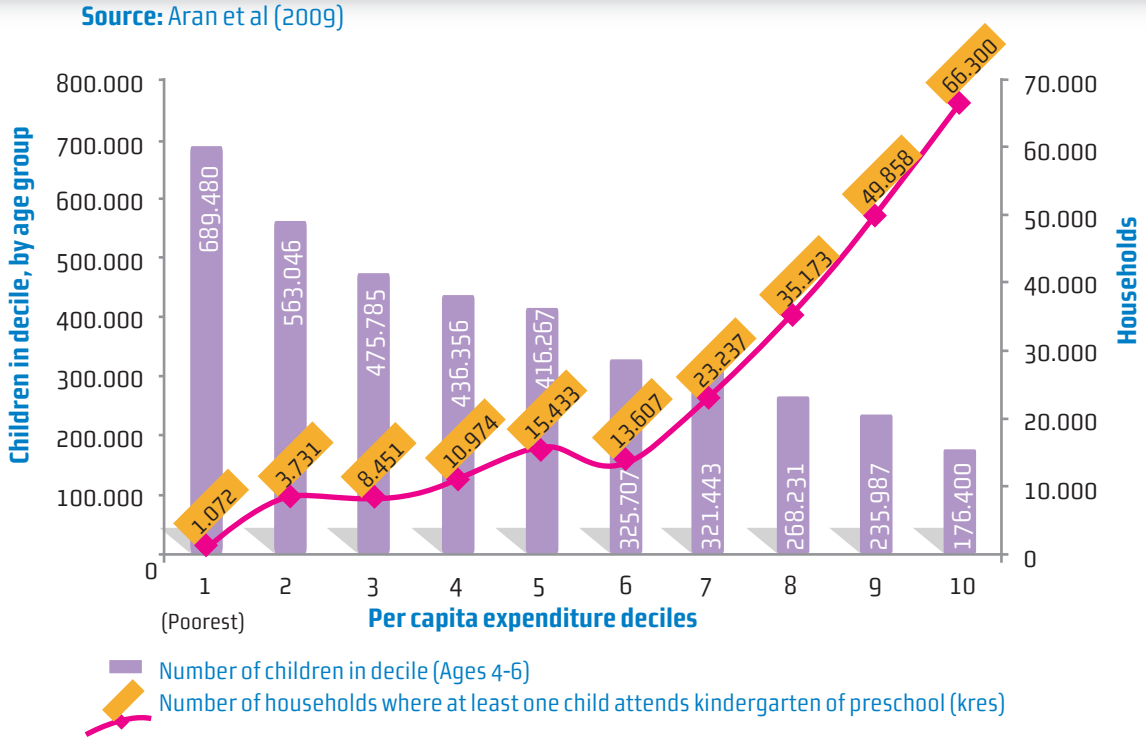
Nonetheless concerted efforts will be required to ensure resources are targeted to economically disadvantaged children across the country and those provinces with the lowest enrollment rates such as Hakkari, Van, Urfa, Ağrı, and Istanbul. This effort will require a multi-pronged approach with several complementary initiatives delivering additional targeted support to vulnerable populations (similar to the approaches adopted in Chile and Australia, see Annex 1). Without an extraordinary targeted effort, it will be much harder to raise the ECE enrollment rate in these lagging provinces.

21- Law No. 657 article 191 states that "child nurseries and daycare centers can be installed for civil servants when needed." The principles and procedures of the organization and operation of these centers are determined by the general regulations of State Personnel Presidency in cooperation with the Ministry of Finance and Customs.

BENEFIT INCIDENCE OF CENTER-BASED PRE-SCHOOL AND DAYCARE OPTIONS IN TURKEY

FIGURE 5

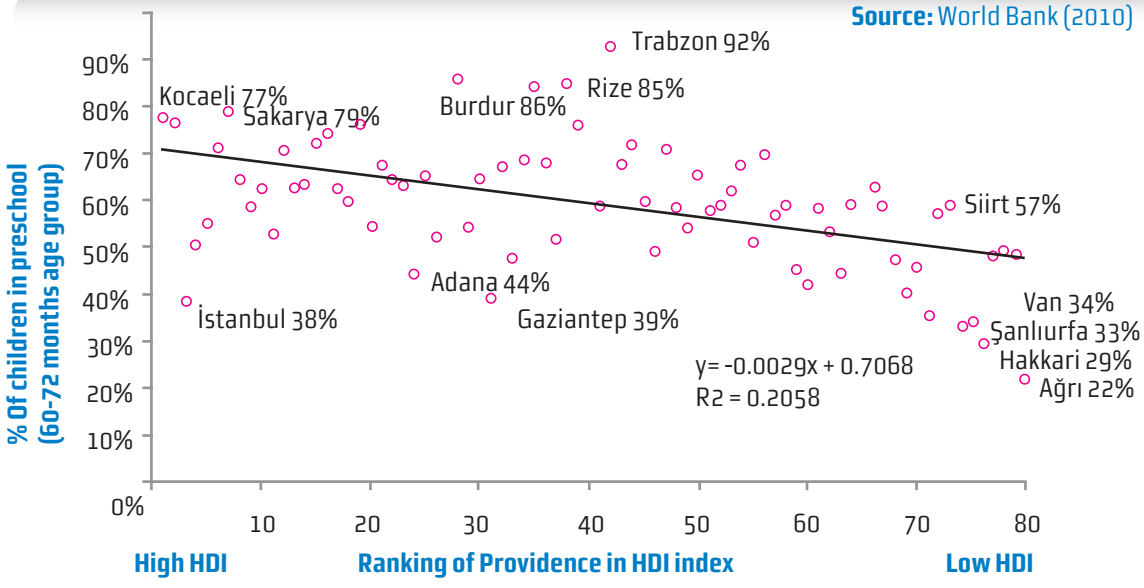
Source: Aran et al (2009)



PRE-PRIMARY ENROLLMENT AND HUMAN DEVELOPMENT INDEX BY PROVINCE

FIGURE 6

Source: World Bank (2010)



KEY STATISTICS ON ECE IN TURKEY

TABLE 3

Source: MoNE (2011)

Type of Institution	Students	Schools	Teachers	Classes	Student -Teacher Ratio	Class Size
Number						
Public institutions						
Pre-primary classes in primary schools	824,070	22,813	29,758	29,843	28	28
Independent pre-primary institutions	184,545	1,452	7,901	6,854	23	27
Child Protection Agency (SHÇEK)	39,948	1,585	7,608	4,633	5	9
Institutions opened under Law 657 (191)	6,776	118	549	495	12	14
Total public	**1,055,339**	**25,968**	**45,816**	**41,825**	**23**	**25**
Private institutions						
Pre-primary classes in primary schools	20,710	584	1,041	1,381	20	15
Independent pre-primary institutions	39,769	1,054	1,473	3,100	27	13
Total private	60,479	1,638	2,514	4,481	24	13
All institutions	**1,115,818**	**27,606**	**48,330**	**46,306**	**23**	**24**
As percentage of total						
Public institutions						
Pre-primary classes in primary schools	73.9	82.6	61.6	64.4		
Independent pre-primary institutions	16.5	5.3	16.3	14.8		
Child Protection Agency (SHÇEK)	3.6	5.7	15.7	10.0		
Institutions opened under Law 657 (191)	0.6	0.4	1.1	1.1		
Total public	**94.6**	**94.1**	**94.8**	**903**		
Private institutions						
Pre-primary classes in primary schools	1.9	2.1	2.2	3.0		
Independent pre-primary institutions	3.6	3.8	3.0	6.7		
Total private	**5.4**	**5.9**	**5.2**	**9.7**		
All institutions	100	100	100	100		

ASSURING QUALITY AND ACCOUNTABILITY IN ECE

25. Turkey has limited data on ECE learning outcomes, which is the indicator that most directly measures the quality of education. In the absence of such data or of 'school readiness' tests in the Turkish system, the best proxies for the quality of ECE are standards for infrastructure, teaching material, and teacher training. Existing evidence shows that there is clearly scope for Turkey to further improve the quality of its pre-primary education. Aran et al. (2009) indicated

that Turkey met only four out of ten indicators that benchmark the quality and access of ECD across OECD countries. (Table 4)

26. The quality of ECE in Turkey can be improved by enhancing both the quality of the pre-school facilities and the quality of instruction. A recent study (Göl-Güven, 2009) evaluated the quality of ECE classrooms in a randomly selected sample of public and private pre-primary schools in Istanbul. It concluded that both types of institutions have significant shortcomings, from physical infrastructure to teacher-pupil interactions, although the study found that the private sector handles daily routines and teacher-parent interactions more effectively. Another study, a qualitative evaluation of the pre-school development process in Kilis Province (Özgan, 2009), also found that physical conditions and facilities were inadequate, but in addition it identified the lack of school-family cooperation as another factor that negatively affects the quality of ECE. This lack of cooperation seemed to be due to parents' limited awareness of the fundamental importance of pre-primary education for children's cognitive, motor, and socio-emotional development.

27. The effectiveness of teacher training in pre-primary education is yet another concern. Teacher training in general and for pre-primary teaching in particular is relatively new in Turkey and has become one of the key areas slated for reform. Some recent studies (Atay-Turhan et al, 2009 and Haktamir, 2008) have stressed the need to restructure the current system of pre- and in-service training offered to staff in pre-primary education to better enable them to meet the needs of their students. The revision of the pre-primary teacher education curriculum in 2006 (Annex 3) demonstrated the government's commitment to improving the quality of pre-primary education as well as to increasing student preparedness for primary education. However, it is crucial that this revision be followed by a systemic evaluation of ECE delivery on the ground and its effectiveness in delivering outcomes such as school readiness for all children, especially those from disadvantaged backgrounds.

28. An effective way to address concerns about the quality of pre-school education would be to institute a reliable monitoring and evaluation system to hold ECE providers accountable for the services that they deliver. The Directorate-General of Basic Education is responsible for setting policies and standards related to ECE, for monitoring the quality of ECE services, and for coordinating the various agencies responsible for ECE provision. All public ECE centers have a mandatory

BENCHMARKING OF ECD SERVICES IN OECD COUNTRIES TABLE 4

Source: Aran et al, 2009 (adapted from UNICEF, 2008)

	Turkey	Mexico	Spain	Germany	Italy	Japan	Portugal	Korea	Austria	Netherlands	UK	Belgium	Hungary	New Zealand	Slovenia	Denmark	Finland	France	Norway	Iceland	Sweden
Parental leave of 1 year at 50% of salary					X										X	X	X	X	X		X
A national plan with priority for disadvantaged children		X		X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X
Subsidized and regulated child care services for 25% of children under 3										X	X	X		X	X	X	X	X	X	X	X
Subsidized and accredited early education services for 80% of 4 year-olds			X	X	X	X	X		X		X	X	X	X		X		X	X	X	X
80% of all childcare staff trained	X	X	X		X	X	X	X	X	X	X		X	X			X	X		X	X
50% of staff in accredited early education services, educated with relevant qualification	X	X	X	X			X	X		X	X	X	X	X		X		X		X	X
Minimum staff-to-children ratio of 1:15 in preschool education	X			X					X	X			X	X		X	X		X	X	X
1.0% of GDP spent on early childhood services																X	X	X	X	X	X
Child poverty rate less than 1%									X			X	X			X	X	X	X	X	X
Near-universal outreach of essential child health services	X					X		X				X					X		X	X	X
TOTAL NUMBER OF BENCHMARKS MET	4	3	3	4	4	4	4	4	5	5	5	6	6	6	6	8	8	8	8	9	10

accreditation and registration process that is overseen by the MoNE. There is almost no accreditation of private sector providers of ECE. In addition to an updated curriculum for training pre-school teachers (see Annex C), MoNE's current program for pre-school education provides detailed standards for infrastructure requirements and parameters for facilities for public and private ECE institutions, and also general guidance on encouraging flexibility in program delivery and family participation.

29. Recently MONE's own auditors have started to carry-out an audit of pre-primary education, focusing mostly on compliance with physical standards for pre-primary institutions and classes.[22] There is, however, little focus on measuring outcomes such as 'school readiness' of pre-primary students which can most directly measure the effectiveness of

22- This initiative is part of the development of a system-wide Quality Management System in education which will aim at improving the quality of education at all levels, including ECE.

pre-primary education. In addition, as noted in the recent study by MONE et al (2011 a) there is a question mark over the effectiveness of the audit system in providing feedback to ECE practitioners on substantive issues, and even their capacity to ensure compliance with existing standards. The government is already making an effort to address some of these issues through the MoNE's "Strengthening the Preschool Education Project."

ENCOURAGING THE PARTICIPATION OF NON-GOVERNMENTAL ACTORS IN ECE

30. At present, three central government agencies deliver most of the programs for young children in Turkey: the Ministry of Health, the MoNE, and SHÇEK.[23] The programs run by these agencies cover different aspects of ECD. The Ministry of Health is responsible for coordinating programs for children in the 0 to 3 age group. The MoNE coordinates educational programs for the 3 to 5 age group through home-based family training programs run by the Directorate-General of Non-Formal Education and center-based pre-school programs run by the Directorate-General of Basic Education. SHÇEK targets the most vulnerable groups by implementing two types of programs: protective services for orphans and children in need and preventive services offered in community venues.

31. Almost all school-based and center-based ECE services are provided by the public sector. While the private sector provides around 5 percent of ECE services and SHÇEK's multi-purpose community centers reach about 40,000 children from economically disadvantaged households (less than 4 percent of enrollment), the center-based ECE programs led by the MoNE's Directorate-General of Basic Education currently account for 90 percent of all ECE enrollment (Table 3). Government-led efforts have expanded significantly in the last five years, largely driven by a greater recognition of the importance of pre-primary education that was stimulated by successful public awareness campaigns (such as "7 Is Too Late") by the Mother and Child Education Foundation (AÇEV). As a result of these efforts, pre-school classroom capacity has been expanded either by reallocating classrooms within primary schools or by building new pre-schools. The MoNE champions the expansion of the system and mobilizes local government funding for ECE. Although the MoNE directly covers infrastructure costs, the priorities of provincial and sub-provincial governments also significantly

23- In addition there are 367 practice kindergartens, and ECE branches in 630 schools under the Vocational and Technical Education General Directorate of MONE.

influence the pace and progress of ECE expansion.

32. A central authority has not been established to oversee pre-service or in-service training of ECE educators in Turkey. Preschool teachers, who are appointed centrally by MoNE, require a four-year university degree. In July 2006, a new early childhood teacher education curriculum was launched after an extensive review and consultation process, with the aim of meeting the aims of the European Higher Education Area. Universities are using this curriculum to provide pre-service training through their four year programs. In-service training is provided to ECE educators mostly by government institutions.

33. Although private institutions receive little public support—either in the form of quality assurance or subsidies to defray fees for the poor — a few community-driven initiatives do exist.[24] The MoNE supports them in accordance with its declared aim of diversifying ECE service provision as laid out in the 9th Development Plan. At present, the MoNE regulates the educational content of private pre-schools, while SHÇEK issues their licenses. In the medium term, the government plans to shift the responsibility for licensing of private pre-schools to the MoNE as well.

34. When it comes to home-based family training programs, several public efforts exist to support parents as primary caregivers and to foster children's cognitive development and make them school ready. The MoNE implements these programs through the Non-formal Directorate in Adult Education Centers (with financial support from the European Commission) and in cooperation with AÇEV and UNICEF. While these programs are an important starting point for expanding ECE through home-based services in Turkey, they cover only about 3.5 percent of children aged 0 to 72 months (World Bank, 2010). Moreover, the UNICEF program has no cognitive development component, so it needs to be complemented by center-based pre-school training (Aran et al, 2009).

35. Encouraging more private sector involvement in providing ECE services would introduce more flexibility into the system and make it easier to adjust to local and individual conditions. Bekman and Gürlesel (2005) pointed out that the centralized nature of most education provision risks failing to meet the needs of children in different regions with different conditions. The authors recommend designing ECE

24- A notable example is found in the efforts of KDEV (an NGO focused on empowering women) to establish daycare in poor urban localities; still, their scale is very small. The government's "Strengthening the Pre-school Education Project" also pilots community-based models of ECE service delivery.

programs to be as flexible as possible because every child has a different pace of development, and providing services locally is more likely to match the needs of individual students in different parts of the country than when services are provided from the center.

36. The Government of Turkey faces the difficult challenge of providing ECE services to 600,000 new students over the next three years. Some public systems around the world, such as the one in Sweden, have achieved universal coverage of high-quality ECD. Given the magnitude of the challenge in Turkey, the government should explore the role of the private sector, NGOs, and communities as complements to public service delivery.

ENSURING ADEQUATE FINANCING OF ECE

37. Countries around the world vary in terms of the level, composition, and methods of their financing for ECE. In OECD countries, the average total public and private expenditure on pre-primary education is 0.49 percent of GDP, of which 0.43 percent is public. Most of Turkey's comparable countries spend about 0.3 to 0.5 percent of their GDP (and between 5 and 10 percent of their education budgets) on ECE, whereas Turkey's ECE spending is only one-tenth of that level, at only 0.03 percent of GDP and around 0.6 percent of the education budget (see Annex 4).

38. The low absolute and relative levels of spending on ECE in Turkey are closely associated with the distribution of social spending in the public sector, which is skewed heavily toward older citizens. Figure 7 shows that the amount of public social spending (education, health, and social protection) on children aged 0 to 5 years old is far less in per capita terms than social spending on any age group older than 45 years old.

39. Due to low levels of public spending on the youngest members of society, Turkey's pre-schools tend to rely heavily on private user fees. Pre-school institutions are known to charge "nutrition fees" that can range in most schools from TL 50 to TL 200 per child per month depending on the region. Compare these fees with a poverty line for a family of four at TL 700 per month, and it becomes clear that many economically disadvantaged families cannot afford to enroll their children in pre-school.

40. The problem of low and inequitable spending on ECE is compounded by the lack of a cohesive framework for financing the system. As was shown in Table 3, the bulk of the ECE system (74 percent of students and 64 percent

of classes) is made up of kindergarten classes that are mostly held in primary education institutions.[25] Until recently, the budget for these kindergarten classes (to pay for teachers' salaries, teaching materials, and infrastructure maintenance, for example) was not managed by the MoNE's Directorate-General of Pre-school Education but by a host of other institutions, most notably the Directorate-General of Primary Education. This institutional structure had two immediate implications. First, it is very difficult to get an accurate estimate of ECE investments because of this fragmentation, and, second, the Directorate-General of Pre-school Education had no control over the resources that are used to deliver over two-thirds of ECE services, in other words, those that are delivered as kindergarten classes in primary schools. In the latest restructuring of MONE (in late 2011), the government has combined the Pre-primary and Primary General Directorates into a General Directorate of Basic Education. This restructuring is likely to have a positive impact in planning and implementing the ECE expansion.

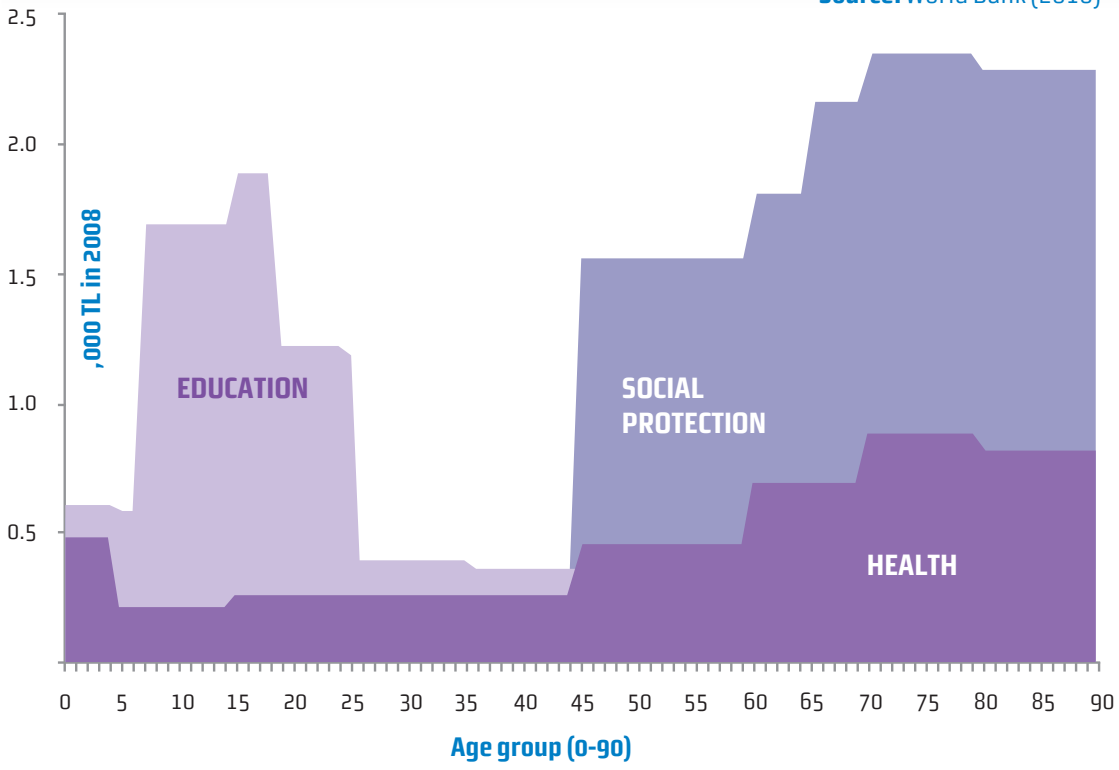
41. There is clearly a case to be made for greater and more efficient financing of ECE in Turkey. As argued earlier, investing in early childhood education has higher returns than at any other level of education, and this has been demonstrated by empirical evidence from Turkey's ECE programs. For example, there have been studies (Kağıtçıbaşı et al, 2001 and Kağıtçıbaşı et al, 2005) that have evaluated a set of successful experiments undertaken by the long-term Turkish Early Enrichment Project (TEEP).[26] They found that children who benefitted from the program were more likely those in a control group to have graduated from high school and even university and were more likely to be employed than their peers. Another recent effort to document the importance of ECE policies in Turkey was the cost-benefit study undertaken by Kaytaz (2005). The author found that ECE interventions in Turkey had yielded anywhere between TL 2.1 (low-case scenario) to TL 6.3 (upper-case scenario) for each TL invested. More importantly,

25- In response to a circular named "Expansion of Pre-school Education" (http://ooegm.meb.gov.tr/donatim/2009-53-genelege.pdf) that was released by the government in June 15, 2009, provinces increased the pace at which they were opening kindergartens within primary schools. It is the governor who usually takes initiative for this and mobilizes resources accordingly. These kindergartens were opened in empty rooms where suitable. However, libraries, laboratories, and teachers' rooms were also transformed into kindergartens, so this effort, while expanding ECE, did appropriate some resources that were legitimately meant for primary schools. It would be desirable to replace these makeshift classes with proper pre-primary buildings in the long run and return these rooms to the primary schools for their own use.

26- This project introduced pre-primary enrichment programs, both for children and mothers, in low-income areas of Istanbul in 1982 and followed children who had participated in the first rounds of the program until adulthood, now almost 30 years later.

PER CAPITA SOCIAL EXPENDITURES BY AGE GROUP IN TURKEY
(CENTRAL GOVERNMENT, EXCLUDING SOCIAL SECURITY CONTRIBUTIONS, 2008) **FIGURE 7**

Source: World Bank (2010)



the author found that programs that provide training to parents as well as providing pre-primary education for children can eventually be up to 30 percent more cost-effective than those that just focus on the children (Kaytaz, 2005, p. 29, Table 3.1). Finally, even when looking at ECE family training programs in isolation, analysts have found returns of between 20 percent and almost 600 percent for every TL invested depending on how the programs are designed (Yılmaz and Yazıhan, 2010).[27]

42. There is also a case for thoroughly assessing which funding model would be the best match for Turkey. Grun (2008) described five ways to finance the ECE sub-sector:

a) Central Public Supply - the government supplies ECE directly by paying itself for the inputs (such as teachers and buildings) as in France.

b) Decentralized Public Supply - the government pays local governments to provide the service, as in Sweden.

c) Incentive-based Public Financing - the government pays providers, either public or private, to deliver ECE services with the funds being conditional on the providers meeting

27- UNICEF estimates that public investments in such family training programs not only have high private benefits and prevent participating children from falling into poverty later in life but also pay for themselves within roughly 20 years as the participants graduate from the education system, acquire formal sector jobs, and pay taxes.
.

the requirements of a quality assurance mechanism, as in several states of the United States.

d) Mixed Model and Market Making - ECE is financed not by the government but by parents and NGOs, and the government plays the role of a convener, bridging information asymmetries and matching open places with parents, as in England.

e) Demand-side Public Subsidy and Private Provision - the government gives generous means-tested subsidies to parents in the form of vouchers or entitlements so they can pay for private and/or public ECE as in New Zealand.

43. Considerably more resources than are currently allocated to the sector will be needed if Turkey is to achieve its ambitious targets for an equitable expansion of ECE. Therefore, the government is going to have to significantly increase its spending to meet its goal of gradually increasing the enrollment of children aged 36 to 72 months from 30 percent (including 68% of 5 year olds) in 2011 to 47 percent (including 100 percent of 5 year olds) in 2014. At the very least, the government will need to raise ECE spending from 0.03 percent of GDP to 0.23 percent of GDP to meet this 2014 enrollment target while also ensuring quality and equity in ECE provision. Finally, the government needs to choose carefully from the menu of financing mechanisms described above to maximize the transparency and effectiveness of ECE.

IV. FROM ANALYSIS TO ACTION: A STRATEGY FOR EXPANDING QUALITY EARLY CHILDHOOD EDUCATION IN TURKEY

44. For each of the four challenging areas discussed above, this section will outline a menu of possible policy responses and implementation strategies. For each area, we propose a two-layered implementation strategy that involves (i) a Core National Program to be led by the central government and (ii) a Supplemental Provincial Program that will provide additional support to ECE in lagging provinces and will be implemented by the provincial governments.

POLICY RESPONSES AND IMPLEMENTATION STRATEGIES FOR EXPANDING ACCESS

45. Access to ECE varies by income in all provinces, with the rich being more likely to access ECE than their economically disadvantaged compatriots (Figure 5). Access also varies significantly between provinces (Figure 6), with some provinces having much lower enrollment rates than others. The ECE expansion strategy would be more equitable and have a greater impact if funds allocated to this initiative were distributed **progressively**. This could be done in two ways:

- Targeting low-enrollment provinces
- Targeting poor households to ensure equity in access.

POLICY RESPONSES AND IMPLEMENTATION STRATEGIES FOR ASSURING QUALITY AND ACCOUNTABILITY

46. The quality of ECE remains a challenge. At present, there is no system in place to measure how well the ECE system delivers outcomes such as school readiness or to ensure that pre-schools can be held accountable (Table 4). MONE can improve the quality of ECE by more effective monitoring and enforcement of existing standards on curriculum, infrastructure, teacher qualifications, teacher training, teaching materials, and educational supplies for all new pre-schools or nursery classes. At the same time, these existing standards should be re-evaluated, and existing institutions should be required to adhere to those standards or to commit to a gradual upgrade of those aspects that are falling short of the standard. In addition, a stratified, representative sample of students in

ECE institutions should be regularly tested for their school readiness. Finally, all of these initiatives should form part of a Quality Review System (QRS) like those that exist in Australia and Sweden (see discussion in Annex 1).[28] This QRS system would be built on clear, nationwide standards (for teacher training, age-appropriate educational materials, and other variables), performance indicators for ECE institutions, and defined expectations of outcomes. Progress and performance would be measured in two ways:

a) School Self-evaluations-Schools evaluate their own performance every year against national standards and make the results publically available.

b) School External Evaluations – Schools are evaluated by peers and expert groups at the regional and national level against national standards. This could be done once every three years, and might include a sub-sample to be assessed for their school readiness. One-third of schools would be randomly chosen each year for an external evaluation, with the aim of covering all schools every three years. In addition, a stratified and representative sample of students from ECE institutions would be regularly assessed for their school readiness.

POLICY RESPONSES AND IMPLEMENTATION STRATEGIES FOR ENCOURAGİNG THE PARTICIPATION OF NON-GOVERNMENTAL ACTORS

47. Given the scale of the challenge, there is a need to improve the management and provision of ECE. This can be done by reaching out to the private sector and communities to help to meet ECE enrollment targets. While the bulk of services will continue to be provided by the public sector, making public financing available to the private sector and NGOs would increase the efficiency of the sector. These actors could complement government efforts by delivering targeted support to schools and students, developing innovative educational TV programs and other instructional materials, conducting external evaluations, and spearheading outreach programs and information campaigns as well as, where appropriate, opening and operating ECE institutions themselves. Given that private providers currently account for only 5.4 percent of pre-school enrollment (Table 3), there is clear scope for expanding private provision alongside the expanded public provision of ECE services.

28- A similar system is used in Hong Kong (see Poon, 2008).

POLICY RESPONSES AND IMPLEMENTATION STRATEGIES FOR ENSURING ADEQUATE FINANCING

48. As discussed above, the current level of spending on ECE in Turkey is not sufficient to achieve the government's expansion goals. Spending will have to increase from 0.03 percent of GDP to 0.23 percent of GDP in 2014 to expand ECE while also improving quality and increasing equity. Also, ECE allocations and expenditures should be explicit within the government budget to ensure transparency.

DEFINING A STRATEGY FOR EXPANDING ECE IN TURKEY: LESSONS FROM INTERNATIONAL EXPERIENCE

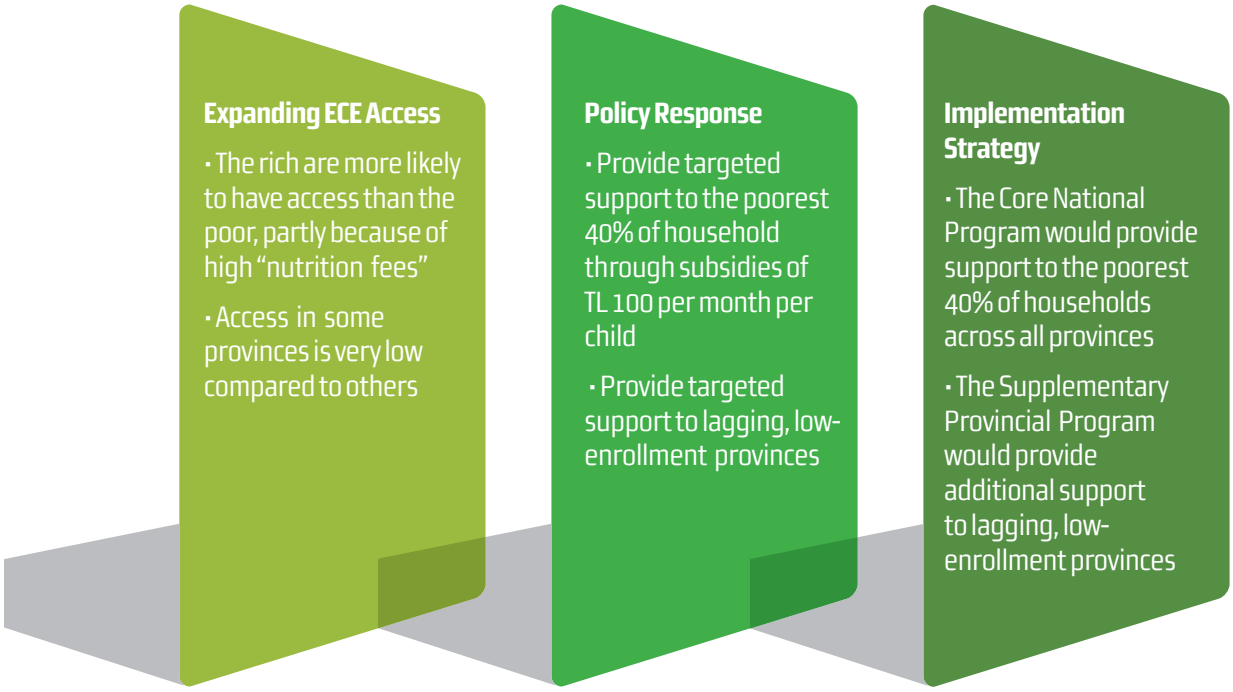
49. This section presents a strategy for expanding ECE in Turkey that draws on lessons learned from international experience. A detailed analysis of the experiences of a range of other countries in delivering ECE is presented in Annex 1, but there are four key lessons that can be learned from these examples.

50. ECE expansion can be achieved either through a comprehensive approach or a targeted approach, but the public financing implications are dramatically different for each of these options. The case of Sweden illustrates how a country can achieve universal coverage of pre-primary education by increasing the amount of resources that it allocates to ECE. The key advantage of taking this kind of comprehensive approach is that it expands coverage quickly, which is one of the Government of Turkey's stated goals. On the other hand, the case of New Zealand illustrates a more targeted approach to ECE in which one goal was to increase the coverage of a minority (Mâori) population. The most relevant example for Turkey, however, may be Chile's program, Chile Crece Contigo (CCC), which takes both approaches simultaneously. The CCC provides a comprehensive set of services aimed at all Chilean children but also encompasses specific interventions that target children from vulnerable families. This dual structure may appeal to policymakers in Turkey whose goal of universal coverage may need to be paired with a set of targeting mechanisms to reach the most vulnerable.

51. Establishing a national standards and assessment systems for ECE providers is essential for quality assurance. Australia's National Quality Standard and the Swedish Schools Inspectorate are examples of initiatives that were put in place to ensure that

EXPANDING ACCESS TO ECE

FIGURE 8

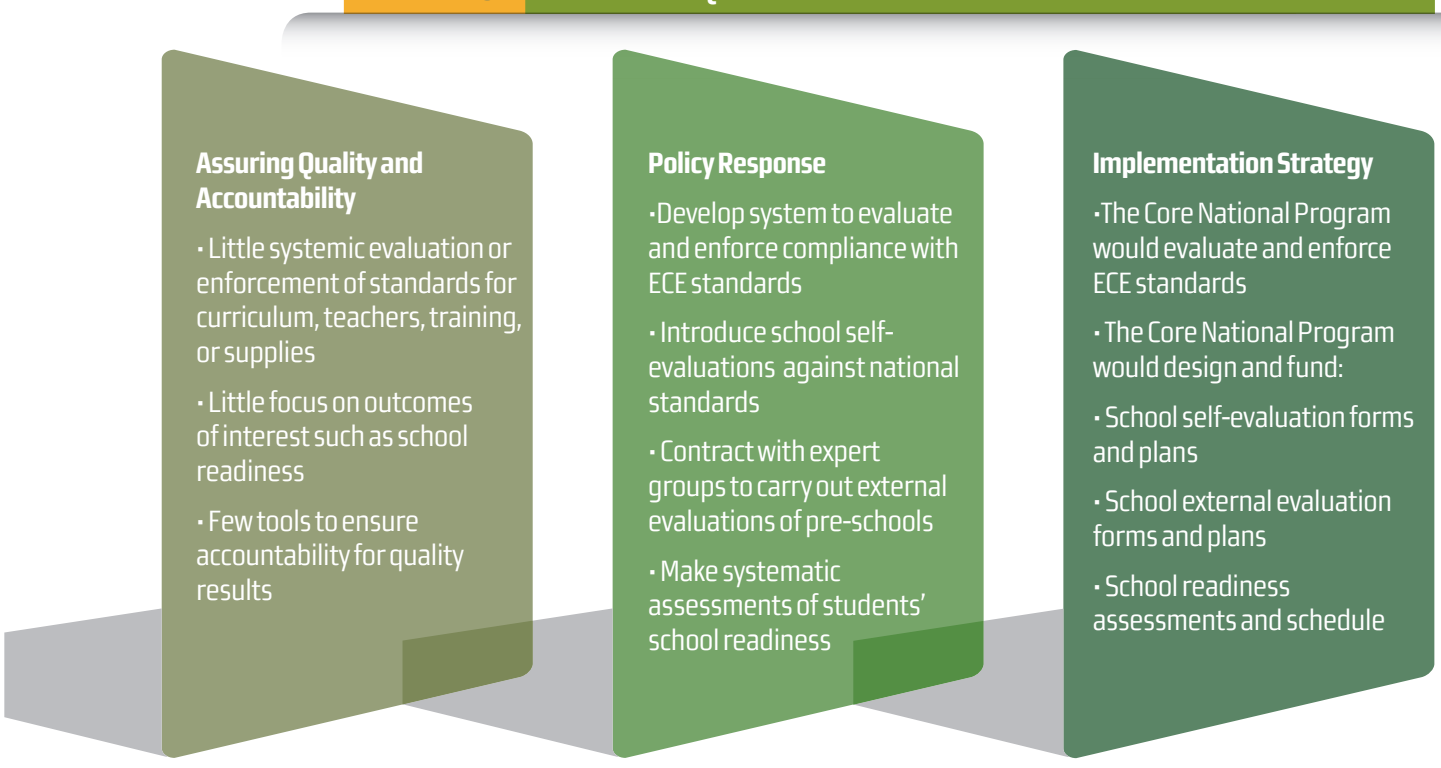


ECE services meet the established quality benchmarks. The examples of Australia and Sweden provide relevant lessons on how best to institute a monitoring, evaluation, and assessment system that will ensure the quality of Turkey's ECE services.

52. Promoting flexibility in service delivery can facilitate a rapid expansion of ECE. Although Sweden has a sound system of quality standards at the national level, it has built in a high degree of flexibility in how ECE services are actually delivered to beneficiaries at the local level. In the Swedish system, municipalities are the main providers of ECE and related services in addition to a network of independent schools and early childhood centers. The New Zealand model goes further by combining financing and regulation by the public sector with service provision by the public and private sectors. ECE services are provided by a wide range of government agencies, not-for-profit organizations, communities, parent groups, and public-private partnerships that vary in their size and coverage. These models of decentralized service delivery are good examples of how to design an ECE system that provides the right balance of quality, innovation, and accountability.

53. To ensure quality and equity, inter-institutional coordination is essential. All four of the countries mentioned above rely on some degree of coordination among the various actors in their ECE systems. Australia's strategy is noted for fostering effective

FIGURE 9 ASSURING QUALITY AND ACCOUNTABILITY IN ECE



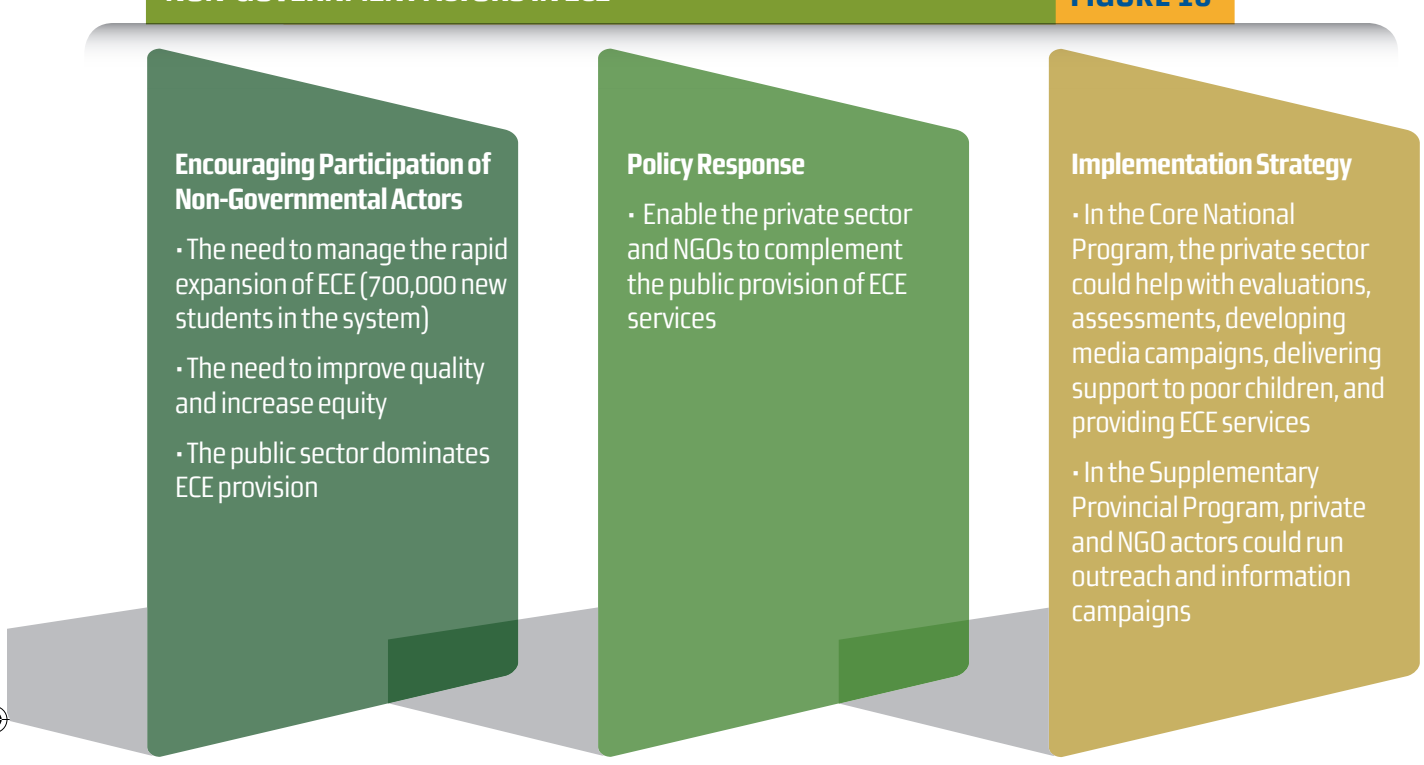
coordination between national government and regional and local government. This element combined with an emphasis on partnerships with local communities and families may be a useful model for Turkey to follow. The decentralized New Zealand model also requires a high degree of coordination between the public, private, and not-for-profit sectors from which Turkey can learn lessons when expanding its own ECE system. The management of Chile's CCC program, the way in which it coordinates between different ministries and agencies, and its integrated system of monitoring and evaluation all contain valuable lessons for Turkey, as does the Swedish example in which the national government sets standards and does evaluations and the municipalities deliver services.

PUTTING IT ALL TOGETHER: A PROPOSED STRATEGY FOR EXPANDING QUALITY EARLY CHILDHOOD EDUCATION IN TURKEY

54. Stemming from the foregoing analysis, we propose a strategy for expanding early childhood education in Turkey. The suggested strategy (which is costed in Table 5) has two components:

ENCOURAGING THE PARTICIPATION OF NON-GOVERNMENT ACTORS IN ECE

FIGURE 10



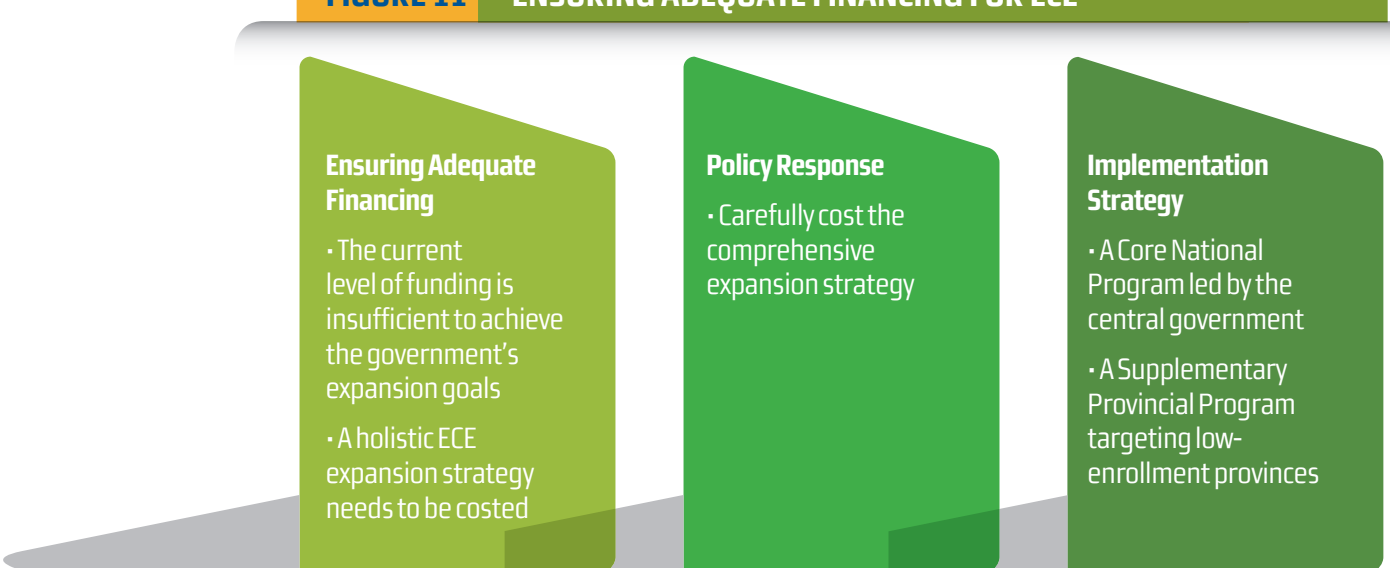
(1) a Core National Program led and financed by the central government and implemented in all provinces of Turkey and (2) a Supplemental Provincial Program that provides additional ECE support to lagging provinces and that is implemented by the provincial governments. The four key challenges facing the ECE sub-sector that have been identified in this report will be addressed in these components in the following way:

Core National Program

- **Intervention A:** Funding infrastructure, teachers, teaching supplies, and training in all provinces. This intervention would cost an average of around 0.1 percent of GDP annually and is already a government priority.

- **Intervention B:** Targeting support to economically disadvantaged households by funding "nutrition subsidies" for the most economically disadvantaged 40 percent of Turkish households. If support in the amount of TL 100 per month is provided per child, this intervention would cost around 0.05 percent of GDP annually. Recipients could be targeted using a proxy means test such as the one that was used in Turkey's Conditional Cash Transfer Program (Annex 2).

FIGURE 11 ENSURING ADEQUATE FINANCING FOR ECE



• **Intervention C:** Funding quality and accountability initiatives all across Turkey. Initiatives such as school self-evaluations and external evaluations, random testing of students for school readiness, and the development of television and media programs for ECE delivery could cost around 0.01 percent of GDP annually and would improve the quality and increase the accountability of ECE service delivery in Turkey.

Supplemental Provincial Program

• **Intervention D:** Funding for targeting the 20 low-enrollment provinces. These provinces would be able to select from a menu of demand-side and supply-side interventions to meet their enrollment targets. This menu would cost between 0.02 and 0.03 percent of GDP and could include: (i) implementing information campaigns and outreach to families; (ii) hiring extra staff to plan or deliver expansion targets; (iii) giving performance grants to schools when they reach their targets for increasing enrollments; and (iv) giving performance grants to sub-provinces if they succeed in increasing their pre-school enrollments. These options might include:

i. Running information campaigns / outreach to families.

ii. Hiring extra staff to plan or deliver expansion targets.

iii. Giving performance grants to those schools that meet their targets for increasing enrollments.

iv. Giving performance grants to sub-provinces that succeed in increasing enrollments.

55. The government can consider any combination of the interventions that make up the Core National Program depending on the level of targeting that is required and the amount of funding that is available. Funding for Intervention D can be provided by the MoNE at the national level, but the central government may also choose to give provincial governments an incentive to allocate additional resources to this program by, for example, offering matching grants from the center. The ECE services can be delivered by a mix of public and private providers.

Options for an ECE Expansion Strategy

56. In this section, we explore some of the combinations of option available to the Government of Turkey in implementing the proposed expansion strategy. (See Annex 5 for the assumptions used in the costing exercise.)

Option A (0.18 percent of GDP)

57. The Core National Program would consist of interventions A, B, and C and provide infrastructure and trained teachers, "nutrition subsidies" for the most economically disadvantaged 40 percent of households, and funding for initiatives to improve quality and increase accountability. This option would cost an average 0.15 percent of GDP annually until 2014 (or 3 percent of the education budget) to implement. The spending on additional classrooms and teachers to accommodate the increase in enrollment would require ECE spending to increase by more than double its 2009 level, reaching an average 0.07 percent of GDP (and 1.6 percent of the education budget). In addition to funding extra classrooms and teachers, the government may want to promote equitable access to ECE by subsidizing user fees for the most economically disadvantaged 40 percent of students. Funding these "subsidies" would require a further 0.05 percent of GDP (and 1 percent of the education budget). Finally, quality and accountability initiatives will cost 0.01 percent of GDP or (0.25 percent of the education budget) to implement.

58. The Supplementary Provincial Program would consist of Intervention D that would target the low-enrollment provinces. It is estimated that the total cost of this would be 0.02 to 0.03 percent of GDP per year (or 0.5 percent of the education budget).

59. Even accounting for all of these costs, Turkey's spending on ECE would be around 0.15 percent of GDP, which would still be significantly lower than the 0.3 percent of GDP that is spent by its most comparable countries. The estimated costs for both programs are detailed in Table 5: Costing the Strategy for ECE Expansion: Coverage for Children Aged 36-72 Months, while the proposed implementation sequence is explained in Table 6: Proposed Implementation Matrix.

Option B (0.13 percent of GDP)

60. A Core National Program including interventions A and C (providing infrastructure and teachers and funding for quality and accountability initiatives) and intervention D (the Supplementary Provincial Program). This option would leave out intervention B (targeting the most economically disadvantaged 40 percent of households with "nutrition subsidies") and thus would have less of an impact in terms of improving equity than Option A.

Option C (0.11 percent of GDP)

61. A Core National Program made up of interventions A and C (providing infrastructure and teachers and funding for quality and accountability initiatives). This option would leave out intervention B (targeting the most economically disadvantaged 40 percent of households with "nutrition subsidies") and intervention D (the Supplementary Provincial Program targeting low-enrollment provinces). Of the options presented here, this one would have the smallest positive impact on the most vulnerable children in Turkey.

SEQUENCING THE IMPLEMENTATION OF THE ECE EXPANSION STRATEGY

62. Table 7 lays out a proposed timeframe and sequence for implementing the ECE expansion strategy. This proposed sequencing is based on the following principles:

i. While targeting low-enrollment provinces is critical to increase equity in the provision of infrastructure and trained teachers for ECE expansion, the government has started with high-enrollment provinces taking into account the time needed for infrastructure investments in less developed parts of the country. This

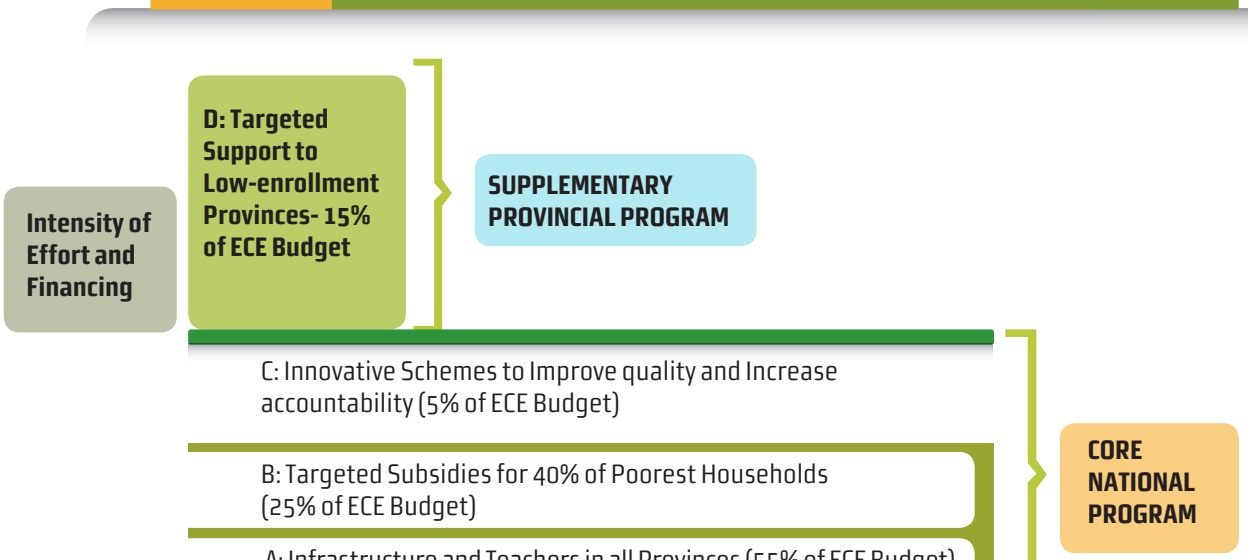
is a practical approach to sequencing, but a plan to target disadvantaged provinces will still need to be developed early on to increase equitable access.

ii. It is important to develop a targeting system for identifying the most economically disadvantaged 40 percent in Turkey based on the targeting system used in the Conditional Cash Transfer Program. This could be achieved within the next 12 months, after which the ECE "subsidies" could start being distributed the following year.

iii. Developing the quality-enhancing initiatives such as the school evaluations, school readiness assessments, and television programs for ECE delivery is likely to take approximately 12 to 18 months. Once these products are developed nationally, they could be implemented in 18 to 36 months.

iv. The provincial initiatives are likely to require intensive training of staff in the provinces. This training could take at least a year, and these initiatives should not be implemented until after this has been completed.

FIGURE 12 PROPOSED ECE STRATEGY FOR TURKEY



COSTING THE STRATEGY FOR ECE EXPANSION:
COVERAGE FOR CHILDREN AGED 36-72 MONTHS

TABLE 5

Year	Education Spending (% of GDP)	Estimated Enrollment Rates (%)		Core National Program (% of GDP)					Supplementary Provincial Program for Low-enrollment Districts (% of GDP)	Total Estimated ECE Spending (% of GDP)
				Infrastructure and Teachers		"Public Subsidies" for the Most economically disadvantaged 40%		National Innovative Schemes		
		60-72 Months	36-72 Months	60-72 Months	36-72 Months	60-72 Months	36-72 Months			
2011	3.8	68	30	0.02	0.03					0.03
2012	4	73	33	0.04	0.06	0.03	0.05	0.01	0.02	0.14
2013	4	84	39	0.07	0.10	0.03	0.05	0.01	0.02	0.19
2014	4	100	47	0.10	0.15	0.03	0.05	0.01	0.02	0.23
AVG 12-14				0.07	0.10	0.03	0.05	0.01	0.02	0.18

PROPOSED IMPLEMENTATION MATRIX

TABLE 6

Objective / Response Strategy Component	Core National Program	Supplementary Provincial Program
	To provide essential ECE services for children 36-72 months (85% of total ECE budget)	***To provide additional targeted support and resources to 20 provinces with the lowest ECE enrollment rates (15% of total ECE budget)***
Ensuring Equity in Access	***To Ensure Equity in Access for All Income Levels:*** ***Within 12–18 months:*** · Develop the ability to identify and target vulnerable populations within communities ***Within 18–36 months:*** · Encourage vulnerable families to use ECE services by targeting the most economically disadvantaged 40% of families through CCTs, information campaigns, and parental education.	***To Ensure Equity in Access for All Provinces:*** Each province can choose from among the following initiatives to increase ECE enrollment: · CCTs to communities · Information campaigns/outreach to families · Hiring additional staff · Giving performance grants to schools · Giving performance grants to sub-provinces
Improving Quality and Increasing Accountability	***Within 12-18 months:*** · Review and finalize curriculum for ECE · Set and enforce national standards on ECE for infrastructure, furnishings, and education supplies for all new schools · Set and enforce national standards for ECE teacher qualifications and expand teacher training for all new teachers · Develop a phased plan to ensure that all existing ECE schools and teachers reach national standards by 2015 · Develop plans and mechanisms for implementing school self-evaluations and external evaluations · Establish baseline data against standards for all schools · Use television and other media to deliver ECE content ***Within 18–36 months*** · Implement annual school self-evaluations · Implement three-yearly school external evaluations (carried out randomly on one-third of schools annually, with a built-in, stratified sub-sample of students assessed for their school readiness)	
Enhancing Management Effectiveness	***Retain implementation responsibility in the MoNE at the central government level*** **Consider various mechanisms for program delivery:** · Direct provision by the MoNE · Private provision · Home-based initiatives · Television and other media programs	***Delegate implementation responsibility to provincial governments*** ***Consider various mechanisms for program delivery:*** · Direct provision by the MoNE · Private provision · Community provision
Providing Adequate Financing	***Dedicate 85% of expanded ECE funding:*** · 0.13% of GDP by 2013 · 0.15% of GDP by 2015	***Dedicate 15% of expanded ECE funding:*** · 0.01-0.02% of GDP by 2013 · 0.02-0.03% of GDP by 2015

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ANNEX 1: EARLY CHILDHOOD INTERVENTIONS IN FOUR OECD COUNTRIES

This annex presents case studies of early childhood interventions in four OECD countries: Australia, Chile, New Zealand, and Sweden.

Australia: A National ECD Strategy and a National Quality Standard

Australia's total population is estimated at 21.5 million people, of whom 1.37 million are children aged 0 to 4 years old. Australia performs comparatively well on some indicators of child health and well-being, such as school achievement at 15 years of age and material well-being. Nevertheless, significant areas of concern persist, particularly in relation to the outcomes of indigenous children. In nearly every reported category of child health and well-being, indigenous children score markedly worse than their non-indigenous counterparts, and in many instances, they are among the least successful performers in OECD rankings. Australia has developed a comprehensive model of ECD interventions that are national, state, and regional in scale and aim to provide each child with the best possible start in life. It is important to note that Australia has great diversity of interventions; some programs have very wide coverage, whereas others are micro-programs with a specific intervention aimed at a precisely targeted population.

In 2009 the national, state, and territory governments of Australia jointly developed Investing in the Early Years: A National Early Childhood Development Strategy. The aim of this strategy is "to ensure that by 2020 all children have the best start in life to create a better future for them and for the nation." The strategy is a comprehensive approach to ECD that focuses on the whole child from the antenatal period to 8 years old in many different dimensions and acknowledges the various vital roles that families, communities, organizations, the workplace, and the government all play in shaping development in early childhood.

The strategy identifies seven target outcomes for realizing the strategy's vision: (i) children are born and remain

healthy; (ii) children's environments are nurturing, culturally appropriate, and safe; (iii) children have the knowledge and skills needed for life and learning; (iv) children benefit from social inclusion and are not disadvantaged, especially indigenous children; (v) children are engaged in and benefitting from educational opportunities; (vi) families are confident and have the capabilities to support their children's development; and (vii) quality ECD services that support the choices made by families regarding their participation in the workforce are provided. The strategy also outlines seven elements needed to deliver a comprehensive ECD system with the child placed at the nexus of need including: (i) support for children, parents, caregivers, and communities; (ii) responsive ECD services; (iii) quality and regulation; (iv) knowledge management and innovation; (v) workforce and leadership development; (vi) infrastructure; and (vii) governance and funding. Associated with each element are a number of immediate actions, reforms, and future commitments made by the Commonwealth of Australia, state, and territory governments and other stakeholders.

The strategy calls for streamlined governance mechanisms (including payment and administration) at the national, state, and local level, clarified roles and responsibilities, greater accountability, and the continuity needed to foster effective decision-making and joint planning. The strategy also aims to improve the quality of early childhood education (ECE) and care by adopting a National Quality Standard. The standard encompasses seven quality areas, which "capture aspects critical to the provision of quality early childhood education and care and outside school hours care [OSHC] services, including educational concept and practice, structural quality, interactions between educators and children, and targeting services to meet the needs of families and local communities" (Council of Australian Governments, 2009). The seven quality areas are: (i) educational program and practice; (ii) children's health and safety; (iii) physical environment; (iv) staffing arrangements, including staff-to-child ratios and qualifications; (v) relationships with children; (vi) collaborative partnerships with families and communities; and (vii) leadership and service management.

The quality standard is accompanied by an updated legal framework and a system for assessing and rating ECE service providers. The rating system "combines the seven quality areas with a five-point rating scale that describes the quality of early childhood education and care and OSHC that all families, services, and the broader community should expect to find in the diverse

childhood education and care settings available across Australia" (Council of Australian Governments, 2009). The system is designed to yield information about the quality of service provision by means of independent evaluations and to foster accountability through partnerships with families and local communities.

Australia has a strong track record of ECD and has an early childhood infrastructure that already includes numerous services, interventions, and an effective social safety net. The strategy aims to improve the coordination of existing efforts, rethink some of the current approaches, and fill gaps to provide a framework that ensures that all children are given the best possible opportunity to excel in life. To this end, the strategy emphasizes the most marginalized children, especially those in rural, indigenous communities.

Chile: The Dual Comprehensive and Targeted Approach

Chile has a population of 17 million people, of whom some 1.24 million are under 5 years old. In the last several decades, successive governments have implemented a number of important policies that have positively affected young children, for example, by increasing the access of the most economically disadvantaged families to quality health care, pre-schools, and social protection. Despite this significant progress, geographical and socioeconomic inequalities persist. While poverty in 2009 affected 15.1 percent of the population, it affected 24.6 percent of children under the age of 4 (rising to 39.1 percent in rural indigenous areas), which implies that Chile's youngest people are among its most economically disadvantaged groups. Pre-school enrollment has increased dramatically in recent years, with 66.4 percent of children aged 4 and 5 years old attending pre-school in 2008. The policy aimed at early childhood - Chile Crece Contigo ("Chile Grows with You") - is composed of a diverse set of programs, including sectoral, cross-sectoral, multi-sectoral, and comprehensive interventions.

When Chile's former President, Michelle Bachelet, was inaugurated in 2006, she announced that her administration would prioritize early childhood protection and equalize developmental opportunities for all Chilean children. Accordingly, a Presidential Commission conducted technical work and extensive consultations to lay the foundation under the CCC for the design and implementation of an integrated system of social protection for children up to 4 years of age with benefits, interventions,

and social services to ensure that all children reach their full potential in life.

The CCC coordinates the many sectoral initiatives and programs at each stage of a child's life. The exact levels of support and services provided are determined by each child's specific needs. Services provided through the CCC include prenatal and birth services, daycare and pre-school centers, subsidies for children in the most economically disadvantaged 40 percent of families, and monitoring of children's ECD trajectory. The Ministry of Planning (MIDEPLAN, Ministerio de Planificación y Cooperación), specifically the Executive Secretariat for Social Protection, is responsible for overseeing the CCC. Several other institutions are important strategic partners, including the Ministries of Health, Education, and Labor. The health sector plays a central role in the CCC, providing most of the services and screening. MIDEPLAN and the World Bank are working together to design an integrated system of monitoring and evaluation for the CCC.

One of the key aspects of the CCC is its dual structure, which brings together a comprehensive support for all children in the country with targeted support to the most vulnerable. The following universal interventions of the CCC provide support to all of Chile's children:

- Mass education programs (including awareness campaigns, libraries, and other educational resources).

- Interactive information channels (including a dedicated phone line, website, and monthly e-newsletter).

- Legislative proposals (including improved adoption laws and changes in maternity and paternity leave).

Additionally, a bio-psychosocial development support program follows the development path of all children who are covered by the public health system (75 percent of Chile's children). The targeted intervention component then provides differentiated support to the most vulnerable children (Silva, 2010). It includes the following services:

- Home visits
- Automatic access to family allowance
- Access to free ECE services through nurseries and kindergartens
- Preferential access to public programs
- Comprehensive care for children with development delays
- Technical aids for disabled children.

Thus, Chile's CCC system is designed to be both comprehensive (to improve the outcomes for all children) and targeted (to provide additional support to the most vulnerable). While the implementation of the CCC in Chile is still very much in its early stages, it will

undoubtedly provide many lessons for countries considering similar policies.

New Zealand: Serving a Diverse Population through Targeted Interventions and Public-Private Partnerships

New Zealand is a small nation with approximately 4.2 million people. According to the 2001 census, approximately 8 percent of the population is Mâori and 4.5 percent Pacific Islander. New Zealand boasts near universal rates of literacy and performs well in important human development indicators, such as the infant mortality rate and life expectancy at birth. It has a collection of interventions that aim to provide children and their families with the services and tools necessary to excel in life.

When the Labor Party returned to government in New Zealand in 1999, ECD became a top priority, with an emphasis on ECE. In particular, reducing disparities between Mâori and non-Mâori and between Pacific Islander and non-Pacific Islander children was given a high priority.

Today New Zealand has an extensive social protection system that uses a targeted support model to reach individuals and families in need of ECD. An important component of this system is the Working for Families package introduced in 2004. This package includes a Family Tax Credit, In-work Tax Credit, a Minimum Family Tax Credit, and a Parental Tax Credit, with the latter two components tailored to support lower-income families.

The Ministry of Social Development (MoSD) oversees child protection in New Zealand, with a particular focus on at-risk families. Child, Youth, and Family is one of the most extensive MoSD services and employs more than 1,300 social workers and approximately 4,500 caregivers. Child, Youth, and Family also deals with instances of child abuse or neglect, helping more than 5,000 children living with caregivers and networking with agencies and communities to coordinate support for children and their families.

The New Zealand model of financing is a public-private partnership that couples public funding and regulation with a private delivery system. This approach has been successful in establishing a diverse set of services that meet the varying needs of families with young children.

Establishing an institutional anchor (or anchors) is essential for coordinating the different sectors engaged in ECD. In New Zealand, the Ministry of Education, the Ministry of Health, and

the MoSD all contribute to the design and management of ECD policies and interventions while collectively working to ensure continuity between the early childhood and primary years. There is a high level of inter-institutional coordination within New Zealand's ECD system. The Early Years Service Hubs developed by the MoSD provide families with a single point of access to information and a range of integrated services offered by the Ministries of Education, Health, and Social Development (among other ministries and organizations) prior to a child's birth and up to school entry.

ECD interventions in New Zealand are operated directly by government ministries and agencies, not-for-profit organizations, communities, parent groups, or some combination of public-private partnerships. These interventions can be as small in coverage and design as the Young Parents' Breastfeeding Group (which underscores the impact a grassroots group can have on improving ECD in a specified area with very little funding) or as large, comprehensive, and complex as Well Child Services.

Since the early 1990s, participation in ECE has increased dramatically to reach near-universal levels. Although some indigenous populations (specifically the Mâori) have lower enrollment rates than the national average, this gap has been significantly reduced and is now close to parity. The Ministry of Education also provides an extensive early intervention system for children with special education needs from the time they are born until they enter primary school. More than 95 percent of eligible children use these services prior to attending primary school.

Ngâ Huarahi Arataki: A 10-Year Strategic Plan for Early Childhood Education aims to provide quality ECE to all children regardless of their circumstances by increasing participation, enhancing the quality of ECE services, and promoting collaborative relationships. The ECE curriculum model, Te Whâriki, provides a theoretical basis, goals, and philosophies for practice, promotes shared understanding and language, and provides a framework for assessing early childhood education in New Zealand.

Sweden: National Standards and Local Flexibility

Sweden's population of 9 million people enjoys one of the highest standards of living in the world, and as a result, young children in Sweden have access to a wide range of quality services to support their growth and development. Sweden consistently ranks in a number of international indexes as one of the top countries in which to live as a mother, woman, or a child. It has implemented a dynamic collection of varied, thorough

ECD interventions that are supported by public policy and constitute one of the world's most extensive social protection systems.

Sweden is only one of three countries in the world that has made ECE and care for young children a legal right. ECD policy development—for childcare and pre-school in particular—has been a priority in Sweden for many years and is regularly discussed in the political arena. Not surprisingly, Sweden sets the international standard for high-level ECD policy development and has achieved near-universal attendance in early childhood education and care.

Sweden's pre-school system has three specific and differentiated interventions; pre-school services, family daycare homes, and open pre-schools. Most children are enrolled in pre-school services, which operate year round and accommodate between 15 and 20 students per class. Family daycare homes are more common in rural areas, complementing pre-school services by offering smaller class sizes for students with unique needs. Open pre-schools, an alternative to conventional pre-schools, target the children of stay-at-home parents who wish to accompany their children to school. In the 2007 school year, slightly more than 85 percent of all children from 1 to 5 years were enrolled in the pre-school system in Sweden.

Since 1998, pre-schools have had their own curriculum, national goals, and guidelines defined by the Ministry of Education and Science. The health sector works closely with pre-school interventions to deliver selected health services. The pedagogical principles of the curriculum are based on the idea that pre-school is to be fun, secure, and instructive for all enrolled children. Within these frameworks, municipalities decide how activities are to operate, subject to the inspections and approval of the Swedish Schools Inspectorate (SSI).

The SSI is a national agency established in 2008 with three areas of responsibility:

- Educational inspection
- Investigation of complaints
- Approval of independent schools.

The SSI ensures that independent, municipally operated pre-schools are subject to regular supervision and thematic quality evaluation. Municipalities are allowed to charge a reasonable fee for each intervention in the pre-school system. This fee is usually nominal and in most areas is related to the family's income and the child's attendance. In return, each "municipality must draw up a quality report at municipal level with regard to all municipally-run pre-school activities, school-age child care, and

school activities. Every school must draw up a quality report at operational level" (Swedish Schools Inspectorate, 2009). In this way, the Swedish pre-school system is able to combine the enforcement of national standards with a high degree of local flexibility.

LESSONS LEARNED FROM INTERNATIONAL EXPERIENCE

Several lessons can be learned from these international experiences that are relevant for Turkey's ECE program.

Lesson 1: Comprehensive versus Targeted Approaches

The case of Sweden illustrates a country's ability to expand the amount of resources devoted to early childhood interventions to achieve universal coverage. This comprehensive approach has the advantage of quickly scaling up coverage, which is one of the Government of Turkey's stated goals. On the other hand, the case of New Zealand offers a more targeted intervention, in which one goal was to increase ECE coverage of a minority (Māori) population. The most relevant example for Turkey, however, may be the dual comprehensive and targeted support offered by Chile's Chile Crece Contigo (CCC) program. This dual structure ought to be studied closely by Turkey's policymakers, whose goal of universal coverage may need to be paired with a set of targeting mechanisms to reach the most vulnerable.

Lesson 2: National Standards and Assessments

The cases of Australia and Sweden both offer valuable lessons for instituting sound quality standards in ECE. Australia's National Quality Standard and the Swedish Schools Inspectorate are examples of policies and institutions put in place by the respective governments to ensure that the services provided in ECE meet the established quality benchmarks. When scaling up their country's ECE coverage, Turkish policymakers should study the examples of Australia and Sweden closely to institute the systems of monitoring, evaluation, and assessment that are essential for ensuring high-quality ECE service provision.

Lesson 3: Flexibility in Service Delivery

While a sound system of quality standards must be set at the national level, Sweden allows for a high degree of local flexibility in how ECE services are actually delivered to beneficiaries. In the Swedish system, municipalities

are the primary providers of ECE and related services in addition to a network of independent schools and early childhood centers. The New Zealand model goes further by combining public financing and regulation with private service provision. Early childhood services are delivered by an extensive network of government agencies, not-for-profit organizations, communities, parent groups, and public-private partnerships that vary in their size and coverage. Turkish policymakers might study these models of decentralized service delivery to design a system that provides the right balance of quality, innovation, and accountability in ECE.

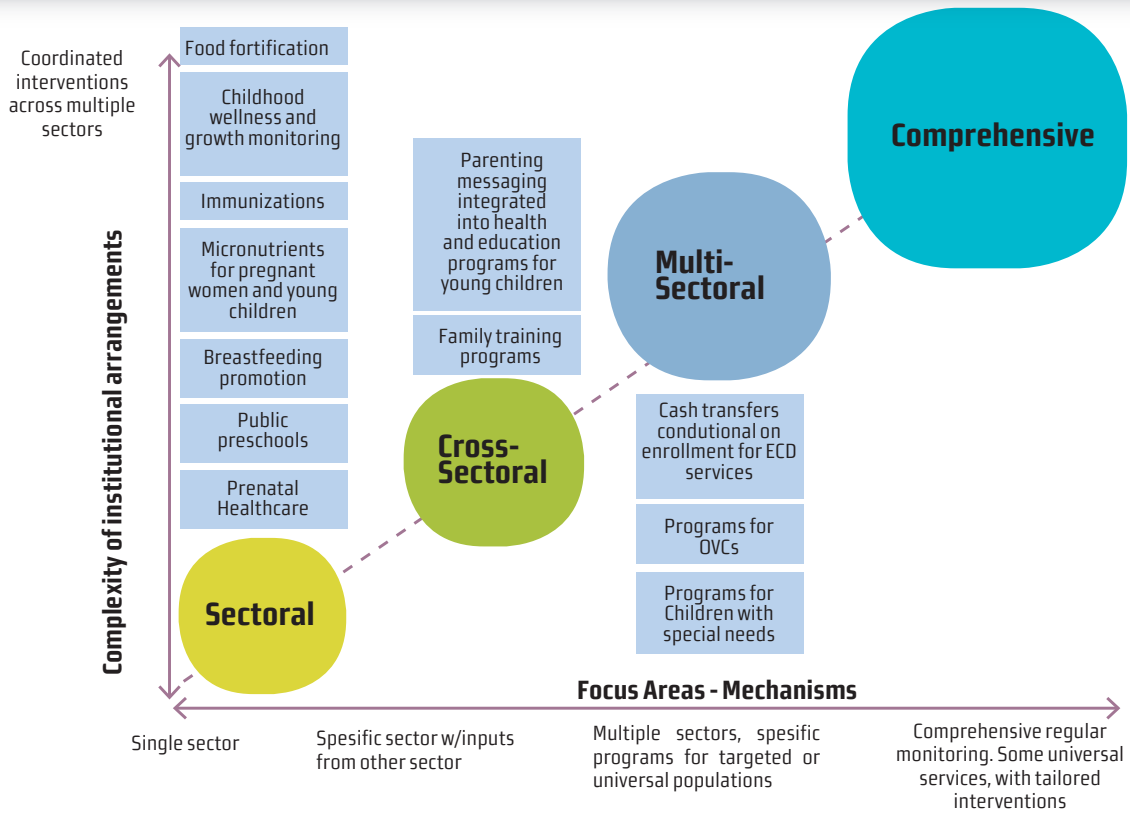
Lesson 4: Inter-institutional Coordination

All four national systems described above rely on some degree of coordination among various actors. Australia's strategy is noted for fostering effective coordination between national government and regional and local government. This strength, along with an emphasis on partnerships with local communities and families, can serve as a model for Turkey as it rolls out its own ECE strategy. The decentralized New Zealand model also requires a high degree of coordination between the public, private, and not-for-profit sectors from which Turkey can draw lessons when scaling up its own system. The management of the Chilean CCC program, the mechanisms for coordinating the initiatives of different ministries and agencies, and CCC's integrated system of monitoring and evaluation all contain valuable lessons for Turkey, as does the Swedish example of having the central government set standards and conduct evaluations while the municipalities deliver the services.

ANNEX 2: A SNAPSHOT OF EARLY CHILDHOOD DEVELOPMENT INTERVENTIONS IN TURKEY

Turkey presently has numerous ECD programs at the national, state, and municipal levels, including sectoral, cross-sectoral, and multi-sectoral interventions. Annex Figure 2.1 groups selected ECD programs by type of intervention, while Annex Figure 2.2 presents their coverage by age group. Annex Table 2.2 and Annex Table 3.1 describe and categorize the selected ECD interventions in Turkey using the SABER-ECD program typology. It is important to note that these figures offer only a snapshot of the numerous interventions that are operating in the country. These interventions were selected on the basis of their relevance and availability of information.

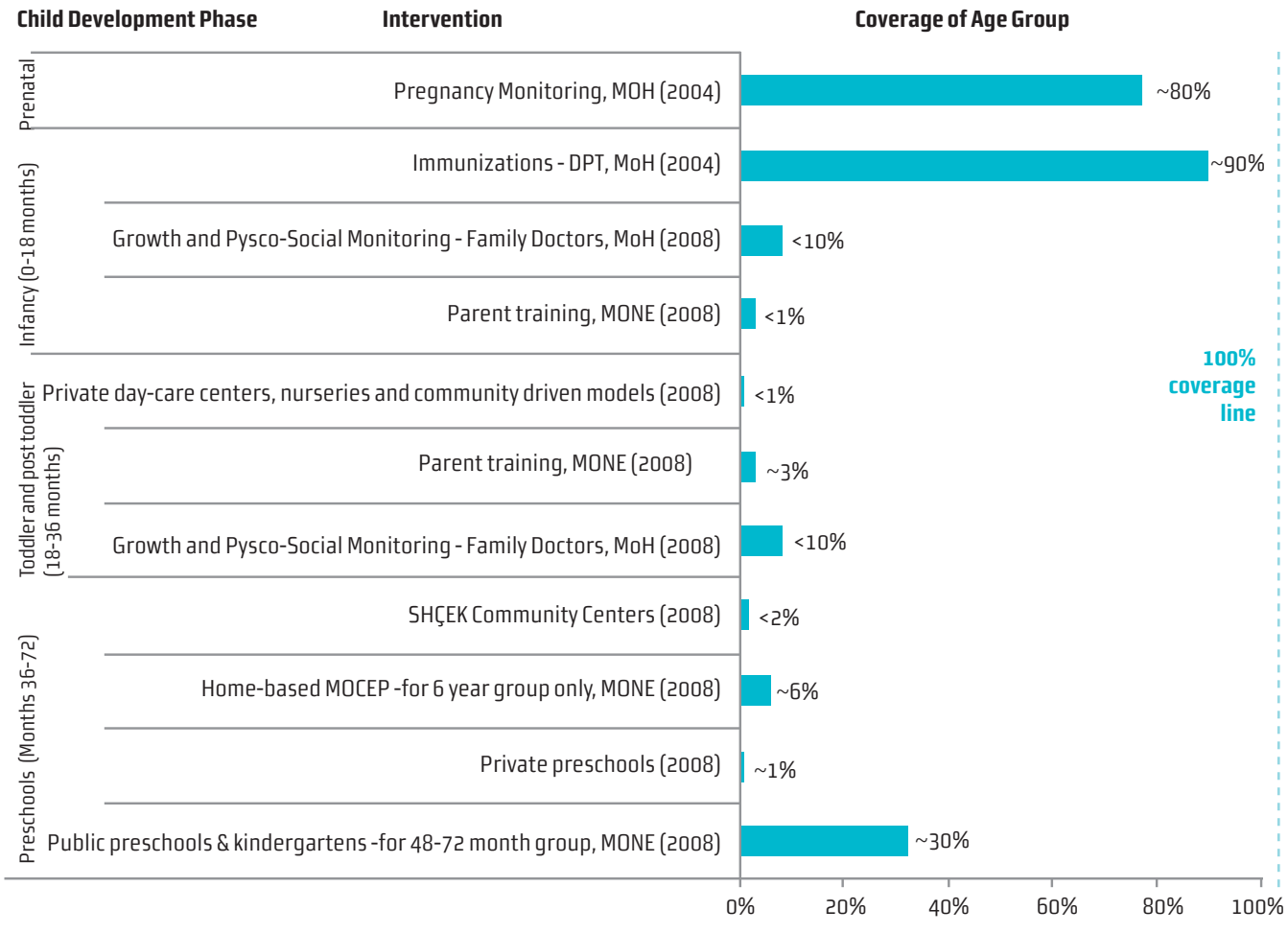
ANNEX FIGURE 2.1 SELECTED ECD INTERVENTIONS IN TURKEY



COVERAGE OF VARIOUS EARLY CHILDHOOD DEVELOPMENT PROGRAMS BY AGE GROUP, TURKEY

ANNEX FIGURE 2.2

Source: World Bank (2010)



CATEGORIZATION OF SELECTED ECD PROGRAMS IN TURKEY:
THE FAMILY DOCTOR SCHEME AND PUBLIC PRE-SCHOOLS

ANNEX TABLE 2.1

ECD Intervention	The Family Doctor Scheme	Public Pre-schools
Category	**Sectoral**	**Sectoral**
Primary policy objective	To provide health care and to monitor young children's growth and cognitive and psychosocial development.	To increase children's school readiness
Brief description	Pregnant women are assigned to family doctors who monitor children's health and development throughout early childhood.	Children are provided with pre-school education in classrooms attached to public primary schools.
Areas / mechanisms of intervention	The family doctor is responsible for the child's health and development from the mother's pregnancy through the child's first six years, including the following: · Immunization · Growth monitoring · Tracking cognitive and psycho-social indicators	· Increasing cognitive stimulation · Increasing school readiness · Developing pre-literacy and pre-numeracy skills.
Coverage / access	The pilot was launched in Bursa in 1996 and implemented in 54 provinces in Turkey, reaching 8.3% of children aged 0 to 72 months in 2009. Coverage expanded to all 81 provinces in Turkey by the end of 2010.	There has been a rapid expansion in pre-school access in recent years. In 2010-11, the enrollment rate for 48- to72-monthgroup reached 43%.
Institutional arrangements	The Ministry of Health oversees the program through three directorates: Mother and Child Health, Primary Health, and Mental Health. Family doctors are responsible for immunizing and monitoring the growth of all children in their jurisdiction and receive payments for families in their jurisdiction.	The MoNE General Directorate for Basic Education is centrally responsible for the program's curriculum and expansion. Public pre-school classes are built inside existing basic education schools or in separate buildings. A pre-primary education program has been approved by the Board of Education on 23 July 2012.
Financing / cost-effectiveness	Family doctors receive a per capita incentive payment based on the number of families in their jurisdiction.	Teachers' salaries are centrally financed by the MoNE. Infrastructure is funded by project financing or local government financing. High private user fees prevent the economically disadvantaged from accessing these schools (TL 50-200 "nutrition fees" are charged in different regions).
Service providers	Family doctors at the local level	MoNE-appointed pre-school teachers (4-year university graduates)
Monitoring and quality assurance mechanisms	The Ministry of Health has adopted a computerized monitoring tool capable of tracking all children in Turkey, starting with the pregnancy of the mother. The database should be able to serve as a child-centered development policy tool to track children and respond to those with lagging indicators across sectors. Family doctors are given some specialized training in ECD and the Integrated Management of Childhood Illness (IMCI) to participate in the program.	Standards focus mainly on building and infrastructure requirements. Standards lacking on education programs and practices. Inspection of centers is infrequent and often inspectors lack an ECD background.
Challenges for scaling up the interventions and for improving service delivery	The program was expanded nationwide by the end of 2011.	Expanding the system depends on financing for infrastructure and teacher costs. The requirement to hire only four-year university graduates increases the salary bill and may make expansion more difficult.

SELECTED ECD INTERVENTIONS IN TURKEY:
KEDV WOMEN AND CHILD CENTERS AND FAMILY TRAINING PROGRAMS

ANNEX TABLE 2.2

ECD Intervention	Private Community Initiatives (KEDV Women and Child Centers Model)
Category	**Cross-sectoral**
Primary policy objective	Provide affordable daycare of good quality in poor neighborhoods.
Brief description	Organizes women into economic cooperatives to operate small businesses and creates Women and Child Centers to provide affordable daycare for working mothers.
Areas / mechanisms of intervention	A community-driven model of privately provided center-based daycare.
Coverage / access	Unknown
Institutional arrangements	ECD experts at KEDV train local mothers to serve as "neighborhood mothers" and facilitate the hiring of pre-school teachers. KEDV helps them to establish centers. Women members are responsible for the continued financing and management of the centers.
Financing / cost-effectiveness	The costs of the daycare center are paid by members using a sliding scale based on the ability to pay.
Service providers	Trained "neighborhood mothers" and pre-school teachers
Quality assurance mechanisms	Unknown
Challenges for scaling up and improving service delivery	The centers become self-sustaining after the initial set-up of facilities and programs by KEDV staff. Increased funding is required for program expansion

> ANNEX TABLE 2.2

Family Training Programs
Cross-sectoral
Program objectives vary from increasing school readiness to family training to improving children's cognitive development.
Programs vary but are mostly home-based, providing parents with strategies to help children develop in the home environment
The Mother and Child Home Education Program (MOCEP) targets mothers of 6-year-old children who have had no pre-school education and will soon start first grade. Groups of 20 mothers attend three-hour sessions each week for 25 weeks at adult education centers. The Father Training Program targets fathers with children aged 2 to 10 and encourages them to engage with their children. The My Family Program (sponsored by UNICEF) trains mothers but does not include cognitive development.
The Directorate-General has been organizing a variety of Mother and Child Education Programs since 1993 for children aged 0 to 6. Through these programs, 5,529 courses reaching 951,406 families in 74 provinces have been delivered. The total number of children reached annually through all family training programs is estimated to be a little more than 2 million. The Family Education Course Program(for families of children between the ages of 0 and 18) is being put into practice starting from the 2010-11 academic year. The program will be implemented by the MoNE and other official institutions/ associations, municipalities, and NGOs in collaboration with the MoNE. Eight thousand copies of the educational materials for participating children and families have been printed and dispatched to the provinces. Municipalities and relevant organizations have received child education material (CEM), brochures, posters, flyers, promotional CDs, and short films to be aired on national TV channels.
Parenting programs are administered by the Ministry of Education through the Non-formal Directorate in Adult Education Centers. Financed by the European Commission; delivery is by AÇEV, UNICEF, and other partners.
A cost-benefit analysis in Turkey found home-based programs to be highly cost-effective, with a benefit-cost ratio of 8:1 for MOCEP.
Each program is managed differently and uses different service providers. MOCEP is implemented by teachers and master trainers who are permanent staff members at Public Education Centers.
Several independent evaluations of MOCEP reported that it had positive effects for both mothers and children, was cost-effective, could be implemented on a large scale, and could offer flexible targeting to reach different segments of society and children at risk. An evaluation that followed MOCEP participants over 22 years found that program participants were more likely to complete high school and university and to be employed than non-participants. There are also regular field visits by master trainers. As part of the "The Family Education Course Program," 54 trainers chosen by the MoNE, SHÇEK, and the Ministry of Justice were selected to train educators to take charge of the program. Under the aegis of 2010 In-service Training, 890 teachers were trained to implement the Family Education Program in public education centers.
Programs are financed within a series of adult education programs; earmarked financing specifically for Parenting Programs is necessary to clarify annual budgets.

CATEGORIZATION OF SELECTED ECD PROGRAMS IN TURKEY:
CONDITIONAL CASH TRANSFER PROGRAM AND SHÇEK COMMUNITY CENTERS

ANNEX TABLE 2.3

ECD Intervention	Conditional Cash Transfer (CCT) Program	SHÇEK Community Centers
Category	**Multi-sectoral**	**Multi-sectoral**
Primary policy objective	To provide a social safety net for families with young children in the most economically disadvantaged 6% of the population to promote positive family behavioral change with respect to education and health.	To provide families and young children in disadvantaged communities with a variety of services.
Brief description	The CCT includes pregnancy allowances to economically disadvantaged families, as well as allowances given to poor families in return for regular health checks on their pre-school-aged children.	Multi-purpose centers delivering services to disadvantaged communities, including vocational training, childcare, family training, and counseling.
Areas / mechanisms of intervention	A direct cash transfer given at the local level.	Protective and preventive services for children in need offered through community centers.
Coverage / access	The CCT is targeted to the poorest 6% of families with young children in Turkey. An estimated 3 million children are reached annually.	81 centers nationally, reaching an estimated 40,000 children (but very limited coverage in relation to need and demand).
Institutional arrangements	The General Directorate of Social Assistance manages the program. Local foundations select recipients at the local level.	SHÇEK manages the Community Centers and Family Counseling Programs nationwide.
Financing / cost-effectiveness	Conditional Cash transfer per child (0-6 years) is 30 TL per month (conditioned on periodic health center visits - MOH's vaccination calendar) Pregnancy conditional cash transfers are; if women give birth at the hospital: 70 TL if women go to the doctor for monthly regular check-ups they get paid 30 TL per month after birth 30 TL per month for two months	Lack of funding limits the program's expansion.
Service providers	Local philanthropic committees oversee the transfers under the CCT program.	Center-based delivery of services.
Quality assurance mechanisms		Unknown.
Challenges for scaling up the interventions and for improving service delivery	The amount of funding distributed to beneficiaries is a relatively small. The selection process for recipients is somewhat subjective, and the criteria for selection can be applied unevenly.	Coverage is currently very limited compared to need.

ANNEX 3: REVISIONS TO THE EARLY CHILDHOOD TEACHER EDUCATION CURRICULUM

PREVIOUS EARLY CHILDHOOD TEACHER EDUCATION CURRICULUM (1998)

ANNEX TABLE 3.1

	Course	Credit		Course	Credit
Semester 1			*Semester 2*		
C	Principles of ECE	3	C	Maternal and Child Health	3
GE	Turkish I: Written Expression	2	C	Motor Development and Education	3
GE	Principles of Kemal Ataturk I	0	GE	Turkish II: Oral Expression	2
GE	Computer	3	GE	Principles of Kemal Ataturk II	0
GE	Foreign Language I	3	GE	Foreign Language II	3
TP	Introduction to Teaching Profession	3	C	Play in ECE	3
C	Human Anatomy and Physiology	3	C	Maternal and Child Nutrition	3
C	Child Development and Psychology	3	C	Practicum I	3
	Total Credits	20		Total Credits	20
Semester 3			*Semester 4*		
C	Music Education I	3	C	Music Education II	3
C	Language and Concept Dev.	3	C	Mental Health and Adaptation Disor	3
C	Mathematics Teaching	3	C	Science Teaching	3
C	Teaching Computer Literacy	2	C	Physical Education and Games I	3
TP	Development and Learning	3	TP	Planning and Evaluation in Teaching	4
GE	Speaking and Writing I	3	GE	Speaking and Writing II	3
	Total Credits	17		Total Credits	19
Semester 5			*Semester 6*		
C	Physical Education and Games II	3	C	Teaching Methods I	3
C	Visual Arts I	3	C	Visual Arts II	3
C	Children's Literature I	3	C	Material Development in ECE II	3
C	Material Development in ECE I	3	C	Drama in ECE	3
C	Children with Special Needs	2	C	Children's Literature II	3
C	Parent Education	3	C	Practicum II	3
GE	Teaching Tech. and Material Dev.	3	TP	Classroom Management	3
	Total Credits	20		Total Credits	21
Semester 7			*Semester 8*		
C	Practicum III	3	TP	Guidance	3
C	Elective I	3	C	Student Teaching	5
C	Creativity and Creative Activities	3	C	Elective III	3
GE	Elective II	3	GE	Elective IV	3
C	Teaching Methods II	3			
	Total Credits	15		Total Credits	14

Total Number of Credits: 146

C Content and early childhood teaching methods course; *TP* Teaching profession courses; *GE* General education courses

Source: Atay-Turhan et al (2009)

CURRENT EARLY CHILDHOOD TEACHER EDUCATION CURRICULUM (IMPLEMENTED 2006)

ANNEX TABLE 3.2

	Course	Credit
Semester 1		
C	Introduction to ECE	3
GE	Turkish I: Written Expression	2
GE	Principles of Kemal Ataturk I	2
GE	Computer I	3
GE	Foreign Language I	3
TP	Introduction to Education Science	3
C	Human Anatomy and Physiology	3
C	Psychology	2
	Total Credits	21
Semester 3		
C	Maternal and Child Nutriton	2
C	Child Development I	3
C	Creativity	3
C	Elective I	3
C	Play	2
TP	Instructional Principles and Methods	3
GE	Sociology of Education	2
	Total Credits	18
Semester 5		
C	Physical Education and Games	3
C	Music I	2
C	Visual Arts	3
C	Teaching Science	3
TP	School Experience	3
TP	Classroom Management	2
TP	Methods of Teaching I	3
GE	Statistics	2
	Total Credits	21
Semester 7		
C	Parent Involvement and Education	2
C	Elective II	2
C	Research Project I	2
TP	Field Experience I	5
GE	Elective I	3
TP	Guidance	3
	Total Credits	17

	Course	Credit
Semester 2		
C	Maternal and Child Health & First Aid	3
GE	Philosophy of Education	2
GE	Turkish II: Oral Expression	2
GE	Principles of Kemal Ataturk II	2
GE	Foreign Language II	3
GE	Computer II	3
TP	Educational Psychology	3
	Total Credits	18
Semester 4		
C	Child Development II	3
C	Children's Literature	3
C	Teaching Mathematics	3
C	Child Mental Health	3
C	Drama	3
GE	History of Turkish Education	2
TP	Instructional Technologies and Material Dev	3
	Total Credits	20
Semester 6		
C	Methods of Teaching II	3
C	Music II	3
C	Material Development	3
GE	Scientific Research Methods	2
TP	Special Education	2
GE	Community Service Practices	2
TP	Measurement and Assessment	3
GE	Interpersonal Relationships	3
	Total Credits	21
Semester 8		
C	School Readiness and Trasition to Elementary Sc.	2
C	Research Project II	2
C	Elective III	2
C	Elective IV	2
TP	Turkish Education System and School Management	3
TP	Field Experience II	5
	Total Credits	16

Total Number of Credits: 152

C Content and early childhood teaching methods course; *TP* Teaching profession courses; *GE* General education courses

Source: Atay-Turhan et al, 2009

ANNEX 4: EXPENDITURES ON EDUCATION AND EARLY CHILDHOOD EDUCATION AND PROGRESS IN PRE-PRIMARY ENROLLMENT

PUBLIC AND PRIVATE EXPENDITURE ON PRE-PRIMARY EDUCATION
FOR CHILDREN AGED 3 TO 6 IN 2005
(PERCENTAGE OF GDP)

ANNEX TABLE 4.1

Country	Public	Private	Total
Australia	0.07	0.03	0.1
Austria	0.42	0.13	0.55
Belgium	0.58	0.01	0.59
Canada	0.2	n.a.	0.2
Czech Republic	0.43	0.03	0.46
Denmark	0.65	0.15	0.81
Finland	0.34	0.03	0.38
France	0.65	0.03	0.67
Germany	0.4	0.14	0.53
Hungary	0.73	0.07	0.79
Ireland	0.39	n.a.	0.39
Italy	0.39	0.05	0.44
Korea, Rep. of	0.05	0.11	0.16
Mexico	0.52	0.08	0.61
Netherlands	0.37	0.01	0.38
Norway	0.84	0.18	1.02
Portugal	0.3	n.a.	0.35
Sweden	0.52	0	0.52
United Kingdom	0.45	0.02	0.47
United States	0.38	0.11	0.49
Average	0.434	0.07	0.495

Source: OECD (2006) p. 247, Table 5.4, quoted in Naudeau et al (2011) p. 180, Table 4.2 A-2

TOTAL PUBLIC EXPENDITURE ON EDUCATION AND PRE-SCHOOL EDUCATION IN 2004

(PERCENTAGE OF GDP)

ANNEX TABLE 4.2

Country	Total Education Expenditure	Pre-primary Education Expenditure	Pre-primary as % of Total Education Expenditure
			Spending 10% and above
Moldova	4.2	0.8	19
Mongolia	5.7	1.0	17.5
Belarus	5.8	1.0	17.2
Bulgaria	4.4	0.6	13.6
Hungary	6.3	0.8	12.7
Slovak Republic	4.1	0.5	12.2
Guyana	5.8	0.6	10.3
France	6.0	0.6	10
			Spending 5-10%
Slovenia	6.1	0.6	9.8
Chile	4.1	0.4	9.8
Israel	7.5	0.7	9.3
Kuwait	7.6	0.7	9.2
Seychelles	5.7	0.5	8.8
Croatia	4.6	0.4	8.7
Spain	4.6	0.4	8.7
Mexico	5.9	0.5	8.5
Czech Republic	4.8	0.4	8.3
Germany	4.8	0.4	8.3
Argentina	3.6	0.3	8.3
Italy	4.9	0.4	8.2
Romania	3.7	0.3	8.1
Azerbaijan	3.7	0.3	8.1
Costa Rica	5.1	0.5	7.8
Poland	6.6	0.5	7.6
Paraguay	4.3	0.3	7
El Salvador	2.9	0.2	6.9
Barbados	7.6	0.5	6.6
Kyrgyz Republic	4.6	0.3	6.5
Peru	3.1	0.2	6.5
Iceland	8.2	0.5	6.1
Jamaica	5.3	0.3	5.7
Netherlands	5.5	0.3	5.5
Estonia	6	0.3	5
Portugal	6	0.3	5

Country	Total Education Expenditure	Pre-primary Education Expenditure	Pre-primary as % of Total Education Expenditure
			Spending 1-5% and above
Greece	4.3	0.2	4.7
Finland	6.6	0.3	4.5
Norway	7.6	0.3	3.9
Switzerland	5.1	0.2	3.9
Canada	5.4	0.2	3.7
Tajikistan	2.9	0.1	3.4
Bolivia	6.7	0.2	3
Nepal	3.4	0.1	2.9
New Zealand	7.3	0.2	2.7
Korea, Rep. of	4.6	0.1	2.2
Mauritius	4.7	0.1	2.1
Australia	4.9	0.1	2
Lao PDR	2.5	0.05	2
Colombia	5.1	0.1	2
Kenya	7.1	0.1	1.4
Benin	3.3	0.04	1.2
Malaysia	8.5	0.1	1.2
			Spending less than 1%
Congo Rep.	4.4	0.03	0.7
Nicaragua	3.2	0.02	0.6
South Africa	5.5	0.02	0.4
Senegal	4.1	0.01	0.2
Jordan	5.0	0.01	0.2

Source: Naudeau et al (2011)

MONE'S UNIVERSAL PRE-SCHOOL PROGRAM FOR 5 YEAR OLDS

- COVERAGE PLAN BY PROVINCE AND YEAR

ANNEX TABLE 4.3

5 year olds enrollment rate in the 32 provinces included in the piloting of compulsory kindergarten education in 2010				
Year	**Province**	**5 year olds cohort population**	**5 years old students enrolled**	**Enrollment rate of the 5 year olds**
2010	SİNOP	2,521	2,567	100%
2010	NEVŞEHİR	4,522	4,525	100%
2010	AMASYA	4,285	4,324	100%
2010	ARDAHAN	1,896	1,781	100%
2010	BURDUR	3,271	3,402	100%
2010	KARAMAN	3,871	4,028	100%
2010	KÜTAHYA	7,261	7,447	100%
2010	ÇANAKKALE	5,075	4,872	96%
2010	SAMSUN	17,875	16,943	95%
2010	GİRESUN	5,175	4,884	94%
2010	TRABZON	10,492	9,892	94%
2010	MUĞLA	11,010	10,326	94%
2010	ARTVİN	2,004	1,846	92%
2010	RİZE	4,293	3,933	92%
2010	ISPARTA	5,480	5,017	92%
2010	BARTIN	2,207	2,019	91%
2010	KARABUK	2,747	2,484	90%
2010	KIRŞEHİR	3,018	2,727	90%
2010	KIRIKKALE	3,733	3,356	90%
2010	BİLECİK	2,614	2,344	90%
2010	UŞAK	4,656	4,130	89%
2010	BAYBURT	1,140	969	85%
2010	TUNCELİ	866	726	84%
2010	YALOVA	2,563	2,138	83%
2010	KIRKLARELI	3,686	3,071	83%
2010	ESKİŞEHİR	9,121	7,509	82%
2010	EDİRNE	4,286	3,516	82%
2010	BOLU	3,463	2,812	81%
2010	DÜZCE	5,099	4,105	81%
2010	GÜMÜŞHANE	1,818	1,408	77%
2010	ÇANKIRI	2,327	1,551	67%
2010	KİLİS	2,728	1,810	66%

5 year olds enrollment rate in the 25 provinces included in the piloting of compulsory kindergarten education in 2011

Year	Province	5 year olds cohort population	5 years old students enrolled	Enrollment rate of the 5 year olds
2011	HATAY	29,092	29,089	100%
2011	MERSİN	27,165	27,212	100%
2011	DENİZLİ	13,497	12,804	95%
2011	ELAZIĞ	8,745	8,043	92%
2011	MUŞ	10,881	9,884	91%
2011	NİĞDE	6,131	5,441	89%
2011	YOZGAT	7,592	6,646	88%
2011	SAKARYA	13,067	10,756	82%
2011	ANTALYA	30,555	25,076	82%
2011	ŞANLIURFA	47,719	38,333	80%
2011	AFYONKARAHİSAR	11,253	8,973	80%
2011	BALIKESİR	13,440	10,449	78%
2011	MANİSA	18,625	14,476	78%
2011	AYDIN	12,878	9,989	78%
2011	ERZİNCAN	3,008	2,304	77%
2011	MALATYA	12,768	9,767	76%
2011	KOCAELİ	25,049	19,006	76%
2011	TOKAT	9,254	6,879	74%
2011	BİNGOL	5,269	3,894	74%
2011	ÇORUM	7,466	5,413	73%
2011	SIVAS	10,065	7,182	71%
2011	OSMANİYE	9,181	6,475	71%
2011	AKSARAY	6,811	4,640	68%
2011	SİİRT	8,563	5,646	66%
2011	BİTLİS	8,183	4,744	58%

5 year olds enrollment rate in the 14 provinces to be included in the piloting of compulsory kindergarten education in 2012				
Year	**Province**	**5 year olds cohort population**	**5 years old students enrolled**	**Enrollment rate of the 5 year olds**
2012	İZMİR	50,191	39,380	78%
2012	TEKİRDAĞ	11,389	8,527	75%
2012	ORDU	9,632	6,799	71%
2012	KONYA	35,721	25,201	71%
2012	ERZURUM	15,009	9,704	65%
2012	IĞDIR	3,959	2,554	65%
2012	ZONGULDAK	8,105	5,160	64%
2012	KASTAMONU	4,548	2,880	63%
2012	KAYSERİ	22,123	13,717	60%
2012	ANKARA	68,788	40,438	59%
2012	DİYARBAKIR	37,243	20,929	56%
2012	BURSA	38,536	21,537	56%
2012	KAHRAMANMARAŞ	21,354	11,916	56%
2012	ADANA	37,283	20,279	54%

5 year olds enrollment rate in the 10 provinces to be included in the piloting of compulsory kindergarten education in 2013				
Year	**Province**	**5 year olds cohort population**	**5 years old students enrolled**	**Enrollment rate of the 5 year olds**
2013	VAN	26922	22682	84%
2013	KARS	6525	4048	62%
2013	ADIYAMAN	12352	7552	61%
2013	BATMAN	13761	6685	49%
2013	MARDİN	19,227	8900	46%
2013	SIRNAK	12934	5950	46%
2013	İSTANBUL	206866	91101	44%
2013	GAZİANTEP	40861	17384	43%
2013	AĞRI	13946	4476	32%
2013	HAKKARİ	6928	1933	28%

NEW STUDENTS TO BE ENROLLED
(ESTIMATES BASED ON MONE'S PLAN)

ANNEX TABLE 4.4

Year	New students to be enrolled (3-5 year olds).
2011	18,962
2012	94,704
2013	202,290
2014	284,416

ANNEX 5: ASSUMPTIONS ON COSTING THE EXPANSION IN TURKEY'S ECE PROGRAM

Our assumptions about the estimated cost of the expansion of pre-school services in Turkey are based on a modification of model used by Aran et al (2009). The key features of the modified model are as follows:

i. We started out by looking at the current coverage of pre-school programs using MoNE (2011) data.

ii. We assumed the investment costs of independent pre-school buildings with five classrooms to be TL 572,000 and equipment expenditure TL 60,000 per school (with five classrooms). We assumed that building a classroom in an existing primary school would cost around 70% of the cost of the average cost of building one in an independent pre-school. In the model, we assumed (in-line with current enrolment shares) that the 2/3rd of the expansion would accommodated by building classrooms in existing primary schools, and the rest will be provided places in in newly built independent pre-school buildings.

iii. For teacher training, we added a cost of TL 920 per year and assumed a four-year training period for teachers. Although these training costs were not immediately taken on by the MoNE in the pre-school budget, we included them for the sake of completeness in the analysis. In reality, these costs would be borne by the budgets for higher education rather than by the budget of the Directorate-General of Pre-school Education.

iv. The salary of a full-time MoNE pre-school teacher is TL 2,333 per month and the cost of master teachers (usta öğretici) who serve as contract teachers is TL 1,476. For the expansion, we assumed that the teachers would come from a mix of both categories, so an average teacher's salary was assumed to be TL 1,900 per month. These salaries are paid out for 12 months per year in the model (which may overestimate the costs of the contract teachers' salaries).

v. We assumed the operating costs (such as heating and utilities) of the kindergartens to be around TL 800 per month. We multiplied these costs by 12 months in the year as well.

vi. We calculated the costs of food subsidies by assuming that only the bottom 40 percent of students would

benefit from the subsidy. "Nutrition fees" charged by public schools range from TL 50 to TL 200 per child per month. We assumed TL 100 per month per child as the cost of the subsidy (which may have resulted in an underestimate).

vii. We assumed that the total cost of the Secondary/Innovative program would be half of the total cost of the food subsidy for the most economically disadvantaged 40 percent of students.

viii. In the analysis, current expenditures were added to the previous year's current expenditures since each added teacher would need to work in preceding years to increase the pre-school enrollment rates. We calculated total current expenditures by adding up the cumulative current expenditures for each preceding year.