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Lives in the Balance: A Comparative Study of Public Social Investments in Early Childhood Across OECD Countries

By

Phyllis Ina Jeroslow

A dissertation submitted in partial satisfaction of the

requirements for the degree of

Doctor of Philosophy

in

Social Welfare

in the

Graduate Division

of the

University of California, Berkeley

Committee in charge:

Professor Neil Gilbert, Chair Professor Jill Duerr Berrick Professor Rucker Johnson

Summer 2016

Lives in the Balance: A Comparative Study of Public Social Investments in Early Childhood Across OECD Countries

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Abstract

Lives in the Balance:
A Comparative Study of Public Social Investments in Early Childhood
Across OECD Countries

by

Phyllis Ina Jeroslow

Doctor of Philosophy in Social Welfare

University of California, Berkeley

Professor Neil Gilbert, Chair

Across the globe, the viability of welfare states depends on the success of policy adaptations to a post-industrial, internationalized economy and domestic demographic changes that encompass family formation, declines in fertility, and lifespan extensions of the elderly. One of the most important issues facing contemporary welfare states is the need to adjust social policy to the demise of the male breadwinner model in favor of the increased participation of women and mothers in the workforce. Whereas childrearing was traditionally the central occupation of stay-at-home mothers, their workforce participation has necessitated out-of-home care for children under the ages of five or six, before the start of primary school. Providing financial supports and investing in early childhood care and education are several policy instruments that can be used not only to ease the burden of care faced by working mothers and their partners, but to promote the well-being and long-term economic productivity of their children as adults. In turn, the increased economic productivity of future generations can mitigate social risks and threats to the survival of the welfare state.

Using a social investment approach based on human capital development in children, a set of indices is constructed to measure public investments in early childhood by ten member countries of the OECD from 2001 through 2011. The indices permit a theoretical exploration of patterns of expenditure and characteristics of policy design relative to their conformity to acknowledged types of welfare state regimes. The indices are also used to detect empirical changes in welfare state expenditures for early childhood investments pre- and post- the fiscal crisis of 2008. The study contributes to the literature of welfare state theory by situating investments in early childhood as a stage in the evolution of family policy; by creating a set of measures that characterizes public investments from a child-centered developmental perspective, one that is less prominent than work-family balance and gender equity viewpoints; and lastly, by combining expenditures and policy design components into a single measure.

Dedication

To the children of future generations who deserve improved life chances

Table of Contents

Chapter 1: Introduction	1
Evolution of Family Policy	1
Social Investment in Young Children as a Response to New Social Risks	2
Welfare State Variations in Work and Care	4
Scope of the Study	5
Chapter 2: Paradigms of Early Childhood Investment	8
Overview	8
Gender Equality and Work-family Balance	9
Parental Leave Policies	11
Poverty as a Developmental Issue	12
Investments in Early Childhood: Income Supports, Childcare, and Education	14
Chapter 3: Theoretical Orientations: Welfare States and Human Capital	18
Overview	18
Theories of the Welfare State	18
Theoretical Orientations for Comparative Analyses	18
De-familialization as a Post-Industrial Adaptation	21
Human Capital Formation, the Social Investment State, and Child Rights	23
Chapter 4: Methods	27
Study Design	27
Data Collection	28
Data Collection for Expenditures	29
Data Collection for Policy Design Indicators	29
Limitations and Scope of Data Collection	30
Policy Design Indicators	32
Assumptions Used in Setting Coding Values	32
Policy Design Indicators for the Child Allowances Index	34
Descriptions of Child Allowance Programs By Country, 2001-2011	35
France and Germany	35
Italy and Spain	36
Japan and Korea	36
Norway and Sweden	37
United Kingdom and United States	37
Policy Design Indicators for the Paid Parental Leave Index	39
Descriptions of Paid Parental Leave Programs By Country, 2001-2011	40
France and Germany	40
Italy and Spain	42
Japan and Korea	43
Norway and Sweden	44
United Kingdom and United States	44

Policy Design Indicators for the Early Childhood Education	
and Care (ECEC) Index	46
Descriptions of ECEC Programs By Country, 2001-2011	48
France and Germany	48
Italy and Spain	49
Japan and Korea	50
Norway and Sweden	51
United Kingdom and United States	52
Index Construction and Weighting	56
Chapter 5: Welfare State Regimes and Early Childhood Investment Policies	59
Overview	59
Child Allowances (2001-2011)	59
Child Allowance Expenditures as a Percentage of GDP	59
Index #1: Child Allowances	61
Paid Parental Leave (2001-2011)	63
Paid Parental Leave Expenditures as a Percentage of GDP	63
Index #2: Paid Parental Leave	65
Early Childhood Education and Care (2001-2011)	68
ECEC Expenditures as a Percentage of GDP	68
Index #3: Early Childhood Education and Care	70
Summary of Results for Research Question #1	72
Chapter 6: Early Childhood Investment Policies and Economic Recession	79
Overview	79
France	82
Germany	82
Italy	83
Spain	83
Japan	84
Korea	84
Norway	85
Sweden	85
United Kingdom	86
United States	86
Summaries by Program Types	87
Child Allowances and the Fiscal Crisis	87
Paid Parental Leave and the Fiscal Crisis	87
ECEC and the Fiscal Crisis	88
Summary of Results for Research Question #2	88
Chapter 7: Stasis, Change, and Challenges of Early Childhood	
Investment Policies	90
Overview	90

Accounting for Welfare State Change in Early Childhood Investments	90
Norway and Sweden	96
United Kingdom	97
France	98
Italy	100
Germany	102
Korea	104
Japan	106
Spain	108
United States	110
Trends in Relation to the Fiscal Crisis	112
Chapter 8: Conclusion	114
The Evolution of Family Policy: From Promoting Fertility to	
Advancing Child Rights	114
Contribution of the Study and Future Directions	120
References	122
Appendix A: Alternative Weighting Schemes for the Child	
Investment Indices	142
Index #1: Child Allowances (2001-2011)	142
Index #2: Paid Parental Leave (2001-2011)	147
Index #3: Early Childhood Education and Care (2001-2011)	151
Summary	154
Appendix B: Test Results Regarding Significant Differences in the Means	
of Expenditures and Index Scores by Program Type and Regime Pair	155
Tests for Significant Differences: Child Allowance Expenditures	155
Tests for Significant Differences: Child Allowance Index	160
Tests for Significant Differences: Paid Parental Leave Expenditures	165
Tests for Significant Differences: Paid Parental Leave Expenditures	170
Tests for Significant Differences: Early Education and Care Expenditures	175
Tests for Significant Differences: Early Education and Care Index	180

List of Tables and Figures

T	ล	h	1	es

Table 1.	Literatures that inform public investments in early childhood	9
Table 2.	Policy Design Indicators for Child Allowances (2001-2011)	38
Table 3.	Policy Design Indicators for Paid Parental Leave (2001-2011)	45
Table 4.	Policy Design Indicators for Early Childhood Education and Care	55
Table 5.	Index #1: Child Allowances Weighting Scheme	57
Table 6.	Index #2: Paid Parental Leave Weighting Scheme	57
Table 7.	Index #3: Early Childhood Education and Care (ECEC)	
	Weighting Schemes	58
Table 8.	Trends in Expenditures and Policy Design for the Child	
	Investment Package by Program Type: 2001 – 2011	74
Table 9.	Early Childhood Investment Package in Ten OECD Countries:	
	Summary Tables for 2001 and 2011	77
Table 10.	Convergence Tests for Expenditures as a Percent of GDP	
	for the Child Investment Package by Program Type: 2001 – 2011	93
Table 11.	Historical and Conceptual Phases of Public Investments	
	in Early Childhood	115
Table 12.	Index #1: Child Allowances Alternative Weighting Schemes	143
Table 13.	Index #2: Paid Parental Leave Alternative Weighting Schemes	147
Table 14.	Index #3: Early Childhood Education and Care Alternative	
	Weighting Schemes	151
Table 15.	Child Allowance Expenditures: France and Germany	155
Table 16.	Child Allowance Expenditures: Italy and Spain	156
Table 17.	Child Allowance Expenditures: Japan and Korea	157
Table 18.	Child Allowance Expenditures: Norway ad Sweden	158
Table 19.	Child Allowance Expenditures: United Kingdom and	
	United States	159
Table 20.	Child Allowance Index Scores: France and Germany	160
Table 21.	Child Allowance Index Scores: Italy and Spain	161
Table 22.	Child Allowance Index Scores: Japan and Korea	162
Table 23.	Child Allowance Index Scores: Norway and Sweden	163
Table 24.	Child Allowance Index Scores: United Kingdom and	
	United States	164
Table 25.	Paid Parental Leave Expenditures: France and Germany	165
	Paid Parental Leave Expenditures: Italy and Spain	166
Table 27.	Paid Parental Leave Expenditures: Japan and Korea	167
Table 28.	Paid Parental Leave Expenditures: Norway ad Sweden	168
Table 29.	Paid Parental Leave Expenditures: United Kingdom and	
	United States	169
	Paid Parental Leave Index Scores: France and Germany	170
	Paid Parental Leave Index Scores: Italy and Spain	171
	Paid Parental Leave Index Scores: Japan and Korea	172
Table 33.	Paid Parental Leave Index Scores: Norway and Sweden	173

Table 34.	Paid Parental Leave Index Scores: United Kingdom and	
	United States	174
Table 35.	Early Education and Care Expenditures: France and Germany	175
Table 36.	Early Education and Care Expenditures: Italy and Spain	176
Table 37.	Early Education and Care Expenditures: Japan and Korea	177
	Early Education and Care Expenditures: Norway ad Sweden	178
	Early Education and Care Expenditures: United Kingdom and	
	United States	179
Table 40.	Early Education and Care Index Scores: France and Germany	180
	Early Education and Care Index Scores: Italy and Spain	181
	Early Education and Care Index Scores: Japan and Korea	182
	Early Education and Care Index Scores: Norway and Sweden	183
	Early Education and Care Index Scores: United Kingdom and	
	United States	184
Figures		
Figure 1.	Codes: Child Allowances Policy Design Indicators	35
Figure 2.	Codes: Paid Parental Leave Policy Design Indicators	40
Figure 3.	Codes: Early Childhood Education and Care (ECEC)	
	Policy Design Indicators	47
Figure 4.	Expenditures for Child Allowances as a Percentage of GDP	60
Figure 5.	Mean Expenditures for Child Allowances as a Percentage of GDP	61
Figure 6.	Index #1: Child Allowances (expenditures and policy design	
	are equally weighted)	62
Figure 7.	Mean Index Scores for Child Allowances	63
Figure 8.	Expenditures for Paid Parental Leave as a Percentage of GDP	64
Figure 9.	Mean Expenditures for Paid Parental Leave as a	
	Percentage of GDP	65
Figure 10.	Index #2: Paid Parental Leave (expenditures and	
	policy design are equally weighted)	66
0	Mean Index Scores for Paid Parental Leave	67
Figure 12.	Expenditures for Early Childhood Education and Care	
	as a Percentage of GDP	68
Figure 13.	Mean Expenditures for Early Childhood Education and Care	
	As a Percentage of GDP	69
Figure 14.	Index #3: Early Childhood Education and Care	
	(expenditures and policy design are equally weighted)	71
_	Mean Index Scores for Early Childhood Education and Care	72
_	GDP in national currency, in millions, 1980 – 2012/2013	80
_	Index #1: Child Allowances (expenditures weighted 25%)	144
_	Index #1: Child Allowances (expenditures weighted 50%)	145
	Index #1: Child Allowances (expenditures weighted 75%)	146
	Index #2: Paid Parental Leave (expenditures weighted 25%)	148
_	Index #2: Paid Parental Leave (expenditures weighted 50%)	149
Figure 22	Index #2: Paid Parental Leave (expenditures weighted 75%)	150

Figure 23.	Index #3: Early Childhood Education and Care	
	(all components equally weighted at 14.29%)	152
Figure 24.	Index #3: Early Childhood Education and Care	
	(expenditures weighted 50%)	153
Figure 25.	Index #3: Early Childhood Education and Care	
	(expenditures weighted 75%)	154

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Chapter 1: Introduction

Evolution of Family Policy

Contemporary welfare states confront challenges regarding economic growth, labor supply, and human capital building. Finding the proper balance of welfare state support for working families who are raising children is critical to ensuring that future generations will be able to grow national economies and sustain the welfare state for those who come after them. To that end, this study invokes a child-centered, human capital framework to examine welfare state investments in young children that are likely, in the long term, to promote adult productivity for the cultivation of vibrant democratic economies.

For Titmuss, the founding Chair of Social Administration at the London School of Economics, welfare provision is a dynamic process that responds to new social needs to meet the demands of ever-changing economic and political circumstances (Hills, 2001). Titmuss's insight well applies to historical developments in the family policies of welfare states. The development of welfare state policies that affect early childhood rests on four vectors that gave rise to an historical sequence of institutional pathways: (1) a concern for maternal and infant health in relation to fertility that began in the industrial era of the late nineteenth century; (2) a concern for reducing child poverty that was first addressed by family allowances in the 1930s; (3) a concern for promoting mothers' labor force attachment during the early years of their children's lives that became prominent in the 1970s when women began entering the workforce in large numbers; and (4) a concern for expanding and strengthening domestic economies, and, by extension, increasing government revenues, through investments in early childhood in order to promote later adult productivity in the marketplace. The four vectors arose unevenly across developed welfare states, with large variations in policy emphases, distributions of benefits, and levels of generosity.

One of the earliest welfare state policy interventions for families was unpaid maternity leave, instituted by European countries in the late 1800s to protect the health of pregnant women and infants in response to alarming drops in fertility rates and declines in national populations. While some countries experienced high birth rates after World War II, fertility rates are again in the forefront of national policy agendas. Despite decades of family policy, the replacement rate of approximately 2.08 children per woman is currently far out of reach for many economically advanced countries.

Family allowances represent another stage in the development of family policy, with a cluster of European nations instituting cash assistance programs throughout the 1930s and 1940s to ward off child and family poverty. Child allowances of varying generosity continue to be a component of family policy.

The integration of the world economy and its transformation from an industrial base to commerce rooted in advanced technologies triggered further development of family policies (Fraser, 1994). In the 1970s, women's participation in the labor force grew at an astounding pace, quickly displacing the hegemony of the male breadwinner model of family support in most developed countries (OECD, 2007). While the industrial economy was based on a family wage earned by a male breadwinner, the new world economy ushered in a period of wage stagnation and decline, followed later by a proliferation of part-time and temporary employment that did not

provide customary benefits. The entry of women into the labor force to augment family income unbalanced the stasis between the market and the family (Saraceno, 2011), inviting state intervention to compensate for the disruption in the unpaid work of female carers. Some consider government policies that attempt to reconcile women's paid labor with family caregiving responsibilities as "one of the most important welfare state expansions" effected by developed economies (Misra, Moller, & Budig, 2007, p. 805).

Demographic trends in family structure that accompanied the new phase of global capitalism further challenged welfare states to adapt family policies that were constructed around the largely obsolete model of male breadwinner and female homemaker (Fraser, 1994). Simultaneous with the economic transition, family composition was markedly changing by increases in divorce rates, and a rise in households headed by women who earned wages below what men received (Fraser, 1994).

With the participation of women as workers and the loss of their unpaid care work came the problem of providing care for very young children and elders. Expansion of child care and other family services first occurred in Denmark and Sweden in the late 1960s, followed by Norway, Finland, Belgium and France in the next decade (Esping-Andersen, 1999). In many developed nations during the 1970s, parental leaves were lengthened, and in some cases extended to fathers, and the generosity of their replacement rates increased (Bruning & Plantenga, 1999; Gauthier, 2000). By the mid-1980s, some countries created child care leaves and child-rearing allowances for the first two or three years of a child's life. Since the 1990s, parental leaves for newborns have generally ranged between three to twelve months (Morgan & Zippel, 2003).

Social Investment in Young Children as a Response to New Social Risks

Beyond the sphere of family policy, global economic and demographic trends created new social risks, and in so doing, exerted a powerful influence on the larger landscape of social policy. Unlike the domestic orientations of welfare economies of the past, today's post-industrial nations depend on an internationalized capital market buoyed by worldwide competition in production and labor (Reich, 1991). The "creative destruction" (Schumpeter, 1950, pp. 81-86) of traditional jobs and employment sectors by advances in science and technology has led to risks for individuals that include unemployment, underemployment, and wage stagnation or decline. At the country level, many governments face troubling poverty rates, a growing low-wage job sector, and widening economic inequality.

Simultaneous with the rapid, tectonic shifts in the global economy, national populations are aging through the continued extension of the human lifespan. The numbers of elderly are growing while the adult working population is shrinking, and declining fertility rates exacerbate this trend. The imbalance between the elderly and working age adults violates the traditional welfare state contract between the old and the young and threatens the fiscal sustainment of welfare states. The viability of state protections and insurances has also been tested by the recent "great recession" (Reich, 2012, p. 17), bringing forth higher levels of unemployment that burden welfare states while simultaneously decreasing the tax revenues that support social safety nets.

In order to counter the multiple, new social risks that confront individuals and governments, some countries have initiated or intensified a strategy of public social investment to arm the citizenry with the skills necessary to navigate the economic uncertainties of contemporary life while preserving contributions to the tax base. Public investments in young

children, which are the focus of this study, are a component of the social investment approach to welfare state provision. While social investment approaches have historical antecedents beginning with the formation of the Swedish welfare state, the present incarnation of a social investment paradigm was resurrected in the 1990s to fit the needs of a knowledge-based economy (Morel, Palier, & Palme, 2012). The social investment approach applies to all ages, and is particularly relevant for young children. Building skills is not exclusively the province of adults. Skill-building can start well before a child enters primary school.

In view of scientific breakthroughs about the structures and processes of brain development in infants, toddlers, and young children, and their linkages to outcomes in later childhood and adult life, the social investment approach legitimizes a role for state intervention in the early years. Although most member states of the Organization for Economic Co-operation and Development currently spend more on benefits for adolescents (OECD, 2009), Heckman, a Nobel Laureate in economics, and Masterov (Heckman & Masterov, 2007) claim that returns are greatest for investments in young children, particularly for disadvantaged children.

When interventions are provided in the early years, there is a longer time period, sometimes over the entire life course, for reaping resultant economic and social benefits. Early interventions capitalize on the critical periods of brain development to nurture cognitive abilities, which are important determinants of schooling and labor market outcomes (Cunha, Heckman, Lochner, & Masterov, 2005; Heckman, 1995). The acquisition of social skills is also important for later life success (Cunha et al., 2005). Skills and abilities acquired in one developmental stage enhance the productivity of learning in subsequent stages (Cunha et al., 2005). Expenditures for early childhood assistance and services complement and boost the efficiency of expenditures for other supports later in childhood, especially for compulsory schooling (Heckman, 1999; Heckman & Masterov, 2007).

Differences in the acquisition of cognitive and noncognitive skills attributed to family income and family background begin before formal schooling and persist into adulthood (Cunha et al., 2005). Thus, for at-risk children, early investments garner additional justification: "Investing in disadvantaged young children…reduces the inequality associated with the accident of birth and at the same time raises the productivity of society at large" (Heckman & Masterov, 2007, p. 2).

Policies that shape human capital formation, such as public support for early childhood education, are one of the environmental factors related to intergenerational social mobility (OECD, 2010). The likelihood of moving up the income ladder relative to one's parents is closely linked to the relationship between educational achievement and labor productivity (OECD, 2010). In summary, effective early childhood interventions can promote social efficiency, social equity, and social mobility (OECD, 2009, 2010).

Motivated by high stakes for the successful social production of a well-trained and well-educated workforce, governments have instituted supports and services for families and for early childhood education and care, with expectations that society will benefit from future economic rewards from children who are well adjusted, well socialized, and academically prepared for entering formal schooling. All four historical policy vectors regarding young children – promoting fertility, reducing child poverty, increasing women's labor force participation, and investing in early childhood – are present in various magnitudes in contemporary welfare states.

Family policies that support young children are an important component in the array of welfare state programs that attempt to mitigate new social risks posed by limitations in the ability of the market sector to provide for social needs given radical changes in the economic and social

fabric. Yet, there is wide variation across countries in the nature and extent of state assistance, which is sometimes expressed in complex policy arrangements. The spectrum reflects intranational tensions between the relative dominance and boundaries of market, state, and family that Offe (1984) described as the perpetual internal power struggle of welfare states.

In view of the often slow or incremental change that is associated with welfare state protections, it can be argued that recent demographic and economic trends have outpaced the capacity of many welfare states to respond adequately to the new set of risks and needs that have arisen since the demise of the male breadwinner model. Variations across countries reveal that some welfare states are better adapted to meet this century's economic and demographic challenges by virtue of providing sufficient support to families who are raising the next generation (Esping-Andersen, 1999).

Welfare State Variations in Work and Care

The study of welfare state variations is typically based on analyzing similarities and differences in social benefits across a selection of developed nations, often drawing on established typologies that group together countries with similar patterns. Many welfare state researchers use Esping-Andersen's (1990) regime typology as a referent, frequently discerning when countries deviate from the assigned regime type, or when it is necessary to propose a new category for countries that exhibit a new amalgam of welfare state characteristics. In his classic work, *The Three Worlds of Welfare Capitalism*, Esping-Andersen (1990) describes three distinct configurations of welfare state regimes, based on the extent to which the social compensate those who are not participating in the labor market ("de-commodification"), and the social stratification that results from political cleavages based on entitlements and exclusions inherent in welfare state programs.

While the ideal types presented in Esping-Andersen's (1990) classic work have since yielded to the realities of hybridization across developed economies, they still hold value by offering concise, conceptual explanations (Esping-Andersen, 1997; Gelissen, 2002). However, the strength of ideal types from an aerial view is compromised by inabilities to explain policy details on the ground (Gelissen, 2002). Additionally, Taylor-Gooby (1996) finds that regime theory is better suited to describe current conditions rather than explain welfare state change (Bonoli & Palier, 1998).

Alternate or expanded welfare state typologies have developed from criteria other than Esping-Andersen's (1990) notion of decommodification, such as religious affiliations (Van Kersbergen & Manow, 2009), primacy of family networks (Ferrera, 1996), and economic imperatives (Kasza, 2006). For nations that were not included in Esping-Andersen's (1990) original typology, and in consideration of continually evolving social and economic conditions, regime attributions appear highly related to the researcher's specific perspective or area of interest.

In the case of this study, regime classifications based on a perspective grounded in gender-based employment and care are perhaps the most instructive and germane. Feminist welfare state scholars critiqued the "three worlds" for ignoring the unpaid caregiving contribution of women in the calculus of family benefits, particularly with respect to children (Ray, Gornick, & Schmitt, 2010). They held that "decommodification" was a flawed metric when applied to women, since women were already decommodified as homemakers and caregivers. Instead, feminist researchers advanced a women's "employment perspective" which

argued that traditional welfare state theory failed to acknowledge that women would benefit from stronger attachment to the labor force (Ray et al., 2010, p. 197). Other feminist theorists emphasized a "care perspective" by claiming that women's unpaid caregiving work was an undervalued, subterranean component of the welfare state. The "care perspective" charged the state with providing cash transfers that would facilitate and dignify women's household care work (Fraser, 1994; Ray et al., 2010, p. 198).

In response to feminist critiques, Esping-Andersen's (1999) relied on the concept of "defamilialization" (p. 51) to describe the degree to which women's caring responsibilities are reduced by market provision or welfare state benefits and services. "Defamilialization" is generally a precondition for women's commodification, in that welfare states that practice defamilialization enable reconciliation between motherhood and women's careers by providing supports for working women (Esping-Andersen, 1999; Orloff, 1993). "Defamilialization" through state or market options also disentangles families from reliance on kinship networks for caregiving assistance (Esping-Andersen, 1999).

A melding of the "employment" and "care" perspectives by welfare state scholars yielded the recommendations that (1) women's labor force attachment and men's caregiving should be promoted in tandem; and (2) that the state should provide parental supports for childrearing, particularly for young children (Ray et al., 2010). Even though a quorum of scholars may agree on a general vision of ideal family benefit parameters that cover employment and care, researchers who study the work-family policies of welfare states often specialize in one of the following areas: (1) promoting women's labor attachment in relation to fertility and motherhood; (2) gender equality at home and in the workplace, (3) work-life balance afforded by employers, or (4) child development outcomes (Gornick & Meyers, 2003; Kilburn & Karoly, 2008; Misra et al., 2007; Morgan & Zippel, 2003; Ray et al., 2010; Saraceno, 2011; Williams, 2010). This study incorporates employment and care concerns from a somewhat different perspective – that of state investments in young children.

Scope of The Study

This study investigates the family policies of ten member countries of the Organization for Economic Co-operation and Development (OECD). Given the importance of the early years in shaping the trajectory of a child's adult life, the role of the state in assisting families is studied longitudinally across countries. The countries are grouped in pairs that serve as examples of five regime types and enable comparisons within and between pairs. Three of the regime types were codified by Esping-Andersen (1990) in his seminal discourse. Regime pairs from Southern Europe and East Asia have been added, providing a total of ten countries for the study. The primary period for empirical investigation extends from 2001 through 2011 and findings are documented in Chapters 5 and 6. Chapter 7 provides a larger historical context to examine trends in each country in the context of theories of welfare state change, and the concluding chapter offers some caveats about current policies and speculates about the future of early childhood investment.

As applied in this study, the social investment approach to human capital accumulation in young children assumes that early investments in child development will better prepare a child for formal schooling, and ultimately, that such preparation will lead to long-term educational achievement and job skill development that will enable the child to contribute to the tax base and the growth of the economy as an adult. In turn, economic success for more adults will reduce

poverty and inequality, improve social mobility, and perpetuate welfare state support in a virtuous cycle.

Based on the assumption that social investments in early childhood have various long-term benefits, this study analyzes the patterns of investment among welfare states and over time. Specifically we address the following theoretical and empirical question:

1) To what extent do patterns of public social investments in young children conform to theoretical notions of welfare state regime types?

Research question #1 analyzes the relevance of regime theory to the understanding of public investments in early childhood by exploring similarities and differences in child investment policies between countries that are often considered examples of the same welfare state regime type. Countries that are associated with different regimes, but which share a similar approach to early childhood investments, are also of interest.

In addition to examining investments in early childhood through the lens of regime affiliation, this study also explores the vulnerability or resiliency of social investments in young children in an era of diminished state-level fiscal capacities. With the threat of welfare state rollbacks in the wake of the global financial crisis, some theorists ponder future prospects for the social investment approach as a whole (Diamond & Liddle, 2012; Morel, Palier, & Palme, 2012). Such analysts wonder if social investment might suffer a deathblow or conversely present new opportunities for policy solutions that resolve the social risks of this century (Morel, Palier, & Palme). The question then arises for this study as to whether or not state agendas for investing in young children were diminished, sustained, or expanded in the recent period of economic contraction. Specifically, we ask the second question:

2) To what extent have patterns of welfare state investments in young children changed between the pre-recession and recession years of the current fiscal crisis?

The answer to research question #2 analyzes the extent to which investments in early childhood may have or have not been dampened by a retrenchment trend driven by a climate of austerity in response to the fiscal crisis of 2008.

In order to answer the research questions, this study investigates three types of social investments in children related to supports for parenting and child development from birth until entry to primary school, specifically: (1) child allowances; (2) paid parental leave; and (3) early childhood education and care. For each category of family benefits or services, a child investment index is created that calibrates expenditures and policy design components. Together, the three indices comprise an early childhood investment "package" of public investments in young children across the ten selected OECD countries. While there is precedent for constructing indices related to national policies for paid leave, child care, early education, and gender equality in a comparative context, the present study represents a novel attempt to combine government spending with policy design components in a single metric that can be tracked on an annual basis for three types of early childhood investments (Bettio & Plantenga, 2004; Gornick & Meyers, 2003; Ray, 2008; Ray, Gornick, & Schmitt, 2008)

The index series represents more than a decade of development among ten national early childhood investment packages. The three indices are based on a synthesis of empirical data regarding expenditures and policy design, undergirded by theories of welfare state regime types

and theories of welfare state change in relation to the care and development of young children. The larger aim of this study is to promote further examination of the potential promise of equalizing developmental opportunities for future generations, first as a strategy for sustaining and enhancing welfare state economies, and, ultimately, as a means for maximizing human capabilities.

Chapter 2: Paradigms of Early Childhood Investment

Overview

Several bodies of literature inform comparative approaches to public investment in early childhood. For welfare state scholars of gender equality, the reconciliation of women's dual roles as workers and mothers is a dominant conversation, while developmentalists focus on the foundations of healthy child development, and economists argue for the importance of mothers' labor attachment and human capital building in the early years. The study of specific family policies regarding parental leave, childcare, and early childhood education are discussed by researchers of the welfare state and are also the subject of research reports by organizations that specialize in these areas, such as the OECD, the International Network on Leave Policies and Research and others. Policies regarding child allowances receive less attention in the literature, although developmentalists and economists emphasize the harms of child poverty, particularly in the early years, and attest to the need for income supports.

Gender-oriented literature examines policies that promote or discourage mothers' labor attachment, work-family balance, and gender equality in the home and workplace. This line of inquiry focuses more on the parental role than on the children themselves in analyses of parental leave policies, the accessibility of public services and supports for childcare and early education, and financial assistance for childrearing. In contrast, literature regarding the intents and influences of public policy on children's developmental outcomes lie in another camp. A distinct separation between adult parenting roles as carers and earners, on the one hand, and their children's development, on the other hand, appears spurious to developmentalists concerned with public investments in young children (Saraceno, 2011). While individual studies often demand a narrow focus, a comprehensive picture of investments in early childhood warrants that investigations of women's (and men's) earner-carer roles as parents be complemented with a child-centered focus in which children are seen as beneficiaries of parental and government investments in time, money, and public services. Crafting family policy involves joint consideration of child well-being and labor market outcomes in order to satisfy multiple criteria - parental choice, social rights of parents and children, and gender equality for caregiving (Saraceno, 2011). The arena of family policy must integrate the answers to a series of questions: "[W]ho should care for very small children, how much, and under what conditions[?]" (Saraceno, 2011, p. 93). Mother-centered and child-centered aspects of mothers' labor participation are compared in *Table 1*.

Child-centered frameworks for public investments in children derive from intersecting literatures in economics, child development, and the effects of poverty. In the economic perspective, children are viewed as vessels for social investment in human capital that will ultimately produce adult contributions to the larger economy and other positive externalities from education and training. Developmentalists may also be interested in human capital building, but they often emphasize the child's perspective and experience, including the child's right to a healthy, productive life. The economic and child rights paradigms are contrasted in *Table 1*. Both the economic and developmentalist literatures share prominent concerns about the long-term negative effects of poverty and inequality, and how these factors shape adult life.

Table 1.

Literatures that inform public investments in early childhood

Paradigms of Mothers' Labor Participation		
Mother-centered	Child-centered	
Women as workers and mothers	Parental leave to care for newborns	
Gender equality at work and in the home	Care by the family vs. care provided by public or market services	
Work-family balance for mothers	Balance between parental engagement in work and caregiving, as experienced by the child	

Developmental Paradigms		
Building Human Capital	Securing Child Rights	
Parental leave; child and family allowances and tax credits	A right to developmental health and wellness	
Quality childcare and early childhood education	A right to early education	
"Public good" benefits to society and economic growth	Quality of life benefits across the lifespan	

This chapter provides a review of literature regarding gender equality, work-family balance, and forms of child investment from economic and developmentalist perspectives, with attention to concerns about poverty, inequality, and social mobility.

Gender Equality and Work-family Balance

When women entered the workforce in large numbers and divorce rates soared upward, feminism turned its attention to equality at home and in the workplace, and payment for childrearing that would acknowledge caregiving as "real" work (Morgan & Zippel, 2003). While researchers apperceive a trend towards greater father involvement in caregiving, and to a lesser extent, in housework, working women have largely retained primary responsibility for childrearing and maintaining the home despite expending more hours at paid work than before the post-industrial era (Baxter, 1997; Misra et al., 2007).

Child care is usually framed as a mother's issue, although empirical evidence is lacking about the benefits of fathers' involvement in care (Saraceno, 2011). Mother's employment sometimes enlists claims of child harm, while fathers' unemployment is seen as detrimental to children (Saraceno, 2011). Irrespective of controversy surrounding women's labor force participation while rearing young children, large numbers of women in contemporary welfare states are both carers and earners, although their priorities vary (Stryker, Eliason, & Tranby, 2006).

While gender equality and work-family balance issues overlap with concerns regarding investments of parental time and money in early childhood, gender-based studies are oriented primarily to the mothers' experiences. Gender-oriented researchers focus on the dilemma faced by women in their dual roles as earners and carers, and discuss childcare provision as a means of enabling women to work. Parental leave is similarly viewed in terms of labor force participation

and implications for women's career advancement (or the lack thereof) and future earning capacity. The "family" portion of work-family balance includes time devoted to children, however, the "balance" is typically about the mother's balance, not the balance for the child between time with and without mother. The bottom-line question from the child-centered perspective is found in debates about what constitutes the proper or optimal care environment for very young children (Saraceno, 2011). This controversial question in turn relates to the constraints that mothers' labor force participation places on their caregiver role (Saraceno, 2011).

Welfare states face a "fundamental dilemma" in valuing care without resorting to a gendered division of labor (Lister, 1994; Morgan & Zippel, 2003, p. 50). Since the late 1990s, feminist scholars of the welfare state find some resolution by harmonizing the "employment perspective" and "care perspective" within a "dual-earner/dual-carer" model that promotes women's attachment to the labor force, father's engagement in caregiving, and parental supports for childrearing (Crompton, 1999; Ellingsaeter, 1999; Gornick & Meyers, 2003; Lister, 2003; Pfau-Effinger, 1999; Ray et al., 2010; Sainsbury, 1999). The dual-earner/dual-carer model rests on the assumptions that mothers and fathers have primary responsibility for raising their young children through equal engagement in earning and caring, and that state interventions are necessary to support families during their children's earliest years (Ray et al., 2010). Contemporary families average about 1.5 earners per family, rather than two full-time earners, because women customarily reduce their employment to raise children (Lewis, 2001).

Many welfare states that acknowledge and support the dual-earner/dual-carer arrangement have polices that promote fathers' caregiving in tandem with mothers' earning role (Adema, Clarke, & Frey, 2015). Extended periods of time spent by fathers at home while their children are infants is correlated with closer father-child relationships, which are beneficial for children's cognitive and emotional development (Adema et al., 2015; Baxter & Smart, 2010; Brandth & Gislason, 2012). In addition, fathers who take leave report greater life satisfaction (Eggebeen & Knoester, 2001; WHO, 2007). Paternal leave-taking is associated with less stereotyping in the workplace and at home, and fathers' engagement in housework is related to higher rates of female employment (Adema et al., 2015; Eggebeen & Knoester, 2001; WHO, 2007).

Another support for the dual-earner/dual-carer arrangement is the availability of part-time work in a nation's economy. In Nordic countries, it is common for women to work part-time until their children are older, and part-time work for mothers is also prevalent in the United Kingdom (Saraceno, 2011; Thom, 2011). In contrast, most working women with young children in Italy work full-time and rely on grandmothers or other relatives for caregiving (Saraceno, 2011).

For lone parents, typically mothers, who function as sole carers and sole breadwinners, reconciliation of parenthood and labor force participation can be harder to achieve than for dual-earner families. Welfare states can mitigate the economic and care burdens faced by lone mothers by individualizing benefits and services, particularly through entitlements (Esping-Andersen, 1999). Nordic countries that provide individualized entitlements demonstrate high levels of lone mothers' labor force participation and low poverty rates.

In the United States, work-family balance is particularly difficult for people in low-wage work (Dodson & Albelda, 2012; Waldfogel, 2001). Low-wage jobs in the United States afford few, if any, employer-based benefits (e.g., paid sick leave or paid vacation) and often require non-standard, inflexible schedules that can fluctuate at the employer's discretion from week to week, thereby precluding parents from attending to many of their children's needs (Dodson &

Albelda, 2012; Smolensky & Gootman, 2003). Parents employed in low-wage work have a shortage of parental resources, in the form of time and money, which are considered necessary for promoting children's development (Gershoff, Aber, Raver, & Lennon, 2007). Low-wage lone parents in the United States face intensified challenges for work-family reconciliation (Dodson & Albelda, 2012).

Parental Leave Policies

Developmentalists consider parental time and family income devoted to children as forms of child investment. In part, family policies about parental leave express cultural and political values about women as mothers and women as workers (Morgan & Zippel, 2003; Saraceno, 2011). While some parental leave policies support the value that mothers should care for young children at home, others promote mothers' participation in the workforce. Once instituted, the policies serve to shape and reinforce parental decisions and behavior about combining work with childrearing in a path-dependent manner (Morgan & Zippel, 2003; Saraceno, 2011). Literature regarding maternity, paternity, and parental leave generally addresses the normative and gendered values associated with such policies, as well as the specifics of policy design, such as duration, replacement rates, and availability to fathers. In addition, organizations that devote substantial attention to parental leave, such as the International Network on Leave Policies and Research, publish annual reports that describe the details of policy changes on a country-by-country basis.

Leave policies can be differentiated by those that assist with care for newborns and infants for up to three to twelve months, and longer leaves that may extend for two to three years for each child (Morgan & Zippel, 2003). In addition to the duration of benefits, parental leaves across developed economies may also be distinguished by their replacement rates and by the extent of paternal leave benefits, if any (Gornick & Meyers, 2003; Ray et al., 2010). In addition, eligibility criteria structure how benefits are distributed in the population.

Parents faced with decisions concerning how to balance work and caregiving are constrained by family policies and their positions in the labor market. Since males usually earn higher wages, it is often more practical for fathers not to take leave if presented with a choice regarding who, in a dual earner couple, will stay home to provide care. By far, mothers are the predominant beneficiaries of parental leaves, but the benefits are typically far below wage replacement (Morgan & Zippel, 2003). Low-benefit leaves are particularly problematic for single mothers who already experience a high risk for poverty (Misra et al., 2007; Morgan & Zippel, 2003). Mothers who avail themselves of long parental leaves may return to jobs that pay less than they previously received, and their career trajectories and future earning potential may be compromised by temporary or part-time work and heightened risk of unemployment (Misra et al., 2007; Morgan & Zippel, 2003).

Leave-taking behavior is also rooted in class divisions despite political rhetoric about family "choice" (Morgan & Zippel, 2003). Options for parental leave and accompanying care allowances are more attractive to mothers who are married to men with stable employment and who themselves are low- to middle-income earners. Such women will be disproportionately disadvantaged by the negative effects of long leaves on their future employment (Simon, 1999), in contrast to mothers with higher socioeconomic status. For example, in Germany, France, and Norway, high-SES women are less likely to forego their better-paid, and perhaps more rewarding, employment to become stay-at-home caregivers (Morgan & Zippel, 2003).

The illusion of "choice" between work and caregiving is also a consequence of "socially-structured preferences" (Saraceno, 2011, p. 89). Saraceno (2011) finds that normative values supporting out-of-home care for children between age three and school-age explain the prevalence of services for this age group, while services for younger children are less common. In countries that promote mother-based caregiving at home, public childcare services and assistance are likely to be in short supply. Family policies that provide only modest fiscal assistance to support care for children reinforce class and gender stratifications (Morgan & Zippel, 2003, p. 77). In contrast, family policies that encourage mothers' work create a demand for affordable, quality childcare options (Saraceno, 2011). In many countries, maternity, paternity, and parental leaves are integrated within the larger framework of early childhood policy (Adema et al., 2015).

Poverty as a Developmental Issue

Developmental studies focused on harmful outcomes associated with childhood poverty may include only tangential references to the role of parental employment and income supports in combatting families' lack of financial resources. When poverty researchers do not discuss family policies or labor attachment directly, it remains for the reader to make the connection that more family income will lower the incidence and severity of child poverty. Nevertheless, the literature reviewed below on the effects of child poverty is illustrative for documenting the need for income supports, such as child allowances.

In developed economies, childhood poverty can be a major obstacle to building the human capital of young children. The OECD (2011) reports that the period between a child's birth and age three poses the highest risk of poverty for families with young children. This period of family formation also coincides with a critical period for parental career development (OECD, 2011). For about two-thirds of OECD nations, the risk of "deep or persistent" poverty, defined as two or more consecutive years, is heightened for single-parent families, or if one parent in a dual-parent household stops working (OECD, 2011, p. 55).

Welfare states that actively support mothers' paid employment through paid leave in conjunction with childcare services demonstrate lower rates of poverty for children, and particularly for children of single parents (Moller & Misra, 2005; Saraceno, 2011; Maldonado & Nieuwenhuis, 2015). Mothers' labor market participation is an important bulwark against childhood poverty. When both parents in the household work, children are protected from poverty in the event of a job loss or low individual wages (Gornick, 2004). Most children in poverty reside in households where at least one adult is employed (Danziger & Haveman, 2001; UNICEF, 2007). In many countries, parental break-up is one of the main causes of child poverty (Gornick, 2004). The risk of poverty is higher for lone parents for whom the difficulties of balancing work and family are intensified (Bonoli, 2005; Hakovirta, Kuivalainen, & Rantalaiho, 2013; Kilkey, 2000).

Socioeconomic disadvantage during childhood is associated with negative effects on cognitive and socio-emotional development (McLoyd, 1998), disparities in child readiness at school entry (Rouse, Brooks-Gunn, & McLanahan, 2005), and adverse long-term outcomes for physical and mental health (Brooks-Gunn, & Duncan, 1997). The timing of poverty relative to the developmental stages of a child's life is considered critical. Poverty experienced during the sensitive periods of infancy and toddlerhood, when the risk of poverty is highest, is understood by neuroscientists and developmental psychologists as particularly detrimental (Duncan,

Magnuson, Kalil, & Ziol-Guest, 2012). Even a few years of poverty in early childhood may have a substantial influence on development (Magnuson, 2013), particularly in relation to cognitive development and achievement skills (Duncan et al., 2012). Deep and persistent poverty during childhood is considered especially pernicious (Magnuson & Votruba-Drzal, 2009). Poverty at early stages of development is particularly worrisome given the rapid rate of brain development during a time when the family context, which differs considerably by socioeconomic status, provides the predominant stimuli and social environment for the child (Duncan et al., 2012; Magnuson, 2013). This concern is warranted by neurological evidence. Neural correlates of socioeconomic status (as measured by parental education and income-to-needs ratio) have been found by Noble, Houston, Kan, and Sowell (2012) in the structural development of discrete brain regions that pertain to "language, memory, socio-emotional processing and cognitive control" (p. 518).

By using preschool cognitive and socio-emotional capacities to model human capital development in young children based on the "best available" empirical studies, primarily conducted in the United States, Cunha et al. (2005, p. 704) "predict that economic deprivation in early childhood creates disparities in school readiness and early academic success that widen over the course of childhood" (Duncan et al., 2012, p. 91). Using a nationally representative sample of American children, Duncan et al. (2012) corroborate the model of Cunha and colleagues (2005) by attributing the statistical correlation between household income during childhood and most adult outcomes between ages 30 and 37 to the disadvantages associated with the accident of birth into a low-income family.

Researchers may often have difficulty isolating the effects of early childhood poverty on longer-term achievement and educational outcomes from other genetic, psychological, and social factors that distinguish poor from non-poor families (Mayer, 1997). Developmentalists implicate the central role of parents by two main pathways -- stimulation and stress – that are theorized as links between poverty and developmental outcomes (Magnuson, 2013). The dual pathways articulate how poverty experienced during childhood adversely affects life course outcomes through reductions in parental investments and increases in family stress (Magnuson & Votruba-Drzal, 2009). For example, parental investment is reflected in the purchase of books and toys and time spent in enriching family activities, particularly those that affect cognitive development (Gershoff et al., 2007).

The pathway of "stimulation" is broadly conceived as healthy nutrition, educational experiences and resources, cognitive stimulation in the home, and quality of child care, schools and neighborhoods (Magnuson, 2013), which are often a consequence of parental investments and decisions. In economic parlance, the "stimulation" pathway concerns "inputs" for the developing child. From an economic perspective, "time and money are the two basic resources that parents invest in children" (Magnuson & Votruba-Drzal, 2009, p. 157). In comparison to better-off families, many low-income parents lack purchasing power for enriching resources and cannot afford time to invest in their children's education (Dodson & Albelda, 2012). The inability "to finance the human capital accumulation of their children" (OECD, 2009, p. 167) is why Becker (1991) surmised that children from poor families fall behind their peers from more affluent families (Magnuson & Votruba-Drzal, 2009).

The "stress" pathway explanation of poverty effects focuses on family relationships and is most commonly explored by psychologists and sociologists. Stress pathway explanations of child outcomes involve interactions between parents and children with attention to parental stress, parental mental health, parenting styles, and the stresses of poverty (Duncan et al., 2012).

In contrast to research that focuses primarily on the effects of child poverty, other studies link poverty to welfare state policies. An investigation of eleven countries by Misra et al. (2007) examines the risk of poverty associated with four welfare state models for working mothers: (1) earner; (2) carer; (3) choice; and (4) earner-carer. Six of the eleven countries are represented in this study: the United States, United Kingdom, France, Germany, Norway, and Sweden.

The highest incidence of poverty, reaching extreme levels for single mothers, is found in the "earner" countries, comprised of the United States, Canada, and the United Kingdom, which promote mother's labor force participation while providing few supports for caregiving. The emphasis on mother's employment that typifies "earner" countries is not adequate to surmount poverty (Christopher 2002a, 2002b; Krysik & Nichols-Casebolt, 1997). The scarcity or meagerness of state subsidies or public services for child care is likely a factor for the high poverty rates of "earner" countries, as state provision of child care for children under age three in other countries is credited with reducing poverty rates, and affording substantial benefit for single mothers in particular (Misra et al., 2007).

The "care" model, adopted by Germany, Luxembourg and the Netherlands, most closely follows traditional, bifurcated gender roles of male breadwinners and women caregivers. The "care" model is "moderately successful" for mothers with partners, but single mothers demonstrate high poverty rates (Misra et al., 2007, p. 815). The "earner-carer" strategy, implemented in Finland, Norway, and Sweden, by which both men and women balance informal care with employment, appears to be the most successful for decreasing poverty among partnered and single mothers. In comparison, the "choice" strategy found in France and Belgium allows greater family discretion in regards to the split between parental earning and caring functions. However, the "choice" strategy is associated with poverty levels for mothers that were higher than those under the "earner-carer" model, especially for single mothers (Misra et al., 2007). After examining the four variations of welfare state models for working mothers, Misra et al. (2007) conclude that gendered roles of male provider and female caregiver continue to predominate in family policy, despite the strong association with poverty. The plight of young children of single mothers is particularly concerning (Maldonado & Nieuwenhuis, 2015). Across the eleven countries examined by Misra et al. (2007), 24 percent of single women with young children are found to live in poverty.

Investments in Early Childhood: Income Supports, Childcare, and Education

The call to invest in children is echoed by economists, developmentalists, and welfare state theorists. The recommended timing for investments in children is during the early years, paralleling the critical windows of development and the period of greatest likelihood for family poverty (Cunha et al., 2005). Even modest investments for several years can provide substantial benefit to disadvantaged children in regard to achievement, and possibly for health or behavior (Magnuson & Votruba-Drzal, 2009). Evidence suggests that early education yields the highest positive effects on cognitive development when begun around age two (Saraceno, 2011). While childcare studies have been conducted mainly in the United States to compare children who do or do not attend formal childcare services (Saraceno, 2011), based on international data sources, the OECD (2011) concurs that starting family investments when children are young is the most efficient timing for family assistance.

The now familiar concept "skill begets skill" conveys that skill formation in early childhood provides fertile ground for human capital investments during the school-age years

(Duncan et al., 2012, p. 91). Research in the United States indicates that early investments increase the efficiency of subsequent investments and are more efficient than remediating deficiencies later in the life course (Heckman, 1999; Heckman & Masterov, 2007).

Rigorous evaluations of more than twenty early childhood programs in the United States demonstrate improved short-term outcomes for children, with about eight programs from this group showing long-term benefits as late as age 40 (Kilburn & Karoly, 2008). The improved short- and long-term outcomes also represent a reduction in costs for remedial education, delinquency, crime, government income assistance, lost wages, and health care. On the basis of these evaluations, Kilburn and Karoly (2008) emphasize that evidence-based early childhood policies are capable of generating government savings and public goods that far outweigh most social investments from the public or private sectors. In contrast, research regarding children who participated in the federal Head Start program, implemented in the 1960s, conveys mixed and nuanced outcomes and benefit-cost analyses (Haskins, R., 1989; Zigler & Styfco, 2004). A critical review of "Head Start" and comparative early education research since 1965 notes flaws in research design and follow-up procedures (Barnett, 2004). While taking such limitations into consideration, Barnett (2004) nevertheless concludes that *Head Start* programs yield long-term gains in cognitive abilities and school achievement. Head Start studies demonstrate smaller effects in comparison to model programs, a finding that Barnett (2004) attributes to a lack of resources to compete with the higher quality and intensity of most model programs. In addition, Head Start is charged with providing a comprehensive slate of services, such as health and nutrition assistance, which are atypical of model programs (Barnett, 2004). In its long history, Head Start effectiveness has been constrained by insufficient funding; inadequate salaries to attract, train, and retain qualified staff; and lack of full-time, year-round service provision (Barnett, 2004; Chapel & Sugioka, 2004).

Substantiation and expansion of the American evidence base is still needed from other countries that have different welfare and education systems (OECD, 2011). Studies of early interventions in Britain and Norway demonstrate cognitive benefits for children during their school years and gains in their adult years from employment and earnings (OECD, 2011; Aakvik, Salvanes, & Vaage, 2005; Goodman & Sianesi, 2005). The OECD has underscored the importance of quality in the delivery of services for early childhood education and care through its *Starting Strong* series (2001, 2006, 2012c), and in ongoing case studies of individual countries (France, Germany, Japan, Korea, Norway, Sweden, the United Kingdom, and others). Access, affordability, and quality are three cornerstones of early care and education, and fiscal constraints can influence governments to sacrifice quality for access (Engel, 2014).

Due to the distinctive needs of each developmental stage of childhood, the OECD (2011) recommends that policies for children be conceptualized according to age ranges. Although current knowledge suggests that early childhood is more critical for adult outcomes than middle childhood or adolescence (Duncan et al., 2012), spending on early childhood is comparatively low, with the period directly preceding school entry garnering the least support (OECD, 2011). Across OECD countries, only 25 percent of family benefits and services are afforded to early childhood in comparison to 36 percent for middle childhood and 39 percent for late childhood up to age eighteen (OECD, 2011). While many countries still provide greater welfare supports to older children (largely explained by universal compulsory education), in half of the OECD countries since 2003, a larger proportion of spending has been reallocated to early childhood, with significant increases in child care services, early childhood education, tax allowances, and tax credits (OECD, 2011).

The benefits of investments in the early years have implications beyond a single generation. In all OECD countries, relative positions in labor income persist across generations (OECD, 2010). Wage persistence, defined as the correlation of sons' earnings with those of their fathers, is particularly high in the United Kingdom, United States, France, and Italy, and lowest in the Nordic countries, Australia, and Canada (OECD, 2010). Parental investment in children's human capital is considered one of the key factors for the intergenerational transmission of labor market earnings (Mazumder, 2012). Numerous studies have found that individual educational achievement drives wages and that "intergenerational educational persistence appears to be a key determinant of wage persistence" (OECD, 2010, p. 9). On the governmental level, education policies account for a substantial portion of observed differences in intergenerational social mobility across the OECD (2010).

Early childhood care and education may be able to facilitate intergenerational wage and social mobility (OECD, 2010). Empirical evidence from across OECD countries suggests that both higher levels of enrollment in early childcare and preschool and higher spending for these services are associated with a decrease in the influence of students' socioeconomic backgrounds on their secondary education achievement (OECD, 2010). Policies that promote the educational achievement of children from disadvantaged families, such as childcare and early childhood education, are likely to increase intergenerational wage mobility, and stimulate economic growth (OECD, 2010).

Early childhood investments also play a part in reducing income inequality (Adema et al., 2015). Large income gaps make it difficult for families in the bottom 40 percent of the income distribution to invest or sustain investments in their children's education, which limits their children's future earnings and hinders long-term economic growth (Adema et al., 2015).

Policy recommendations of economists and developmentalists concerning investments in early childhood converge on several points. In order to stimulate child development and promote adult productivity, families need protection from poverty, and particularly from deep and persistent poverty, in children's early years. Income supports and enhanced educational experiences should be targeted to those most in need (Magnuson & Votruba-Drzal, 2009; OECD, 2011). There is no equity vs. efficiency tradeoff for investments targeted for disadvantaged children, as such investments yield the highest economic returns, provided they are made at early ages (Cunha et al., 2005). Deficits in cognitive skills need to be addressed at very early ages in order to be effective, and non-cognitive skills also need to be nurtured (Cunha et al., 2005). Consequently, national priorities should redirect a portion of social investment from older age groups to the early years in order to support skill formation for vulnerable, disadvantaged populations that lack enriched environments for raising children (Cunha et al., 2005; OECD, 2011). Additionally, direct, in-kind services that are evidence-based should play a larger role in the policy package for young children (Duncan et al., 2012; OECD, 2011).

Consistent with the conclusions of economists and developmentalists, welfare state scholars Hemerijck (2013) and Esping-Andersen (2002, 2009) advocate a "comprehensive child investment strategy with a strong emphasis on early childhood development" (Hemerijck, 2013, p. 381). In their view, households with working mothers have replaced the male breadwinner model as the norm, and policies and labor markets should be based on principles of gender equality in order to enable both partners to share work and family responsibilities. Such a policy package would include "child-care services, incentives for mothers to work, and adequate income maintenance to take into account mothers' reduced labor supply and the cost of children" (Esping-Andersen, 1999, p. 182-183). However, policies should not be designed simply to assist

working mothers or reconcile parents' work and family life. The aim of a "child-centered social investment strategy" (Hemerijck, 2013, p.381) is to promote equitable life chances for the youngest citizens.

Chapter 3: Theoretical Orientations: Welfare States and Human Capital

Overview

The conceptual approaches for this study concern theories of the welfare state, with particular reference to post-industrial economic adaptations; changes in the gendering of work and family spheres; and human capital theory as applied to the social welfare policy profile known as the social investment state. Together, these approaches help to explain the evolution of family policy relative to early childhood over more than a century from the industrial to the contemporary period.

This chapter first provides a basic explanation of theoretical approaches to comparative analyses of welfare states. The next topic concerns theoretical positions about post-industrial adaptations required of welfare states due to the influx of women into the labor force and the consequent need for public provision of childcare services, parental leave, and other family supports. Human capital theory is then discussed in relation to the central role of investments in early childhood as a core element of the social investment state. Lastly, a child rights perspective is introduced as a possible sequel to human capital building in the evolutionary trajectory of the political and moral economy of the young child.

Theories of the Welfare State

Theoretical Orientations for Comparative Analyses

Offe (1984) observed that welfare states evolve from an ongoing friction among the systems of capitalism, the state, and the family. The market reigns supreme, but the state and family are "flanking subsystems" (Keane, 1984, p. 13) that simultaneously buttress and thwart the market. The three interlocking institutions of market, state, and family provide the overarching framework for conceptualizing family benefits conferred by nation states. Offe's (1984) analysis is well illustrated by several sweeping trends emblematic of post-industrial society. Since the 1970s, the internationalization of the economy, the flood of women into the labor force, and the subsequent need for new caregiving arrangements for young children have exerted exogenous and endogenous pressures on contemporary welfare states. While all countries are affected by these megatrends, the particular configuration of the public, private, and family sectors within each nation shapes the scope and generosity of its family benefit provisions.

Offe's (1984) basic logic of three institutions that interface through a process of continual tension is embedded within other well-established theories of the welfare state. In the "path dependency" perspective, the unique history and culture of each nation dictate the roles of market and state institutions, which originated at propitious moments in time and slowly evolved in tandem over the course of centuries, producing divergent configurations of welfare states. Path dependency relies on the assumption that beneficiaries of social assistance or market policies form constituencies that effectively prevent politicians from substantially modifying the status quo; institutional inertia and incremental changes in the same trajectory are the rule (North, 1990; Pierson, 1996).

Path dependency is a type of ecological theory, accounting for multiple, interacting factors, and time-dependent factors in the construction of the welfare state. In the path

dependency framework, actors function within a larger ideological, organizational, and social context. However, path dependency cannot account well for radical changes when they do happen, without resorting to an explanation typified by a contrasting theory based on political power, often described as "power resources" (Korpi, 1983). As a concession, Pierson (2002) notes that political officeholders may try to make substantial changes in order to prevent their successors from reversing policy. In a similar vein, North (Nobelprize.org, 1993) proposes that new institutional arrangements will likely develop when external forces pushing for the maximization of economic utility are sufficient to overcome the inertia of institutions.

Arguments from a "convergence" point of view stand contrary to the "path dependency" framework, and assert that many welfare states adopt similar policies when faced with similar structural challenges (Gilbert, 2004; Guo & Gilbert, 2007; Wilensky, 1975). For example, in response to major economic and social trends dating from the 1970s, most welfare states adopted variants of welfare state policies to encourage work, support women's labor force participation, and provide assistance for childrearing (Gilbert, 2004). "Power resource" theorists, on the other hand, find that political parties and class affiliations exert a powerful influence on the determination of state social policies, and that welfare states are capable of enacting substantive policy changes through the wielding of political might which pits labor and capital in dynamic opposition (Korpi, 1983). While path dependency opposes convergence, shifts in political power could either support or thwart convergence across countries.

Theorists also developed typologies to categorize the role of the state in social welfare provision. The search for an explanatory model for welfare state types reached a plateau with the publication of Esping-Andersen's (1990) treatise, *The Three Worlds of Welfare Capitalism*. In this work, Esping-Andersen describes three distinct patterns of welfare state regimes that differ by their degree of "de-commodification," i.e., the extent to which social policies compensate those who are not participating in the labor market. In Esping-Andersen's (1990) "regime" theory, welfare states produce their own systems of social stratification through political cleavages inherent in the beneficiary structure of social entitlements and benefit exclusions.

In Esping-Andersen's (1990) typology, the United States is an exemplar of the "liberal" regime. In reaction to the stratification of social classes in Europe, the American welfare state embraces ethics of freedom, self-reliance, and industriousness. Equal opportunity combines with competitive individualism in the marketplace, and unequal outcomes are assumed to inspire innovation. Consequent to competition, Esping-Andersen (1990) explains that unequal market outcomes result in social stratification: the group at the bottom relies on stigmatizing public relief; the middle relies on social insurance, and the privileged rely on market solutions. In the liberal economy, the freedom of the individual as a procurer of well-being, chiefly through the market place, is elevated above collective entitlements to social provision. Parental leave is unpaid at the national level, and most childcare is purchased in the market, with wealthier families having greater access to higher quality care (Gornick & Meyers, 2003).

Germany typifies the "conservative" regime profiled by status differentials that are preserved through traditional guild affiliations and other occupational hierarchies for the sake of harmonious social integration and the avoidance of class confrontations. In the conservative regime, the state functions as a protective patriarch to uphold church and traditional family roles, invoking values that originated with the notion of 'noblesse oblige' (Esping-Andersen, 1990). With respect to family benefits, extended care leave policies have popular support (Morgan &

Zippel, 2003). Motherhood is encouraged, while state-based day care and family services are underdeveloped (Esping-Andersen, 1990).

Esping-Andersen (1990) notes that Spain and Italy share features of the conservative model with Germany and France regarding the linkage of social rights to the social and employment status of citizens. However, Ferrera (1996) maintains that Spain and Italy confer a distinctive, pre-eminent role to the family, and particularly to women, in the provision of social care (Perez-Carames, 2011). Ferrera (2006) characterizes the Southern European welfare states as countries with strong intergenerational familial commitments that are invoked to compensate for the state's offtimes anemic social provision and its subservience to organized interests (Perez-Carames, 2011).

The Nordic "social democratic" regime, based on the Beveridge principle of the universal rights of citizenship and on equality of social status, is distinctive for valuing "an equality of the highest standards, not an equality of minimal needs" (Esping-Andersen, 1990, p. 27). In social democracies, the exercise of freedom is linked to the state's promotion of personal independence through the maximization of individual capacities. Social democracies exist in the Nordic states, and Sweden is often considered as the quintessential example (Esping-Andersen, 1990).

The social democratic model relies on the achievement of full employment, which permits a maximization of revenue to the state (Esping-Andersen, 1990). Revenue allocated for social welfare is universally redistributed through a flat-rate benefit principle. Thus, the social democratic welfare state configuration articulates a "fusion of welfare and work" (Esping-Andersen, 1990, p. 28). Unlike other regimes, social programs and services pertinent to childrearing in the social democracies make it possible for women to choose to work rather than be confined solely to unpaid household duties (Esping-Andersen, 1990). In contrast to the conservative and liberal regimes, the social democratic model elevated the value of individual independence above the bonds of family obligation, patriarchal benevolence, or shameful dependence on state 'charity' through the maximization of institutionalized rights of citizenship (Esping-Andersen, 1990).

The regime types defined by Esping-Andersen (1990) have long served as a mainstay of welfare state analysis. Much research has been conducted to test Esping-Andersen's "regime" theory, producing results that support, expand, or in some way challenge his categorizations. Additionally, as the governments of Asian and former communist bloc countries initiate or expand social benefits, researchers have used the regime approach to propose new categories of welfare states.

The East Asian welfare states of Japan and South Korea developed after World War II. In South Korea, social policies were coordinated with economic policies to maximize economic growth, while in Japan, conservative ruling parties favored constituent groups and regions with targeted social programs (Kasza, 2006; Ringen, Kwon, Yi, Kim, & Lee, 2011). Estevez-Abe (2008) finds that Japan's industrial policy is a partial proxy for Japan's social policy, in an arrangement best described as "neocorporatist" (p. 1).

In the course of welfare state development, Japan and South Korea have relied on adapting the social policies of other industrialized countries, and South Korea's social programs have grown to resemble those of welfare European welfare states (Ringen et al., 2011; Kasza, 2011). Both countries are low social spenders, and Japan is among the least redistributive of advanced industrialized nations (Estevez-Abe, 2008; Ringen et al., 2011). Despite some commonalities shared between East Asian nations, Kasza (2006) resists the descriptor "East Asian welfare model" on the basis of a lack of systematic scholarship on the subject (p. 117).

De-familialization as a Post-Industrial Adaptation

Feminist scholars criticized Esping-Andersen's (1990) analysis of welfare state regimes for failing to acknowledge the unpaid caregiving work of women as mothers and housewives, which enabled the edifice of state and market to endure (Sainsbury, 1994). It may be speculated that the significance of the family as a provider of social welfare was largely ignored because the caregiving role of women was for centuries taken for granted, an invisible and unpaid contribution considered as an immutable fact of nature, not as an economic asset: "Lord Beveridge and other builders of the post-war welfare state explicitly assumed that mothers would be housewives" (Esping-Andersen, 1999, p. 54).

In a later work addressing the post-industrial transformation of the economy, Esping-Andersen (1999) explained that current challenges to the welfare state were likely a consequence of the path dependency of the "broader institutional framework(s)" (p. 5) that combine labor markets, the family, and the welfare state. Reminiscent of Offe's (1984) systemic analysis, Esping-Andersen (1999) asserted that the challenges lie at the "interaction" (p. 4, author's italics) of labor markets, the family, and the welfare state as composite parts of social welfare. Finding commonality with a feminist orientation, Esping-Andersen (1999) argued that the household economy is "perhaps the single most important 'social foundation' of postindustrial economies" (p. 6) and the linchpin to any resolution of challenges to the welfare state.

The concept "de-familialization" is often used in comparative analyses of family policies to describe the degree to which households' welfare and caregiving duties are less dependent on family and kin, and relegated instead to the state or market (Esping-Andersen, 1999; Lister, 2003; McLaughlin & Glendinning, 1994). "De-familialization" either through state assistance or market purchase is generally a precondition for women's capacities to commodify their labor through paid employment (Orloff, 1993).

Esping-Andersen (1999) finds "the more welfare state, the less familialism" (p. 67). For example, the welfare states of Italy and Spain have been influenced by Catholicism, which emphasizes familial responsibilities and the principle of subsidiarity that only permits interference from the state as a last resort. In general, family policies are undeveloped in familistic countries (Van Kersbergen, 1995; Guerrero & Naldini, 1996; Saraceno, 1996), since familistic regimes are neither conducive to subsidies nor services.

According to Esping-Andersen (1999), the nations that were early adopters in extending childcare and other family services in the 1960s (Denmark and Sweden) and in the 1970s (Norway, Finland, Belgium, and France) are the only ones that exercise a strong commitment to de-familialization. While a number of countries offer near universal coverage for preschool kindergartens for children aged three to six (e.g., France, Germany, Italy, Spain, and Scandinavia), the family benefits of most welfare states are typically provided in the form of income transfers. Only in rare cases, such as the United States, is de-familialization primarily channeled through the market rather than through the state (Esping-Andersen, 1999).

The cost of care incurred by states and families has significant implications for the types of policies pursued by welfare states and associated policy outcomes. Building, maintaining, and staffing costly child care centers are far more expensive than providing care allowances (Morgan & Zippel, 2003). On the other hand, a downside of paid care leave is that more low-income, low-skilled women will avail themselves of maternal leave, thus reinforcing economic inequality (Morgan & Zippel, 2003). The pricing of childcare services is key. The market cost of childcare

would be prohibitive in Europe, and subsidies would generally be insufficient to offset such costs. Childcare is more affordable in the United States due to a large, low-wage labor sector that is a main provider of care services (Esping-Andersen, 1999). In this arrangement, however, low-income families are unable to purchase the services that the better off can access, and in places where the quality of available care differs, the wealthier will be able to afford higher-quality services. Hemerijck (2013, p. 381) concludes that the need for childcare cannot be adequately fulfilled by market options. Market solutions for outsourcing family care are likely to result in inequalities, and the price of market-based services will exclude those who most need them (Esping-Andersen, 1999).

Fertility presents another dimension of family policy. Low rates of fertility and female employment pose a serious threat to the viability of welfare states, as fewer workers are available to grow the economy and provide the revenue to support the safety net. Esping-Andersen (1999) posits that low fertility is related to women's inability to find work-life balance between the opposing demands of career and family. In the absence of supports for domestic work, women may choose to forego employment, while others may limit family size in order to pursue careers. Work and childrearing are more compatible in the Nordic countries where public supports for working mothers are more available and generous (Esping-Andersen, 1999; Gornick & Meyers, 2003; Waldfogel, 2001). Ironically, familism is detrimental to both fertility and female labor participation (Esping-Andersen, 1999).

Data on fertility rates across OECD countries are counterintuitive. The familistic countries of Italy and Spain have the lowest fertility rates across the world's nations, while the defamilialized Nordic regimes of Norway and Sweden display some of the highest fertility rates in Europe (Esping-Andersen, 1999, p. 67). One might expect that high rates of female employment would result in low rates of fertility, but the findings are contrary to this assumption. High rates of fertility are found in countries with high rates of female employment, while countries with low fertility have lower rates of female labor participation (Esping-Andersen, 1999; OECD, 2007, 2011).

Despite collisions between the institutions of the family and the labor market, poverty and social exclusion are not inevitable consequences of welfare state configurations (Esping-Andersen, 1999). Esping-Andersen (1999) concludes that adaptive responses have been made in the social democratic welfare states and in Australia in the early decades of the post-industrial era. By instituting de-familialization policies in these countries, poverty and inequalities have been minimized and employment has been maximized. In contrast, the liberal Anglo-Saxon regime has increased its reliance on the market in lieu of the state, while the Continental European countries, particularly the familistic Mediterranean nations, have largely preserved the basic configuration of their welfare regimes (Esping-Andersen, 1999).

Contemporary family policies are also explained by the "power resources" of political parties. As applied to parenthood, "power resources" analyses concern the exploitation of beliefs about women's and men's roles in work and caregiving for the purpose of advancing political and economic agendas. Politically charged policy decisions about how to allocate benefits between working and caregiving mothers are considered to lie at the crux of the labor vs. care debate (Morgan & Zippel, 2003). In the struggle for political power, gendered convictions enlisted during times of rising unemployment mask ulterior political motives to support parental leave policies that in effect decrease the participation of women in the labor force and ease fiscal constraints on welfare states (Morgan & Zippel, 2003). For example, rhetoric about expanding parental "choice" enables centrist and conservative parties to garner acquiescence from the left.

Political propaganda pushing "choice" pleases those who support maternal care, while also conjuring equalization of supports across working and stay-at-home mothers by constituents of disparate persuasions (Morgan & Zippel, 2003).

Human Capital Formation, the Social Investment State, and Child Rights

Another focus of welfare state adaptation to this century's norm of the dual-earner, dual-carer family is the role assigned to young children in the future of their nations' economies. In the resurgence of the social investment perspective in the 1990s (Hemerijck, 2013), proponents point to substantial rates of return on early childhood investments and may also argue for equality of opportunities across socioeconomic classes. In this view, the sustainability of post-industrial welfare states rests on a comprehensive child-centered social investment strategy, one that would educate more children to perform in a knowledge-based economy, to grow that economy, and to provide the tax base for social needs (Hemerijck, 2013). As described by Hemerijck (2013, p. 382), "the prime objective of [future] welfare provision must be to promote fair life chances for the young."

The development of human capital is the core principle of the social investment state (Esping-Andersen, 1999; Giddens, 1998; Hemerijck, 2013; Morel et al., 2012). Becker's human capital theory (1964) rests on the positive relationship between inequality in education and training and the resultant inequality in the distribution of income (Jordan, 2008). Earnings are understood as a function of the skill set that each worker can apply to the labor market (Duncan, 1984). According to human capital theory, an underinvestment will likely reap poverty and low wages.

Heckman (2000) expands Becker's (1964) notion of human capital by emphasizing the importance of non-cognitive social skills, such as self-discipline and motivation, which are known to determine success in life. One of Heckman's (2000) main points is that non-institutional sources of skill formation, and families in particular, play a critical role in fostering in their children the abilities required to succeed in the present economy.

The basic tenets of human capital theory as applied to early childhood policy closely mirror children's developmental processes. As described by Kilburn and Karoly (2008), unifying concepts of human capital theory include the following assertions: "[1] human development involves the interaction of nature and nurture; [2] human capital, skill, and capabilities involve multiple dimensions; [3] development occurs in multiple stages; and [4] later skills build on earlier skills" (p. 5). In addition, Heckman (2007) maintains that the existing stock of an individual's human capital increases the efficiency for internalizing subsequent human capital inputs. In Heckman's model, preventative investments made early in the lives of at-risk children are likely to be more effective than remedial measures administered later in the life cycle (Kilburn & Karoly, 2008).

Heckman and Masterov (2007) prioritize investments in young children from disadvantaged environments, with the aim of reducing inequality associated with being born into a poor family. Early interventions, such as high-quality childcare and early education, can reverse some of the harm attributed to disadvantage while supplying a high economic return beneficial to the child, the child's offspring, and society as a whole (Heckman & Masterov, 2007).

When economic analyses are applied to evaluate the costs and benefits of early childhood programs, "a growing body of program evaluations shows that early childhood programs have

the potential to generate government savings that more than repay their costs and produce returns to society as a whole that outpace most public and private investments" (Kilburn & Karoly, 2008, p. 11; authors' italics). Investments in early childhood generate both cost-savings and cost-benefits. For the welfare state, cost-savings refers to the positive rate of return on investment to government, while cost-benefits refers to savings for the individual and society, in addition to savings for the government (Kilburn & Karoly, 2008).

The social investment state hinges on a constellation of work and family policies that build the human capital of adults and children. For adults, social investments include activating the labor force and promoting gender equality at home and in the workplace to improve the human capital of working mothers and encourage fertility (Esping-Andersen, 1999; Morel et al., 2012). Initial social investments in children take the form of paid parental caring time during the first year of a child's life, and ensuring access to services for early childhood care and education. High enrollment and quality instruction in childhood care and education services are hallmarks of social investments that are essential for human capital accumulation during early childhood (Morel et al., 2012).

While the social investment approach of Norway and Sweden can be argued as a manifestation of path dependency, for other countries, investments in early childhood may represent an untried strategy for family policies, one that usually requires political leadership to forge new popular conceptions about the connections between early childhood foundations and adult economic success. A case in point is the political platform of the Labour Party in the United Kingdom in 1999, based on the philosophy of the "Third Way" which sought to eliminate child poverty by 2020 through investments and services intended to benefit families and their young progeny, and marginalized families in particular.

Human capital building as a social right can be contrasted with capability building as a human right. This contrast invites implications for social investments in early childhood. Political arguments rely on economic justifications – children as the human capital of the future, i.e., a "public good" worthy of caring and investment (Esping-Andersen, 2002, 2009; Saraceno, 2011, p. 91). The other argument is based on ethics – children as independent citizens with rights to developmental and material support irrespective of family membership (Lister, 2008; Saraceno, 2011; Therborn, 1996). The human capital perspective seeks to counter poverty and social inequality by improving the future life chances for children, whereas the children's rights perspective concerns the present needs of children for developing their capabilities (Saraceno, 2011). The economic and rights-based approaches each enlist collective social responsibility for the development of children.

Amartya Sen (1993, 1999) advanced a new conception of human rights based on the "Capability Approach," which can readily be applied to young children and their rights to develop. The Capability Approach concerns the freedom to do and to become. In this ethical philosophy, freedom is both the means and the ends. Freedom is contingent on the development of capabilities, and capabilities permit greater freedom. Hence, the philosophy equates development with freedom and conceives development as freedom, as indicated by the title of one of Sen's works.

The Capability Approach is at once individualistic and societal. Freedom operates at the level of individual agency, while society is responsible for creating the conditions, not only to allow freedom to occur through human development, but to actively promote freedom's flourishing. In the Capability Approach, people are active agents in creating their lives and in contributing to society.

While the Capability Approach depends heavily on the vision, ingenuity, and capacity of government to provide the groundwork for developing the freedom of individuals, the contributions of the market and civil sectors are also essential. Since market availability does not require distributive equity, it is essential that market-based opportunities are widely accessible (Sen, 1999). Through equalized access to opportunities provided by a wide array of social institutions, inequalities in outcomes will be lessened.

In practice, it is likely that the actual provision of services for very young children and financial assistance for their families would be quite similar for the human capital and child rights frameworks, regardless of the underlying rationale, as both value healthy development. The distinction is partially with respect to the end goal – one approach prioritizes benefits to society, and the other prizes benefits to the individual. Both approaches largely rely on the same bodies of evidence regarding child development, and the effects of poverty and inequality.

The human capital approach is oriented towards a social return on investment that also provides benefits to the individual. Children that are the beneficiaries of social investments are expected to become self-sufficient citizens who contribute to economic growth. Conversely, the Capability Approach aims first to benefit of the individual's quality of life, with secondary, positive externalities for society.

While nevertheless promoting the development of children's capabilities to boost life chances and reduce social inequality, the human capital framework may conjure the objectification of children as economic actors, and justify public "inputs" only when a societal benefit could later be derived during adulthood, perhaps as determined through a cost/benefit or return on investment analysis. The rights perspective, on the other hand, allows for additional public supports to serve less tangible, intrinsic experiences that promote "full development" (Saraceno, 2011, p. 92) and enrich the child's quality of life.

The human capital and child rights approaches may imply distinctions for the respective roles and responsibilities of the state and the family (Saraceno, 2011). Saraceno (2011) notes that the two frameworks can lead to different attitudinal valuations of family care vs. public care and early childhood education, especially for disadvantaged families. Early childcare and education services viewed in human capital terms could be perceived as compensation for a deprived childhood, or as an intrusive intervention that, in essence, denies children the experience of family care and time (Saraceno, 2011). In view of controversies surrounding cultural and individual valuations of models of early childcare relative to the work and caring roles of mothers and fathers, Saraceno (2011) advocates that policies should reflect gender equity for mothers and fathers and have sufficient options to allow for the diverse needs of children, the provision of equal opportunities, and the exercise of individual freedom. Such policies would entail redistribution as well as parental time for caring (Saraceno, 2011).

Despite the seeming polarization of children coolly objectified as future laborers in a human capital perspective pitted against children with subjective rights, human rights approaches as applied to early childhood inherently involve the building of human capital. While the Capabilities Approach is based in an ethical framework, Sen (1999) makes clear that building capabilities is a joint endeavor of the market, state, and civil sectors, and not solely based on political rights. In view of the expansions in human rights over the centuries, the child rights perspective may perhaps guide the future steps in the evolution of early childhood policy.

This study primarily focuses on the current human capital approach to examine aspects of early childhood investments relative to their promise for economic growth and the sustainability

of social welfare policies. However, the consideration of children's rights to develop their capabilities will be revisited in the concluding chapter.

The social investment approach is currently implemented in only a few countries (Hemerijck, 2013). A looming theoretical question for the future of the social investment state is whether it will withstand and surmount the current wave of austerity that is preoccupied with debt and deficit reduction. One recommendation is to forge ahead by creating a political and economic consensus that promotes long-term and child-centered social investment while also attending to short-term fiscal consolidation (Hemerijck, 2013). For the many countries constrained by the politics of austerity, it will likely be an upward battle to persuade fiscally conservative polities about the prudence of investing in young children. Perhaps, as Hemerijck (2013) suggests, compromises could be reached between attending to fiscal shortfalls and planning for long-term growth. The discussion in Chapter 6 concerning the sustainment or expansion of investments in child allowances, paid parental leave, and early childhood education and care in the aftermath of the recent fiscal crisis may shed some light on this prospect.

Chapter 4: Methods

Study Design

Research question #1 concerns patterns of welfare state investments in young children in relation to welfare state regime types, while research question #2 examines the extent to which investment patterns have changed before and after the fiscal crisis that began in 2008. This study addresses these questions by constructing a set of three indices that depict public investments in early childhood. The indices capture government expenditures for family benefits in conjunction with critical policy design components that indicate how benefits of such policies and programs are distributed in the population. The family policies that comprise the analytic focus include cash allowances for children; paid maternity, paternity, and parental leave benefits and birth grants; and benefits for childcare and pre-primary education. The indices are entitled: "Child Allowances," "Paid Parental Leave," and "Early Childhood Education and Care (ECEC)."

Policies related to work and family are thought to represent distinctive aspects of a country's priorities, and information would be lost by combining different types of programs into a single index (Misra, Moller, & Budig, 2007). For this reason, the indices are analyzed separately to allow for a close examination of monetary investment, investment of parental time, and access to educational and social stimulation, which have all received wide consensus in the literature as distinct types of supports for the developmental needs of young children. The indices are designed to calibrate longitudinal and cross-sectional patterns of government policy for ten member countries of the Organization for Economic Co-operation and Development (OECD) from 2001 through 2011.

While there is widespread consensus in many respects regarding regime affiliations based on the earlier works of theorists such as Titmuss (1974) and Esping-Andersen (1990, 1999), as noted in Chapter 3, there is also contention, particularly regarding the issue of the role of women in work and caring. When attempting to categorize countries by a regime typology, Esping-Andersen (1997) advocates for parsimony, while other researchers emphasize categories that suit their particular focus of attention, such as care provision, gender equality, and social rights regarding welfare and work, etc. (Sainsbury, 1994). In the parsimonious approach, Esping-Andersen (1997) bases regime categories on the interplay between (1) family self-servicing (which includes caring for children); (2) market activity (which includes earnings, work-related welfare, and purchased welfare); and (3) government provision (e.g., transfers and direct service provision). Accordingly, the selection of countries for this study is based on four wellrecognized regime types, due to their affiliation with similar constellations of welfare provision across the family, market, and state sectors: social democratic, conservative/corporatist, liberal, and familistic. Four pairs of countries are selected to serve as examples of each regime: Norway and Sweden (social democratic, Nordic); France and Germany (conservative, Central European); Italy and Spain (familistic, Southern European); and the United Kingdom and the United States (liberal). These commonly used categories fit reasonably well for the current focus of interest – investments in early childhood – but others may hold different perspectives.

In broad generalities, social democracies rely on the principle of universalism to provide state-based services and generous supports to care for and educate young children, while liberal countries depend on market provision to purchase care and educational services, with residual social assistance available for the most needy. Conservative/corporatist states are typified by the

subsidiarity principle, which holds that welfare supports are best provided at the family or community level, and by the stratification of state and corporate welfare by occupational status. In contrast, familistic countries entrust family networks to provide childcare and other forms of social welfare, and services in the public and market sectors are underdeveloped.

Of the examples selected for this study, the pairings of Norway and Sweden, and Italy and Spain are likely to meet with less resistance among theorists concerned with the plight of children than the pairing of France and Germany or that of the United Kingdom and the United States. While the latter sets of countries are frequently paired together in analyses of welfare states, France differs substantially from Germany in its approach to supporting families who are rearing children. Due to France's historic concern about national fertility levels, family assistance is provided through multiple government programs, while Germany steers families to care for children at home in obeisance to the subsidiarity principle.

In the case of the liberal regime pair, the United Kingdom diverged from the United States in the 2000s on the issue of human capital investment in children. At that time, the Labour Party spearheaded large investments in children and families as part of a national agenda to eradicate child poverty by 2020. In light of this development, Waldfogel (2010) nevertheless attested to the underlying similarities of the two liberal countries by proffering her study of Britain's bold new policies as a *cri de coeur* for United States policymakers to follow Britain's lead. Additionally, both countries continued to rely heavily on market provision for childcare, and costs in the United Kingdom were the most expensive of all European countries (Chung & Meuleman, 2014; OECD, 2011).

In addition to the examples of four well-acknowledged regimes, Japan and South Korea (hereafter "Korea") are selected as an East Asian pairing. As in the selection of the other countries, researchers may disagree with the joining of Japan and Korea as regime partners. However, Japan and Korea share similar histories as comparatively new welfare states that took root after World War II. For several decades, the national governments of both countries prioritized economic development and spent little on social expenditures (Ringen et al., 2011; Esping-Andersen, 1997). While some theorists view Japan as a unique type of welfare state, others are inclined to consider Japan as a hybrid, featuring a configuration of social policy also exemplified by Korea and other East Asian countries (Esping-Andersen, 1997; Kasza, 2006). The hybrid character of Japan rests in its stalwart familialism which constrains women to serve as the primary caregivers for children and the elderly, the underdevelopment of child care services, and residualism in social assistance to families (Esping-Andersen, 1997). With the addition of Japan and Korea, this study investigates early childhood investments by ten member countries of the OECD that serve as examples of five welfare state regimes.

Data Collection

Two types of sources are used for collecting data to construct the indices: (1) a large-scale, international database containing expenditure data for family programs, and (2) country-specific policy reports containing information about program design (e.g., eligibility and benefit structure).

Data Collection for Expenditures

Two sources are used for collecting expenditure data for the indices: (1) the Family section of the OECD Social Expenditures (SOCX) Database (OECD, 2014b – 2015b), and (2) OECD country-specific notes that accompany the SOCX Database, which contain descriptive information about social expenditure programs (OECD, 2014a – 2015a). Within the SOCX Database of each country, the section "Family" denotes family benefits. For most of the countries in this study, data regarding family benefits can be obtained as far back as 1980. Data selected for this study are family benefits from 2001 through 2011, the most recent year that data for all ten countries were available at the time of data collection. The "Family" designation contains separate expenditure data for multiple programs, expressed in millions, in national currency. In order to compare expenditures across countries, expenditure amounts for each program type for each year are converted into a percentage of national gross domestic product (GDP) for that year.

One of the initial tasks in preparing the data for the study is to determine the applicability of each individual program to the early childhood years, and its purpose as one of the following: a cash allowance or tax credit; a maternity, paternity, or parental leave benefit; a childcare benefit; or a pre-primary education benefit. For the purpose of this study, "early childhood" refers to children prior to the age of mandatory, primary education. For most of the countries in this study, age six is the age of compulsory education (France, Germany, Italy, Japan, Korea, Norway, Spain, and the United States). In the United Kingdom, primary schooling begins at age five, and in Sweden, primary education begins at age seven.

Data are included in the study for each program that meets the criteria for relevance to early childhood. Each program is then assigned to one of the three indices for family benefits (Child Allowances, Paid Parental Leave, or ECEC). Satisfaction of the criteria is often not evident from the titles of the family benefit programs themselves as they appear in the SOCX database, as the names of the programs often have multiple connotations. Frequently, country-specific notes (OECD, 2014a-2015a), policy reports (OECD, 2001-2011), and other ancillary sources were used to decipher program functions. It should be noted that birth grants are included in the Paid Parental Leave Index, since these payments are usually made concurrently with parental leave benefits around the time of birth, in contrast to child allowances, which often extend for much longer periods of time.

SOCX data were first extracted between March and May 2014 for a pilot of an early version of the indices with a subset of the countries. The SOCX data used in the current study were re-extracted between December 2014 and February 2015 to ensure uniformity across the full sample. Reference data for annual gross domestic products (GDPs) were obtained in November, 2014 from the *Reference Series* in the OECD SOCX database (OECD, 2014e).

Data Collection for Policy Design Indicators

The early childhood investment indices were designed to incorporate the premise, generally expressed in the literature, that expenditure data alone are not sufficient to define a welfare state program, but that other factors, such as the distribution of benefits throughout the population, are critical to understanding policy implications and outcomes. The indices thus blend expenditure data with components of policy design. For example, programs have eligibility requirements, criteria and parameters for differential benefit amounts, and directives

regarding the duration of benefits. Based on analyses of program designs in the literature and theoretical approaches addressed in Chapters 2 and 3 (e.g., gender equality; work and family reconciliation; theories of the welfare state; and human capital theory), several non-expenditure indicators that characterize the design of family benefit programs are included in the indices. The indices thus blend expenditure data with components of policy design. For purposes of this study, the term "policy design indicators" shall refer to all indicators for child allowances, paid parental leave, and ECEC *other than* government expenditures.

Several sources are consulted to construct policy design indicators for each of the three indices. The primary source is *Benefits and Wages*, a series of annual reports issued by the OECD for individual countries beginning in 2001 (OECD, 2001-2011). The *Benefits and Wages* series provides year-by-year details about eligibility requirements and entitlements for beneficiaries of national programs, as well as tax allowances or tax credits that are related to children. Due to the earliest available year for program descriptions in the *Benefits and Wages* series, the three indices regarding family benefits begin in 2001. For the ten countries included in this study for the years 2001-2011, a total of 110 *Benefits and Wages* reports are reviewed. (A professional translation service is used to enlist the services of a native speaker for the series of reports on France, which are only available in French.)

Additional descriptive sources are used to supplement the information in the *Benefits and Wages* series and provide explanations of family benefits related to maternity, paternity, and parental leave policies. These sources include the aforementioned set of *Country Notes* associated with the OECD's Social Expenditure (SOCX) Database (OECD, 2014a-2015a), which provide brief descriptions of major national social policies, and the OECD's *PF 2.5 Annex: Detail of Change in Parental Leave By Country* (OECD, 2012b), which offers a succinct, chronological history of a country's parental leave policies since initial enactment through 2012 (in most cases) for the countries considered in this analysis. Other supplementary sources include country notes published in 2008, 2011, 2012, and 2014 in the *International Review of Leave Policies and Research* (Moss & Korintus, 2008; Moss, 2011; Moss, 2012; Moss, 2014), and the country-specific reports of the Clearinghouse on International Developments in Child, Youth and Family Policies (2015) from various years, which provide explanations of family policies and early education policies individualized by country.

Additional information regarding early childhood education and care is obtained from Table C2.2 (Characteristics of early childhood education programmes (2011, 2012)) in *Education at a Glance* (OECD, 2014c); and Table 4.1 (Main institutional arrangements for provision of ECEC in OECD countries), Table 4.2 (Entitlements to ECEC provision across OECD countries), and Annex E (Country Profiles) in *Starting Strong II: Early Childhood Education and Care* (OECD, 2006).

Limitations and Scope of Data Collection

As noted above, the expenditures used for this study are those obtained from the OECD SOCX database. Expenditures for child tax credits and other tax-based programs for children were included in the analysis only when such data were made available to the OECD and included in the Family section of the SOCX database. For example, the *Earned Income Tax Credit* (EITC) of the United States is designed primarily (but not exclusively) to provide tax refunds to low-income working families with children, but program expenditures for the EITC are included in the "Other Social Policy Areas" section of SOCX. For the period encompassing

2001 through 2011, spending on the refundable portion of the EITC ranged between \$26.1 billion (2001) and \$55.6 billion (2011), approximately .002 percent and .004 percent of GDP, respectively, for the years indicated. Consequently, it can be argued that cash allowance expenditures in the United States are somewhat underestimated in this study, although it is not clear what portion of the EITC is actually used for investments in children. Studies regarding how families spend EITC tax refunds indicate that families are likely to spend EITC funds on basic needs such as housing costs, paying bills, debt repayment, and transportation-related expenses (Goodman-Bacon & McGranahan, 2008; Simpson, Tiefenthaler, & Hyde, 2010; Smeeding et al., 2000). Additionally, the EITC refunds are not based on child age, so the portion of benefits that flows to families with very young children is not readily apparent. Even with these limitations, it could conceivably be argued that EITC refunds free up other family funds to use for investing in young children. While the examination of other policy types for all ten countries (such as labor activation, housing, and health) in addition to family benefits would enhance the overall context of investments in early childhood, such an investigation is beyond the current scope.

Another limitation which may lead to underestimation of spending in the United States and possibly in other countries is that expenditure data in SOCX are reported in aggregate at the country level. Consequently, the SOCX data do not capture the expenditures of local, regional, or state governments for countries that do not rely exclusively or primarily on centralized benefit distributions at the national level.

In addition, the available data for cash allowances in the Family section of the SOCX database do not allow isolating the benefits that flow to children ages zero through five or six. Many countries that provide cash allowances for children extend benefits until a child reaches between fifteen and twenty years of age or older, if the youth is pursuing further education or vocational training. Italy also provides family allowances to low-income, childfree couples. It is important to keep in mind this limitation of the SOCX data source when interpreting the generosity of cash allowances for very young children. Additionally, it is beyond the scope of this study to generate a meaningful "per capita" cash allowance by country, due to the terms of eligibility and the benefit amounts, which may vary across age groups or by other criteria. Barriers were also encountered for achieving a per capita measurement for paid parental leave. Most paid parental leave policies pertain to children younger than age one or two. However, the narrowest category of annual population data available from the OECD for very young children groups together children from birth through age three. Additionally, the OECD's population by age data begin in 2002.

The selection of policy design indicators most relevant to the theoretical underpinnings of the research question was limited by the availability of annual descriptive information for the study years. While the selection of programs for the indices was carefully conducted, the relevance of some child allowance programs was particularly difficult to ascertain with a high degree of certainty. For a few programs for which no description could be found in the sources used, judgments regarding inclusion in the index could be fallible. There is less likelihood of problematic judgments for inclusion of paid parental leave and ECEC programs, as the preponderance of benefits for such programs apply mainly or exclusively to very young children. The policy descriptions for each country provided later in this chapter attest that a myriad of nuanced details regarding eligibility and benefit amounts defy simple categorizations even for the relatively small selection of indicators used in this study.

As noted above, the context of public investments in early childhood could no doubt be broadened beyond the indices used in this study. For example, measures regarding the quality of early childhood education would make a valuable contribution to the ECEC indices. A final limitation is the time-limited scope. The study period ends in 2011, while government policies for early childhood have continued to evolve.

Policy Design Indicators

In addition to cash expenditures as a percentage of GDP, each index incorporates policy design indicators that calibrate the distribution of benefits. For analytic purposes, coding values for each indicator range between zero and one. This section first explains assumptions that were used to design the coding schemes and then describes the coding values used for the individual policy design indicators in each index.

Assumptions Used in Setting Coding Values

Assigned values for policy design indicators intend to convey meaningful programmatic differences. However, while the coding decisions are based on concepts found in the literature, such valuations unavoidably entail subjective judgments. In order to align each indicator with the country-level, child-centered perspective of this study, the assignment of values for each indicator is based on the relative expected benefit to the development of children as distributed across a country's child population. Assumptions that underlie the assigned values include:

- Higher government expenditures relative to GDP for child allowances, parental leave, and ECEC are better than lower expenditures.
- Universal, per child benefits are better than means-tested benefits or benefits based on other conditions.
- Providing additional benefits for lone parents, larger families, and children under age three are better than not doing so.
- Parental leaves of one year or more are better than shorter leaves (with the caveat that long maternal leaves of several years have been associated with lower maternal earnings over the lifetime (Misra et al., 2007), thus affecting family income).
- Providing dedicated leave to fathers is better than not doing so, and four weeks of paternal leave are better than a shorter period.
- Providing tax relief for ECEC is better that not doing so.
- Providing the option of a paid benefit or tax relief for purchasing public or private care alternatives to government-sponsored, center-based care is better than not providing such options.
- Providing widely available public ECEC center-based care is better than having limited public ECEC or only private ECEC.
- Providing free ECEC is better than fee-based ECEC.
- Providing ECEC at younger ages by entitlement or custom is better than limiting ECEC to older ages or not having an entitlement or customary provision.

The assumptions above are provided in order to provide transparency regarding the valuations of the coding schemes for each policy design indicator. Other researchers may have

different perspectives. Spending more on children is usually valued more highly than spending less, although many would be quick to argue that what matters most is how effectively government spending is allocated. Additionally, not everyone would unequivocally agree that universal benefits are superior to targeted benefits. Titmuss (1976) writes that universal benefits equalize opportunities, and that targeted benefits in addition to universal benefits can provide further assistance to those who most need it. In addition, Korpi (1983) argues that universal benefits receive a higher level of political support and thus are more sustainable than targeted programs, which are more vulnerable to political divisiveness because they benefit only a small portion of the population.

With respect to early education and care, tax relief for ECEC expenses is highly dependent on the eligibility and benefit structure of each tax relief program, and in some cases, may not be applicable to low-income or poor families. For purposes of the experimental set of indices proposed in this study, tax relief is considered as one lever that governments can employ to lower ECEC expenses for families. Providing free, public ECEC services also saves families from out-of-pocket care costs, thereby reducing the risk of poverty. While providing various types of ECEC benefits increases families' choices about the care arrangements that are most suitable to each family's needs, researchers nevertheless argue that "choice" is not a panacea. Care options may reinforce stratification according to families' socio-economic levels and by the quality of care that children receive (Misra et al., 2007; Morgan & Zippel, 2003). Pitfalls of the "choice" approach are discussed further in Chapter 7. Greater prevalence of public ECEC services is valued more highly than reliance on private ECEC services for similar reasons.

Providing higher valuation of programs that benefit lone parents, larger families, and children under three is based on the research described in Chapter 2 which pertains to the risk of poverty for children of lone parents, and the critical developmental period for children younger than three years of age. Benefits to larger families are sometimes awarded on the basis of family size, or in the form of a per-child benefit that inherently increases benefits for larger families.

In the case of paid leave, promoting longer or dedicated leave for fathers is likely to benefit children by allowing fathers to spend more time with them, although much research remains to be done on this front (OECD, 2007). Longer paid leave durations for parents are valued higher than leaves of shorter duration. However, evidence suggests that leaves for mothers longer than one year may compromise their later earnings (Misra et al., 2007; Morgan & Zippel, 2003; OECD, 2007; Saraceno, 2011), perhaps straining family budgets in a manner that adversely affects children when they are still very young. For this reason, the coding scheme for this particular indicator does not rate paid parental leaves in excess of one year as any higher than leaves of one year. On a related point, researchers may prioritize the importance of children's time spent with parents higher than the benefits of providing public care options for very young children. Consequently, those holding this perspective may not find any detriment in waiting until a child approaches primary school age before using out-of-home public care services.

In summary, each of the assumptions noted above is not immune from reasonable arguments. However, the assumptions that underpin the coding valuations for the policy design indicators are also based on reasonable premises derived from the literature. Coding values were developed by an iterative process as each of the ten countries' programs were explored in order to customize coding categories that reflected the variation found across the sample. While the codes are intended to convey meaningful differences in generosity, researchers could debate the coding values assigned to each policy design indicator.

The remaining sections of this chapter provide detailed information about each country's policies that is used to assign coding values for the policy indicators. The information is presented by program type in the following order: Child Allowances, Paid Parental Leave, and ECEC.

Policy Design Indicators for the Child Allowances Index (#1)

Three policy design indicators are incorporated in Index #1 "Child Allowances" in addition to the quantitative expenditure data from the SOCX database. The indicators concern information regarding (1) the overall child allowance benefit scheme; (2) whether or not lone parents are provided with additional cash assistance and if such assistance is means-tested; and (3) whether or not additional assistance is provided to larger families, or families with children younger than three years old, and if such assistance is means-tested.

Coding values for the first policy design indicator included in the Child Allowances Index regarding the overall benefit scheme reflects a spectrum of distributional generosity, starting with an absence of benefits at the low end of generosity to more generous benefits based on certain conditions for eligibility (such as low income, an occupational affiliation, or the age of a child). Unconditional, universal benefits are coded as a high level of generosity.

The child allowance benefit scheme is rated by five categories from low to high: (1) no child allowance; (2) means-tested eligibility; (3) not means tested, but other conditions for eligibility (e.g., number of children or employment status); (4) eligibility is not means tested, but benefit amount may vary by income, child age, or sibling order; and (5) universal per-child benefit (not means tested).

Benefits designated specifically for lone parents are stratified as follows: (1) no benefits specific to lone parent status; (2) benefits are means-tested; and (3) benefits are not means-tested. Benefits that are designed to assist larger families or families with children younger than three years old are categorized as follows: (1) no benefits are specific to large families or children less than three years old; (2) benefits are means-tested; and (3) benefits are not means-tested, or are a mix of means-tested and non-means-tested benefits. Benefits awarded to families with more than two children are considered as benefits for "larger" families, whether or not benefits for the third or additional child(ren) are greater or less than the benefits awarded for the first two children. At present, this code does not specifically capture those countries that incentivize larger families by awarding higher benefits to the third and subsequent child(ren), a limitation that could be rectified in a future iteration of the coding scheme. However, the country descriptions that follow in this chapter detail which countries incentivize larger families by awarding more generous payments to the third and subsequent children. (The original intent of the code was to determine if larger families received more assistance to provide for the needs of a greater number of children, rather than examining whether or not countries incentivized larger families.) See *Figure 1*.

Figure 1. Codes: Child Allowances Policy Design Indicators

```
Child allowances benefit scheme
        No child allowance
.25
        Means-tested eligibility
        Other condition for eligibility (number of children; sibling order; family composition;
.40
        child age; past or current employment), but not means-tested
.66
        Not means-tested for eligibility; benefit amount may vary by income, child age, or
1.00
        Universal, per child benefit (not means-tested)
Child allowances designated specifically for lone parents
.50
        Yes, means-tested
1.00
        Yes, not means-tested
Child allowances designated specifically for larger families or child age <3
.50
        Yes, means-tested
1.00
        Yes, not means-tested, or mixed (means-tested and not means-tested)
```

With respect to the Child Allowances Index (#1), a high score is achieved by a combination of high government expenditures; universal benefits; non-means-tested benefits for lone parents; and non-means-tested or mixed (means-tested and non-means-tested) benefits for larger families or for children under age three.

Descriptions of Child Allowance Programs By Country, 2001-2011

The three policy design indicators for the Child Allowances Index (#1) are discussed together by pairs of countries for each regime type: France and Germany; Italy and Spain; Japan and Korea; Norway and Sweden; and the United Kingdom and the United States. Program descriptions are derived from the series *Benefits and Wages: Country Specific Information* (OECD, 2001-2011) unless otherwise indicated.

France and Germany

In France, the national family allowance funds (*Caisse Nationale d'Allocations Familiales* [CNAF]) are not means-tested, but families must have at least two dependent children to be eligible. The family allowance affords a substantive supplement for each additional child that is higher than the payment for the first two children combined, thus further benefitting larger families. France has several other cash allowance programs, including means-tested benefits for lone parents and for children under three years old. Benefits for lone parents (*Allocation de Parent Isolé* [API]) are intended to bridge the gap between family income and a base rate for the cost of living. (In 2009, API benefits were replaced by the *Revenu de Solidarité Active* (RSA),

an in-work welfare benefit to encourage labor force attachment.) The *Prestation d'Accueil du Jeune Enfant* (PAJE), enacted in 2004, provides means-tested benefits for families with one or more children under three years of age, and the *Complément Familial* (CF) provides means-tested benefits for families with three or more children with one or more children over age three. The PAJE replaces the former *Allocation Pour Jeune Enfant* (APJE) program.

Germany's family benefit is paid as a monthly tax refund (*Kindergeld*) for all children and is not tested by income. The family tax credit increases with the number of children after two children (2001, and 2009-2011), or after three children (2002-2008). In 2001, and again since 2009, the third child receives more than the first two combined, and subsequent children receive the highest per child refund. Since 2005, a supplementary, means-tested child allowance (*Kinderzuschlag*) is available for families to assist with the costs of child-rearing. Lone parents are eligible for an additional needs-based allowance that is contingent on the age or number of children (for a single child under age seven or for two or more children under age sixteen). (In 2005, the needs-based lone parent allowance in Germany became linked to the receipt of unemployment benefits.)

Italy and Spain

Cash allowances in Italy are provided to employees or former employees and are based on the number of family members, including the recipient, spouse, grandchildren, brothers and sisters. Married couples without children are also eligible. Italy's family allowance programs are means-tested against taxable household income. Means-tested eligibility criteria for lone parents are less stringent and their benefit rates (based on number of family members) are higher than rates for married couples with children. From 2007 through 2009, supplementary family allowances are implemented for lone parents with three, four, or five dependents, with higher supplements as the number of children increases, and lower benefits as income increases. One type of family allowance program, enacted in 1999, provides means-tested allowances to lone parent or married couple households comprised of at least three children under age eighteen.

In Spain, family allowances are means-tested. Like Italy, the benefit amount varies by income and family size. However, benefits in Spain are awarded per child, not by number of family members in the household. Since each child receives a benefit, larger families will receive more. Unlike Italy, Spain does not have a child allowance benefit specifically for lone parents.

Japan and Korea

Over the period 2001-2011, Japan gradually extends the ages of children covered by the child allowance from below age six up to age fifteen. Eligibility for the child allowance ("Jido Teate") is tested by an income cap. The amount of the benefit is based on three categories for the age and educational level of the child (under age three; over age three but prior to elementary school; and junior high school). The benefit amount is highest for children under age three, and lowest for children in junior high school. A higher benefit is provided for the third and subsequent child between age three and prior to elementary school. The relative benefit amounts across age categories vary through the years as the age limits for the allowance are extended. For a brief period in 2010 and 2011, the "Kodomo-teate" child allowance is not income-tested, and a monthly benefit is awarded for each child. Lone parents in Japan receive income-tested benefits

according to the number of children, up to age eighteen. Lone-parent fathers were added as beneficiaries of the lone parent benefit in 2010.

Korea targets its cash allowance program specifically to lone parents, and benefits are means-tested based on the number of family members and the combined value of income and property. Subsidies are also provided to grandparents raising grandchildren with special circumstances, such as unemployed or incarcerated parents, or economic hardship due to divorce, abandonment, or death of parents. Since 2009, cash allowances are also provided to mothers or fathers under the age of 25 who are heads of households. Mothers or fathers under age 25 receive either the National Basic Livelihood Security Benefits (NBLS) or child-rearing support if their income exceeds the NBLS.

Norway and Sweden

In the Nordic regime, Norway offers universal cash allowances for children up to age eighteen throughout the index period (2001-2011). In recent years, Norway provides a supplement for children in certain Arctic regions (Svalbard, Finnmark, and parts of North Troms). Lone parents receive a child benefit for one more child than they actually have. Lone parents are also entitled to a "transitional allowance" limited to three years after the birth of the youngest child. While pursuing education, the transitional lone parent benefit can be extended for two additional years.

In Sweden, the child benefit is awarded per child, and is not subject to a means test. The family qualifies for the child benefit for each child below age sixteen (or below age 20 if still at school). The per-child benefit is supplemented according to increases in the number of children for the second through the fifth (or subsequent) children. Sweden provides an extra cash benefit for lone-parent families for each child, which is not subject to a means test. This benefit is supposed to be paid by the absent parent, and the state becomes involved only if payment is not made. The policies for Sweden's child benefit and lone parent benefit have been consistent throughout the years covered by the index, 2001-2011.

United Kingdom and United States

The United Kingdom provides a universal child benefit that is not means-tested for children under sixteen (or until nineteen if pursuing full-time, non-advanced education). While all dependent children in the family are eligible for the child benefit, the oldest child receives a higher benefit amount. The universal child benefit is awarded throughout the index period (2001-2011).

The *Child Tax Credit*, a wastable tax credit for taxes to be paid, has become the most important source of benefits for dependent children in the United Kingdom since it was introduced in 2003 (OECD, 2001-2011). The *Child Tax Credit* can be claimed regardless of employment status. However, the *Child Tax Credit* is reduced for households that have incomes that exceed certain limits but are ineligible for the employment-related *Working Tax Credit*.

During the years between 2001 and 2004, lone parents in the United Kingdom receive a supplemental child benefit. From 2004 through 2007, lone parents are eligible for an additional, means-tested allowance under the *Working Tax Credit*. In 2008, new work-focused obligations are introduced for lone parents, and from 2008 through 2011, lone parent benefits become interrelated with the *Working Tax Credit* and *Child Maintenance* payments. By 2011, benefits

for children of lone parents are subject to a complex interaction with programs for labor activation, income support, and absent parent payments. Lone-parent benefits are linked to *Jobseekers Allowance* or *Income Support*, each of which may be affected by alimony or child support.

During the period covered by the index (2001-2011), benefits for children in the United States were administered through the means-tested program, *Temporary Assistance to Needy Families* (TANF) program. Unlike TANF's predecessor, the entitlement program *Aid to Families With Dependent Children* (AFDC), TANF was tied to labor activation. The TANF program structure was designed to encourage work and self-sufficiency, and benefits were subject to a federal lifetime limit of five years. However, benefits did not increase for children conceived after the initial determination of benefits was made. Eligibility criteria, benefit levels, and benefit duration were determined by the individual states. The example of Michigan, used in the OECD *Benefits and Wages* reports, indicated that benefit amounts were based on income and family size, with increments for additional family members. Consequently, larger families received more cash benefits. Lone parents were not awarded supplemental benefits, although lone parent families constituted a substantial portion of households served by TANF (Administration for Children and Families, 2012).

Values for the policy design indicators for each country for child allowances are based on the descriptions provided above and noted in *Table 2*.

Table 2.

Policy Design Indicators for Child Allowances (2001-2011)

Country (listed in order by regime pair)	Benefit Scheme	Lone parent benefits	Large families or children < age 3
France	.40	.50	1.00
Germany	.66	.50	1.00
Italy	.25	.50	.50
Spain	.25	0	.50
Japan	.25 (2001-2009)	.50	.50 (2001-2009)
	1.00 (2010-2011)		1.00 (2010-2011)
Korea	.25	.50	.50
Norway	1.00	1.00	1.00
Sweden	1.00	1.00	1.00
United Kingdom	.66	1.00 (2001-2004)	1.00
		.50 (2005-2011)	
United States	.25	0	.50

Policy Design Indicators for the Paid Parental Leave Index (#2)

Three policy design indicators are incorporated in Index #2 "Paid Parental Leave" in addition to the quantitative expenditure data for family benefits from the SOCX database. The indicators concern information regarding (1) the overall benefit scheme; (2) the combined duration of paid maternal, paternal, and parental leave; and (3) the extent to which paid leave is available to fathers. This study relies on the OECD (2007) definitions for maternity leave, paternity leave, and parental leave:

Maternity leave (or pregnancy leave): Employment-protected leave of absence for employed women around the time of childbirth, or adoption in some countries...Paternity leave: Employment-protected leave of absence for employed fathers at the time of childbirth...Parental leave: Employment-protected leave of absence for employed parents, which is often supplementary to specific maternity- and paternity-leave period (as above), and usually, but not in all countries, follows the period of maternity leave... (p. 105)

The benefit scheme for parental leave is stratified by four levels from low to high: (1) no paid benefits; (2) eligibility is conditional (e.g., by income, number of children, age of children, self-employment, or employee contributions); (3) eligibility is mixed, i.e., conditional and not conditional; and (4) universal. In this coding scheme, "mixed" refers to countries whose eligibility requirements differ across maternity, paternity, and/or parental leave with respect to conditionality or non-conditionality. Additionally, the ubiquitous eligibility requirement that an employee works for a fixed period of time prior to the receipt of leave benefits is not considered "conditional" and is not used to determine the coded value. On the other hand, the eligibility requirement that an employee must pay contributions to an insurance program in order to receive leave benefits is coded as "conditional."

The levels of combined parental leave duration are parsed by four levels of generosity from low to high: (1) no paid leave; (2) up to four months of paid leave; (3) from four months up to twelve months of paid leave; and (4) twelve or more months of paid leave. The extent of paid paternal leave availability is valued from low to high as follows: (1) no paid paternal leave; (2) leave time is available, but is not specific to fathers; (3) fathers have dedicated leave time for fewer than four weeks; and (4) fathers have dedicated leave time for four or more weeks. See *Figure 2* for the coding scheme for Paid Parental Leave.

Figure 2. Codes: Paid Parental Leave Policy Design Indicators

```
Paid parental leave scheme
        No paid benefits
        Conditional eligibility (i.e., employee contribution; income; not self-employed;
.33
        number of children; or age of children)
.66
        Mixed eligibility: conditional and not conditional
1.00
        Universal eligibility
Duration of paid maternal, paternal, and parental leave
0
        None
.33
        Up to 4 months (<16 weeks)
.66
        4 months up to 12 months (>=16 weeks and <52 weeks)
1.00
        12 or more months (52 weeks or more)
Paid paternal leave availability
        None
.33
        Yes, but not dedicated to fathers
        Yes, fewer than 4 weeks dedicated exclusively to fathers
.66
1.00
        Yes, 4 weeks or more are dedicated exclusively to fathers
```

A high score on the Paid Parental Leave Index (#2) is achieved by high government expenditures; a universal benefit scheme for eligibility; twelve or more months of combined maternal, paternal, and parental leave; and paid leave for four or more weeks that is dedicated exclusively to fathers.

Descriptions of Paid Parental Leave Programs By Country, 2001-2011

The three policy design indicators for the Paid Parental Index (#2) are discussed by pairs of countries for each regime type in the following order: France and Germany; Italy and Spain; Japan and Korea; Norway and Sweden; and the United Kingdom and the United States. The histories of parental leave policies are obtained from the OECD's (2012b) *PF 2.5 Annex Detail of Change in Parental Leave by Country* unless otherwise noted. For the benefit of the reader, additional historical context about paid leaves prior to the first study year (2001) is provided for most countries. As a reminder, the Paid Parental Leave Index includes maternity leave, paternity leave, parental leave, and birth grants.

France and Germany

In France, maternity leave and paternity leave have been universally provided since 2002, while parental leave eligibility is conditioned on the number of the children, the age of children, and/or family income. Parental leave benefits are allocated by family, not by individual parent, although parents have discretion about how benefits are divided between them (Fagnani & Boyer, 2011).

Paid maternity leave emerged in France in 1928, but was restricted to civil servants. Maternity leave became more widely available in 1946. By the 1970s, the payment rate for maternity leave climbed to 90% of earnings, and paid time for maternity leave reached sixteen weeks, including six weeks dedicated to the prenatal period. In 1985, a per-family child rearing benefit, the "Allocation Parentale d'Education" (APE), was awarded at a flat rate to parents on parental leave with three or more children, providing that the youngest child was under three years old. The APE was made available to the second child under age three in 1994. Under APE eligibility, parents could work part time for a reduced benefit.

During the 2000s, fathers in France were awarded fully paid, dedicated leave. In 2002, fathers became entitled to a total of 14 days of leave, including three days immediately following the child's birth and the remaining days to be taken consecutively within the next four months. In 2004, flat-rate payments (*Complement de libre choix d'activité* (CLCA)) during parental leave became available to parents for their first child for a period of six months, providing family income did not exceed a threshold. A higher, flat-rate payment (*Complement Optionnel de Libre Choix* (COLCA)) was introduced in 2006 for parents having a third child. Families with three or more children had the option of choosing either the CLCA or the COLCA benefit.

Maternity and paternity leaves in France are funded from health insurance through contributions from both employees and employers. Employees pay 2.35 percent and employers pay 13.10 percent of the total wage, including social contributions. The CLCA is paid by the social security program of the National Family Allowance Fund, while the CLCA and COLCA are paid by the local Family Allowance funds (*Caisse des Allocations Familiales* (CAFs)), which are financed by contributions from employers (Fagnani & Boyer, 2011).

The French paid leave system favors larger families, and is less beneficial to families with only one child. For the first child, the conditions of a lower income do not grant more than six months of paid parental leave after maternity and paternity leaves have been exhausted. Having a second child would extend the payment period until that child reaches age three. Other than the fourteen days of paternity leave, no other paid leave is reserved exclusively for fathers.

In Germany, two weeks of paid maternity leave prior to delivery were introduced as early as 1911. By 1968, the provision of maternity benefits became a joint responsibility of government and employers. A sickness insurance benefit was paid for fourteen weeks (six weeks before delivery plus eight weeks after delivery) by the social security system at a flat rate approximately equivalent to the average salary for female workers, which was supplemented by employers to cover the difference between the benefit and the mother's actual salary. Maternity benefits became more generous in 1979 due to concerns for maternal health. At that time, maternity leave could be extended for an additional four months, with the monthly benefit amount based on the average salary received in the three months prior to the start of leave. Self-employed mothers were not entitled to paid maternity leave (Blum & Erler, 2011).

Paid parental leave for married mothers and fathers and unmarried mothers was enacted in 1986 as a family entitlement, providing eight months of benefits in addition to 14 weeks of maternity leave. An added cash benefit was provided for six months for any new parent who worked up to a maximum of fifteen hours per week during the parental leave period. Flat rate payments were awarded during the first six months, and the final two months of benefits were subject to a means test based on family income. By 1993, paid parental leave had been extended up to twenty-two months.

Parental leave became fully income tested in 2001 with ceilings for eligibility, but permitted eligible parents to work up to 30 hours per week. Parents could choose a 10-month

leave period at a higher rate, or a lower-paid, 22-month leave period. Significant policy changes were instituted in 2007. Per-family payments for parental leave for all gainfully employed parents became income related at the rate of 67 percent of the parent's average earnings for the twelve months preceding childbirth, with minimum and maximum parameters for benefit amounts. Parents were eligible for this payment whether or not they took parental leave time, but payment was adjusted accordingly, to 67 percent of the difference in earnings before and during the leave period (Blum & Erler, 2011). Work hours could not exceed thirty per week in order to be eligible for benefits.

An extra payment was introduced for fathers who used two months of parental leave, resulting in a maximum payment period per family of fourteen months, including two months of maternity leave. Under this arrangement, one parent was entitled to twelve months of parental allowance and two months were dedicated to the other parent (OECD, 2011). The period of paid leave could be extended to as much as 28 months at a lower payment rate, provided that each parent used at least four months of leave.

In Germany, the mother's health insurance contributes to the funding of maternity leave, but employers provide most of the financing by compensating for the shortfall in the total cost of the benefits. The state covers costs for mothers without health insurance or who are unemployed. Germany does not have a statutory entitlement or funding program for paternity leave, and paid parental leave is financed through general taxation (Blum & Erler, 2011).

Italy and Spain

In Italy, mandatory, paid maternity leave was first instituted in 1950 with a daily allowance of 80% of earnings during leave periods that varied by employment sector from six weeks to three months before childbirth, and for eight weeks in all sectors after birth. By 1972, the period of leave was mandated as two months prior to childbirth and three months following birth. Maternal leave was historically provided to salaried women, and only later provided to self-employed women in 1988, paid at 80% of minimum wage for the same timelines as those stipulated for their salaried counterparts.

Parental leave in Italy has been an individual entitlement (Addabbo & Giovannini, 2011). Six months of paid parental leave for mothers following maternity leave was introduced in 1973, with a replacement rate of 30% of earnings. By 1977, fathers with a self-employed wife became eligible for six months of parental leave, also at a benefit rate of 30% of earnings. In 2000, each parent became entitled to six months of parental leave, and an incentive was provided to fathers: fathers who took three months of parental leave would be entitled to an additional month, for a total of seven months. In 2009, fathers became entitled to leave even if their wives were not working.

While parental leave in Italy is an individual benefit, the total amount of parental leave afforded to two parents (after five months of maternity leave) cannot exceed eleven months. Other than the incentivized time for fathers' parental leave, there is no other period of parental leave specifically reserved for fathers. Maternity and parental leaves are funded by contributions from employers and employees according to employment sector, and paid through the National Department for Social Welfare (Addabbo & Giovannini, 2011).

In Spain, paid maternity leave was integrated into the social security system in 1966, financed by employers and employees. At that time, maternity leave afforded 75% of previous earnings for six weeks. By 1989, paid maternity leave was extended to 16 weeks at full wage

replacement, with a maximum of ten weeks that could be reserved prior to childbirth. In order to qualify for paid maternity leave, mothers were required to pay social security contributions or be a recipient of unemployment contributory benefits.

In 1980, fathers were granted two days of paid paternity leave, paid by employers. This was extended to 15 fully paid days in 2007, with social security providing the added 13 days of payment. Fathers must have fulfilled contributory requirements in order to receive benefits for the extra 13 days (Escobedo, 2011).

Since 2008, Spain has also awarded birth grants as one-off lump-sum payments for lone parents, large families, or multiple births. Lump sums for lone parents and large families are means tested, but lump sums for multiple births are not means-tested. Spain does not provide any paid parental leave.

Japan and Korea

In Japan, paid maternity leave was introduced in 1969 at 60% of earnings for six prenatal weeks and six weeks after childbirth. By 1986, mandatory maternity leave had been extended to six prenatal weeks and eight weeks after childbirth. Maternity leave benefits were increased to two-thirds of average daily earnings in 2007.

Maternity leave in Japan is funded by the Employees' Health Insurance system, through contributions from employees, employers, local government and the state. Self-employed women, part-time, and casual employees who are enrolled in the National Health Insurance system (which includes a number of special national health insurance societies) are not eligible for the maternity benefit (Nakazato & Nishimura, 2012). There is no statutory paternity leave benefit (Nakazato & Nishimura, 2012).

Per-family payment for parental leave in Japan was introduced in 1995 at 25% of earnings until a child's first birthday, but parental leave could not be split between parents until 2010, when parental leave was made an individual entitlement. With this change, fathers were encouraged to take at least some leave, and parents could take leave simultaneously, even if one parent was not in the labor force. If leave was split between the mother and father, the family became entitled to a bonus of two months of additional leave (for a total of 14 months). In 2010, the replacement rate for parental leave was raised to 50% of earnings, with specified minimum and maximum benefit amounts. Eligibility for paid parental leave was conditioned on past employee contributions to Japan's Employment Insurance for at least 12 months during the two preceding years (Nakazato & Nishimura, 2012).

In Korea, maternity leave was enacted in 1987 for 60 days, fully paid and mandatory. By 2001, fully paid maternity leave was extended to 90 days, and paid parental leave was introduced at a flat rate payment until the child's first birthday. Monthly flat rate payments for parental leave increased in generosity in 2004 and 2006. In 2007, parental leave benefit payments became linked to income, paid at a 40% replacement rate, with upper and lower monthly limits. Parental leave was shareable between parents. Benefits were available on a part-time basis until the child reached three years old. Three days of fully paid paternity leave were introduced in 2008.

Norway and Sweden

In Norway, maternity and parental leaves are funded through general taxation, while paternity leave is funded by individual or collective employment agreements (Brandth & Kvande, 2011). Paid leave policies are universal for employed persons.

Norway's programs for parental leave expanded steadily through the years with respect to duration, benefit amount, gender egalitarianism, and designated leave for fathers. Fathers have been included in leave policies since 1977. By 1993, parental leave was 52 weeks, of which nine were mandatory for the mother (three pre- and six post-birth weeks). Four weeks were for the "father's quota," and 39 weeks were shareable between the parents. Parents were able to choose between a short option (a leave of 42 weeks paid at 100%) and a long option (52 weeks of leave paid at 80%). By 2011, the father's quota was extended to twelve weeks. The parental leave payment period was lengthened to 47 weeks at a replacement rate of 100%, or 57 weeks at an 80% replacement rate. Part of the leave time was allocated to the weeks before birth.

Norway has also provided birth grants continuously since at least 1988, and non-meanstested birth grants from 2008 through 2011 (OECD, 2014a – 2015a; OECD, 2011). Birth grant recipients have included lone parents and mothers who do not receive a maternity allowance.

Sweden has a long history of universal benefits for leave arrangements for employed parents. Three months of paid maternity leave were initiated as early as 1955. By 1974, parental leave had replaced maternity leave, permitting parents to share leave over a maximum of 180 days following the birth of a child. Through the 1970s, the duration of parental leave was extended to nine months paid at a replacement rate of 90%. Gender-neutral leave for the "other" parent was first introduced in 1980, which in effect provided fathers with ten days of paid leave at 90% of the basic social security insurance rate (SGI). In the 1980s, parental leave benefits continued to expand, ending the decade with 15 paid months.

Further policy changes in Sweden continued in the 1990s. Total paid parental leave became evenly split for mothers and fathers, with an option for parents to trade their allotments to each other, except for one month reserved for each parent as the "daddy" and "mummy" months. Benefit amounts fluctuated during the 1990s between a high of 90% of the SGI for "daddy" and "mummy" months to a low of 75% SGI for one year, followed by a flat rate benefit for the remaining three months. The 2000s saw policy innovations such as a "gender equality bonus" to incentivize both parents to use paid leave time. The cash bonus was awarded when one parent used leave after the parent with the longest utilization of paid leave returned to work. As early as 2002, the parental leave benefit was extended to 480 days, with a lower level of remuneration for 90 of the 480 days. The dedicated "daddy" and "mummy" months were doubled to 60 days.

Maternity, and parental leave benefits are paid by the Swedish Social Insurance Agency. Employers contribute 31.42 percent of earnings and 2.2 percent for parental insurance, and the government provides financing for any shortfall. Self-employed persons also contribute (Haas, Duvander, & Chronholm, 2011).

United Kingdom and United States

The United Kingdom introduced paid maternity allowance for 13 weeks as early as 1948. By 1994, maternity leave generosity had increased to 18 weeks. Six of the weeks were paid at a 90% replacement rate, and twelve weeks were paid at a flat rate. In 2003, the flat rate period for

maternity leave was increased to twenty weeks, and a flat rate payment for two weeks of paternity leave was introduced. In 2008, mothers became entitled to a total of 39 paid weeks of maternity leave, with six weeks paid at 90% of earnings, and a flat rate for the remaining 33 weeks. By the end of 2011, it was possible for a father to receive an unused portion of maternity leave, but only between the child's twenty-sixth week and first birthday. There was no paid parental leave benefit (O'Brien & Moss, 2011).

Maternity leave in the United Kingdom is financed by National Insurance Contributions from employers and employees. Employers can claim back an average of 93 percent of the payments from the nation's taxation agency and small employers can claim 103 percent. Paternity leave is similarly funded (O'Brien & Moss, 2011).

The Family Medical Leave Act (1993) of the United States, instituted during the Clinton Administration, provides an *unpaid*, job-protected leave for twelve weeks within a 12-month period to care for a family member, regardless of age, for a variety of circumstances, including the birth of a child. All public sector employees are eligible, while private employers and non-profit organizations with fewer than 50 employees are exempt (Kamerman & Waldfogel, 2011)

The United States does not have a national program for paid maternity, paternity or parental leave. In the absence of a paid leave program at the federal level, five states (California, Hawaii, New Jersey, New York, and Rhode Island) and Puerto Rico have initiated Temporary Disability Insurance (TDI) programs which cover about 25 percent of the labor force (Kamerman & Waldfogel, 2011). TDI benefits replace about half of lost earnings for ten to twelve weeks around the time of childbirth, including four weeks before and six to eight weeks afterwards (Kamerman & Waldfogel, 2011).

Values for the policy design indicators for each country for paid parental leave are based on the descriptions provided above and noted in *Table 3*.

Table 3. Policy Design Indicators for Paid Parental Leave (2001-2011)

Country (listed by regime pair)	Benefit Scheme	Duration of leave (maternal, paternal & parental combined)	Leave available to fathers
France	.66	1.00	.33 (2001)
			.66 (2002-2011)
Germany	.33 (2001-2006)	1.00	.33 (2001-2006)
	.66 (2007-2011)		1.00 (2007-2011)
Italy	1.00	1.00	1.00^{a}
Spain	.33	.66	.66
Japan	.33	1.00	.33 (2001-2009)
			1.00 (2010-2011)
Korea	1.00	1.00	.33 (2001-2007)
			.66 (2008-2011)
Norway	1.00	1.00	1.00
Sweden	1.00	1.00	1.00
United Kingdom	1.00	.66	0 (2001-2002)
			.66 (2003-2011)
United States	0	0	0

^aIn Italy, fathers are entitled to an extra month of parental leave if they use three months of non-designated parental leave time.

Policy Design Indicators for the Early Childhood Education and Care Index (#3)

This study adopts the OECD's (2015b) definition of early childhood education and care (ECEC) specified in the report *Starting Strong IV: Monitoring Quality in Early Childhood Education and Care*: "the term early childhood education and care (ECEC) includes all arrangements providing care and education for children under compulsory school age, regardless of setting, funding, opening hours or programme content" (p. 19). Further, the OECD (2014) publication *Education at a Glance* explains that early childhood education is "designed primarily to introduce very young children to a school-like environment" (p. 325), with the following characteristics:

...are in a center or school-based; are designed to meet the educational and development needs of children; are typically designed for children at least three years old and not older than six; and have staff that are adequately trained (i.e., qualified) to provide an educational programme for the children (p. 325).

Therefore, a distinction is commonly made between early childhood education, which refers to "the initial stage of organized instruction" (OECD, 2014, p. 320) and childcare (childminding), such as informal care in home settings and babysitting by relatives or neighbors. The definitions for ECEC, early childhood education, and childcare used herein include public and private services unless otherwise noted.

Index #3 is a composite of government benefits to families for early childhood care and education and six policy design indicators. The policy design indicators take into account (1) tax relief for household expenditures; (2) benefits for purchased public or private care alternatives to government-sponsored, center-based care; (3) the type of care (public or private) for age zero to two, and (4) from age three to six respectively; (5) the usual starting age for early childhood education programs; and (6) benefits targeted for lone parents.

Tax relief status includes tax credits and allowances provided by governments to lessen families' burdens for childcare and early education costs. Tax relief status is coded as a simple 'yes' or 'no.' The index also includes a 'yes' or 'no' indicator for monetary benefits that offset costs for purchasing public or private care as an alternative to government sponsored, center-based care. Such monetary benefits may include fee reductions or tax relief that assists with paid care.

Two policy design indicators for types of center-based care are divided by age group. For the ages from birth through two years old, the categories are: (1) private only; (2) mixed public and private; and (3) publicly available, with out-of-pocket costs. Costs for care are generally based on family income, the number of children, and/or the age of the children. It is common across the countries in this study for costs to be discounted if more than one child in a family is enrolled at the same center. For the older age group, from three years through five or six years of age, the categories are: (1) private only; (2) mixed public and private; (3) publicly available, with out-of-pocket costs; (4) mixed (i.e., fee-based services and free care); and (5) free.

The policy design indicator for the usual starting age for early childhood education is categorized by the following ages: (1) zero through one; (2) two; (3) three; (4) four; and (5) no usual starting age. This indicator refers specifically to organized educational instruction, rather

than childminding care. The final policy design indicator concerns benefits that are specifically intended for lone parents, whether through fee reductions, cash benefits, tax relief, or prioritized access to ECEC services. This indicator is coded 'yes' or 'no.' See *Figure 3*.

Figure 3. Codes: Early Childhood Education and Care (ECEC) Policy Design Indicators

Tax relief (tax credits, deductions, or allowances) for ECEC expenses No 1.00 Yes Paid benefit, fee reduction, or tax relief for purchased public or private care alternatives to government-sponsored, center-based care No 1.00 Yes Type of center-based ECEC, for children 0-2 years old Private only .50 Mixed public and private 1.00 Publicly available, with out-of-pocket costs (generally based on income, number of children, and/or age of children) Type of center-based ECEC, for children 3-5/6 years old Private only .25 Mixed public and private .50 Publicly available, with out-of-pocket costs (generally based on income, number of children, and/or age of children) .66 Mixed fee-based and free 1.00 Free Usual starting age for early childhood education^a No usual starting age .25 Age 4 Age 3 .50 Age 2 .75 1.00 Age 0-1 Additional consideration for lone parents through fee reductions, cash benefits, tax relief, or prioritized access to ECEC services 0 No 1.00 Yes ^aSource: Table C2.2 Characteristics of early childhood education programmes (2011, 2012) in Education at a Glance (OECD, 2014). This source provides data for 2011 and 2012. In cases where two ages were indicated in the table, e.g., "2 to 3," the youngest age was selected for coding.

The OECD's Benefits and Wages series (2001-2011) serves as the primary data source for coding tax relief status, benefits for care purchased as an alternative to government-sponsored, center-based care, types of ECEC services and supplemental consideration for lone parents unless otherwise indicated. While the *Benefits and Wages* series (2001-2011) provides annual data regarding family benefits for childcare, other sources are used to fill in information gaps regarding early education services. Descriptions concerning the types of available early education services are generally not provided on an annual basis, in which case the information obtained for coding is applied to all years in the study period. Data for the usual starting age for early childhood education are obtained from Table C2.2. Characteristics of early childhood education programmes (2011, 2012) in Education At A Glance (OECD, 2014, p. 328). This source provides data only for the years 2011 or 2012. However, the starting ages for early education in most of the countries in the study are relatively stable across the research period. Other sources for the ECEC policy design indicators include several OECD reports, the International Review of Leave Policies and Related Research (various years), the Clearinghouse on International Developments in Child, Youth and Family Policies (various years), and Britain's War on Poverty (Waldfogel, 2010).

A high score for the Early Childhood Care and Education Index (#3) is achieved by a combination of high government expenditures relative to GDP; the provision of tax relief; the provision of paid benefits for purchasing public or private care alternatives to government-sponsored, center-based care; publicly available ECEC for zero through two-year-olds; free ECEC for three- through six-year olds; the provision of early education at ages zero through one; and the provision of additional assistance for ECEC to lone parents or preferential access to ECEC by their children.

Descriptions of ECEC Programs By Country, 2001-2011

Descriptions for the seven policy design indicators for the ECEC Index (#3) are presented in the following sequence of regime pairs: France and Germany; Italy and Spain; Japan and Korea; Norway and Sweden; and the United Kingdom and the United States.

France and Germany

In France, the program *Allocation de garde d'enfant à domicile* (AGED) offset the cost of payroll taxes that supported the employment of a childminder at home for children under six years of age. In order to qualify, couples were required to reduce their professional activity. Eligibility was means-tested and the benefit amount varied by the recipients' resources and by child age. Higher benefits were provided for children younger than age three than for children between the ages of three and six. Another co-existing program was the *Aide à la famille pour l'emploi d'une assistante maternelle agréée* (AFEAMA), which provided benefits for a registered "maternal assistant" for children less than six years old. The benefit amounts for AFEAMA also varied by child age and family resources. Eligibility for AFEAMA in 2001 was not means-tested.

AGE and AFEAMA were both subsumed under the *Prestation d'Accueil du Jeune Enfant* (PAJE) in 2004 for children born that year or afterwards. Under PAJE, the availability of parental choices for the mode of childcare for children under age six was known as the "*libre choix du mode de garde*" and the option for parents to care for their own children under age

three was described as the "libre choix d'activité" (OECD, 2001-2011). Care supplements and out-of-pocket costs for childcare under PAJE were based on income, number of children, and type of care (childminder, registered "maternal assistant", or crèche). Households were required to have a minimum income derived from a professional activity in order to qualify for the "libre choix du mode de garde." Benefit amounts for the "libre choix d'activité" were based on whether work hours were completely suspended or partially reduced. Parents who chose to care for their children at home were ineligible for the family child allowance. Approximately eight percent of French children younger than three received center-based care in public or non-profit crèches (OECD, 2006). Fees were determined according to family income.

In Germany, childcare centers ("krippen") for children younger than age three served approximately three percent of that age group in former West Germany and thirty-seven percent in former East Germany (OECD, 2006). "Krippen" childcare services were provided primarily by churches in the private, non-profit sector and usually financed by public funds (OECD, 2006). Fees for center-based childcare varied regionally. Criteria included family income, household size, and the number of children in care. In 2010 and 2011, childcare was free in the last year before school enrollment for up to thirty hours per week.

France and Germany differed in their approach to ECEC services for children age three and above. In France, the free, educationally-oriented "écoles maternelles," enrolled nearly all children age three and older and extended services to children as young as age two, while Germany had a mix of conditional fees and free care (OECD, 2006). In Germany, the last year of child care before formal schooling was free up to thirty hours, but kindergartens, which enrolled 90 percent or more of children between ages three and six, were fee-based (OECD, 2001-2011; OECD, 2006).

France and Germany each offered tax relief for ECEC expenses, but only France offered family benefits for public or private alternatives to government-sponsored, center-based care (Clearinghouse on International Developments in Child, Youth and Family Policies, 2008, 2009; OECD, 2001-2011). Neither country offered specific additional consideration to lone parent families in the provision of ECEC services.

Italy and Spain

In Italy, the ECEC system was comprised of the "nidi d'infanzia" for children from three months to three years of age, and the "scuole dell'infanzia" for children between ages three and six. Publicly funded and generally publicly operated childcare provision in the "Asilo Nido" nurseries served approximately eight percent of children under three years old under varied fee arrangements for state and non-state providers across municipalities and geographical regions (Clearinghouse on International Developments in Child, Youth and Family Policies, 2005; OECD, 2001-2011; OECD, 2006). Care vouchers and modest tax reliefs were introduced in Italy in the 2000s to assist with the costs of a public or private crèche or a child minder (Ranci & Sabatinelli, 2014). In-kind benefits for center-based care were based on household income and composition, and children of lone parents or low-income families were granted priority access (OECD, 2001-2011; OECD, 2006).

Italy had below OECD average rates of enrollment in care programs for children under age three even though the right to care for this age group had been established in 1971 by national legislation (Addabbo & Giovannini, 2011; OECD, 2011). Universal, free early

education was offered in "Scuola Materna" preschools for children between the ages of three and six, and enrollment rates approached one hundred percent for this age group (OECD, 2006).

As in Italy, ECEC programs in Spain were structured according to two age groups, from birth until age three, and from age three onwards. In 2006, early education became an entitlement for the older age group and was free of charge for children ages three and older in both public and government-dependent private schools (Escobedo, Meil, & Lapuerta, 2011). In 2007/2008, enrollments in pre-schools exceeded 98 percent, while attendance for children younger than three was approximately 20 percent (OECD, 2001-2011). Out-of-pocket costs for childcare in the public sector for children younger than three were estimated at about one-third of the total cost, with local corporations, local "*Autonomous Communities*," and state governments funding the two-thirds shortfall (OECD, 2001-2011). While costs and eligibility for public childcare subsidies varied widely across the country, typical criteria included low-income status, lone parenthood, two working parents, and/or siblings in care. Over half of childcare services for children under three were provided by the private sector, and full fees were required in private childcare centers (Ibanez & Leon, 2014; OECD, 2001-2011).

Sources differ regarding information about tax relief in Spain for childcare expenses. The Clearinghouse on International Developments in Child, Youth and Family Policies (2004) indicates that a significant increase in tax deductions for childcare for children younger than three was instituted in 1998. The OECD's (2001-2011) *Benefits and Wages* series describes a "top-up" tax allowance in 2001 and 2002 to defray the educational costs of dependent children between the ages of three and sixteen. Based on the amounts of the dependent child tax allowances between 2001 and 2004, it appears that the extra "top-up" deduction provided for educational expenses in 2001 and 2002 was subsumed into the main deduction for dependent children in 2003 and 2004. The *Benefits and Wages* series also indicates tax deductions for childcare for children between ages three and six for the years 2005 through 2011, and notes that "*Autonomous Communities*" had authority to establish additional tax deductions for public, center-based care.

Japan and Korea

In Japan, municipal, center-based childcare in "hoikuen" nurseries was available for children under age six, but the government did not provide any associated family benefits or tax relief. However, childcare costs were based on a sliding scale according to central and local income taxes paid, with the highest income tax brackets paying the highest childcare fees. Out-of-pocket costs were also related to child age, such that services for children under age three were more costly than services for older children. For families who were in receipt of public assistance, there was no charge for childcare services. Since 2004, children of lone parents were given priority access for childcare places. Private daycare was also available at costs comparable to public care (Chesky, 2011). The Japanese government covered approximately 60 percent of the nation's cost of childcare (OECD, 2001-2011).

Customarily, Japanese children began education-oriented schooling in kindergartens ("yochien") at age three (OECD, 2014c). Of the students who attended early childhood education programs, 28.7 percent attended a public school in 2012 (OECD, 2014c). Subsidies based on need for kindergarten education fees were provided for children from ages three through five, and some families qualified for free services (OECD, 2014a-2015a; OECD, 2015b). Private kindergartens in Japan were more prevalent than public facilities, and fees for private

early education were approximately double that of their public equivalents (Chesky, 2011). While enrollments for kindergarten ages were higher than the OECD average, childcare enrollments for children younger than three were below average (Nakazato & Nishimura, 2012).

In Korea, government and private facilities provided childcare for children from ages zero through five and kindergarten from ages three through five. While fees in private facilities were higher than in publicly-supported centers, the private sector dominated the provision of ECEC services in Korea, and the total proportion of public provision was low (OECD, 2006; OECD 2001-2011). Of the 20 percent of children through age three who received child care services, approximately 87 percent were enrolled in private centers and 13 percent in public centers. The demand for care services for children age three and younger far exceeded supply (OECD, 2006).

Government-supported childcare in the public and corporate sectors followed a fee structure which provided benefits based on low income, child age, number of children in care simultaneously, and type of facility. Working mothers and working men without spouses qualified for tax deductions for childcare expenses. Since 2004, children of lone parents were prioritized for admission to childcare facilities. Starting in 2005, the government provided full childcare support to those who qualified for the *Basic Livelihood Security* program; low-income children aged five; low-income, lone-parent families; and other targeted groups. While care for low-income five-year-olds was free in principle, the demand among those who qualified far exceeded the supply of available spaces (OECD, 2006). Nevertheless, Korea established an entitlement to care for four-year-old children in low-income families in 2006.

In regards to early education services, the private sector accounted for 78 percent of kindergarten enrollments, for which parents paid 100% of the fees (OECD, 2006). Public sector kindergartens under the auspices of the Korean Ministry of Education served 12 percent of children ages three and four; 27 percent of children ages four and five; and 45 percent of children ages five and six (OECD, 2006). Parents were able to claim an "education fee deduction" for preschool expenses for each child.

Norway and Sweden

Norway had a diverse array of ECEC services available for young children, as well as tax deductions for families. ECEC policies were designed to support children's development, while also meeting the needs of working parents (Clearinghouse on International Developments in Child, Youth and Family Policies, 2005). Of children ages zero to six who received kindergarten ("barnehage") services, about 57 percent were enrolled in public centers, while the remainder were served by the private sector (OECD, 2006). A growing proportion of children were served by private agencies (OECD, 2006).

Childcare fees were based on income, and upper limits on costs were instituted even for private facilities in 2004. Fees were discounted for siblings who also received ECEC services. In addition, lone parents who pursued professional or educational activities were eligible for a supplementary child care benefit. An annual cash benefit was provided to parents of children ages one and two who did not attend a public kindergarten, or who only attended part-time. The amount of the benefit was based on the number of hours utilized at a public kindergarten, with more generous benefits for fewer hours of attendance.

State regulations in Norway mandated that public and private kindergartens offered discounts to low-income parents. National and municipal grants were designed to cover the

costs of these discounts, which were determined by the municipality or the kindergarten owner. Funding for ECEC services was provided by the national government (40 percent), municipal governments (30 percent), and parent fees (30 percent) (Clearinghouse on International Developments in Child, Youth and Family Policies, 2005). Parents paid an estimated 20 percent of ECEC costs, including fee caps for public and private providers (OECD, 2006).

Universal ECEC services, which had a dual mission of care and education, were available to all children from the age of one on a part- or full-time basis (Clearinghouse on International Developments in Child, Youth and Family Policies, 2005). Attendance in formal services was above the OECD average for children throughout the pre-primary years (Brandth & Kavande, 2011). Comparatively few children received informal care external to the formal system (Clearinghouse on International Developments in Child, Youth and Family Policies, 2005; OECD, 2001-2011).

Sweden provided extensive and universal support for publicly-funded ECEC services, which were fundamental to Swedish family policy (Clearinghouse on International Developments in Child, Youth and Family Policies, 2008). Along with Denmark, Sweden reputedly offered the highest quality out-of-home care and education available in the public sector (Clearinghouse on International Developments in Child, Youth and Family Policies, 2008). Full- and part-time preschools and family day care homes were options for all children of a working mother, or a mother who was a full-time student, as an entitlement from age one until age seven (the compulsory school age). While preschools were considered superior in quality to "familjedaghem" which provided family day care services (childminding), the alternative option was provided to accommodate family preferences and children's needs (Columbia Clearinghouse, 2008). Since 2001, children of unemployed parents have been guaranteed full-time ECEC services at ages four and five, and three hours per day at younger ages (Columbia Clearinghouse, 2008).

Fees for ECEC services were heavily subsidized by state and local governments and were not tax deductible. Out-of-pocket costs were based on a percentage of gross income that ranged from one to three percent. In 2002, Sweden capped fees for ECEC according to the number of siblings in care, and waived fees for children of low-income families (Clearinghouse on International Developments in Child, Youth and Family Policies, 2008; OECD 2001-2011). Of total enrollments in 2012, 82.9 percent were in public institutions, and 17.1 percent were in government-dependent private institutions (OECD, 2014c). While some private, for-profit programs did exist, they accounted for only three percent of children receiving preschool services (Clearinghouse on International Developments in Child, Youth and Family Policies, 2008). In 2011, 98 percent of four- and five-year-olds and 96 percent of three-year-olds received childcare services. Of children ages one and two, enrollments were 49 and 91 percent, respectively (OECD, 2001-2011). In Sweden (as in Norway), there was no gap in time between the end of paid parental leave and the start of publicly available ECEC services (Brandth & Kavande, 2011; Haas, Duvander, & Chronholm, 2011).

United Kingdom and United States

The United Kingdom embarked on a social investment strategy for children in the late 1990s with the goal of eradicating child poverty by 2020. Services and programs to promote school readiness for preschool children were viewed as an essential area for investment to support the anti-poverty agenda (Waldfogel, 2010). Compulsory education in the United

Kingdom began at age five, one year earlier than in the other countries in the study except for Sweden, where formal schooling began at age seven.

In 1998, free, universal early education, fully funded by the state, was introduced for four-year-olds for part-time, part-year services in any educational setting. These services were extended to three-year-olds in 2004. By 2006, childcare became a statutory entitlement for working parents (Waldfogel, 2010). Of the 96 percent of three-year-olds who were enrolled in early education, more than half attended private schools or services in the voluntary sector (Clearinghouse on International Developments in Child, Youth and Family Policies, 2008). In comparison, 98 percent of four-year olds attended early education, and 75 percent of this group were enrolled in public facilities (Clearinghouse on International Developments in Child, Youth and Family Policies, 2008).

Childcare for children younger than age three in the United Kingdom was provided by a wide variety of nurseries and childminders in the public, private, and non-profit sectors (Leon, Pavolini, & Rostgaard, 2014). Of these options, in the absence of comparable data for the United Kingdom as a whole, England evidenced the highest proportion of private childcare provision among European countries (OECD, 2006). The high cost of childcare in the United Kingdom, which exceeded that of any other OECD country, required substantial co-payments (Chung & Meuleman, 2014; OECD, 2011). Consequently, many lower-income families did not have the financial resources to purchase care and only a small portion of the under three age group received out-of-home care (Columbia Clearinghouse, 2008; Waldfogel, 2010). Most of these children were cared for by childminders in a family daycare environment (Columbia Clearinghouse, 2008).

Childcare tax credits were the main form of assistance for the zero to three age group. In addition, lone parents were afforded a modest level of supplemental childcare support. In order to encourage work, a special "child care assist" grant for lone parents was initiated in 2005 which defrayed the cost of care in the week preceding the start of employment, and non-working lone parents were able to sample a care provider for a week at no charge (Waldfogel, 2006).

In the United States, most of the ECEC provision was accomplished through the market and subject to market forces. The exception was kindergarten, which was largely free, universal, and offered at age five in conjunction with public primary schooling for the year prior to compulsory education. While the United States did not have a national system of early childhood education and care, ECEC services and supports were provided through child care subsidies, the *Child and Dependent Care Tax Credit* (CCDF), and the federally funded *Head Start* and *Early Head Start* programs, which primarily served children from disadvantaged families. In addition, many states amplified the federal tax credit and/or provided pre-kindergarten educational services. The OECD (2006) estimated that the federal government of the United States accounted for 25 percent of childcare costs, while state and local governments contributed 15 percent, and families shouldered the remaining 60 percent. While low-income families were the main recipients of CCDF childcare subsidies and *Head Start* services, lone-parent families were not targeted as a group for supplemental benefits at the national level.

The federal Child Care and Development Fund provided the primary benefits for childcare through block grants to the states for operating childcare subsidy programs. In addition, states were able to transfer a portion of their block grant from the federal cash assistance program, *Temporary Assistance to Needy Families* (TANF), to their CCDF program or spend TANF funds directly on childcare. Childcare assistance was also one of many social services offered to the states through the federal *Social Services Block Grant* (SSBG).

Under the CCDF benefits, qualified parents were provided with certificates or vouchers that could be used to defray the cost of childcare services, while some states also offered contracted providers. Parents were free to select any legal provider of their choosing that met basic health and safety standards required by states and tribes. A wide array of service options included: childcare centers, family members, neighbors, family daycare programs, and faith-based programs.

CCDF benefits were targeted to TANF recipients and other low-income families. Federal law required states to limit eligibility to families whose incomes did not exceed 85 percent of the state's median income and to prioritize families with "very low" income. Within this federal parameter, states had wide discretion to set other eligibility requirements and co-payments based on income and number of children. Some states waived fees for families under the poverty line.

Through the *Child and Dependent Care Tax Credit*, the United States provided tax assistance to working families who incurred childcare expenses. The amount of the credit was dependent on income, the number of children, and the amount of expenses. Qualified childcare expenses were capped according to the number of children. The *Child and Dependent Care Tax Credit* was non-refundable, meaning that families with no tax liability did not reap a benefit. While a low-income family was theoretically eligible for the tax credit, families with incomes under \$15,000 usually owed little, if any, income tax, and consequently were not likely to have been served by this tax reduction (Rohaly, 2007). Given the predominance of the market-based system for the provision of childcare, the amount paid by families varied greatly according to market forces and included those who paid full price and others who received full or partial subsidies.

In addition to subsidies and tax assistance, the United States *Head Start* and *Early Head Start* programs funded public, private non-profit, and for-profit agencies to provide education and other comprehensive child development services at the local level. The programs were free and primarily targeted three- and four-year-old children from disadvantaged families to improve school readiness through a holistic approach to healthy child development. In addition to *Head Start*, approximately thirty-eight states funded pre-kindergarten programs by 2008 (OECD, 2001-2011).

Care by relatives predominated among younger children in the United States, while center-based care was more common among children older than three years. In non-relative service settings for the zero to three age group, family daycare and ECEC centers comprised 90 percent of care provision. Approximately two-thirds of this care was provided by the non-profit sector, while one-third was marketed by for-profit vendors (OECD, 2006).

For children between the ages of three and six who were not yet in kindergarten, overall enrollments in center-based care in 2007 were approximately 55 percent. In comparison, the enrollment for children in this age group whose family income was below the poverty level was 41 percent (U.S. Department of Education, 2008; OECD, 2001-2011).

Values for the policy design indicators for each country for ECEC are based on the descriptions provided above and noted in *Table 4*.

Table 4.

Policy Design Indicators for Early Childhood Education and Care

Country	Tax Relief	Benefit for Purchased Care	Type of Center- based Care Age 0-2	Type of Center- based Care Age 3-6	Usual Starting Age for Early Education ^a	Lone Parent Benefit
France	1.00	1.00	1.00	1.00	.75	0
Germany	1.00	0	1.00	.66 ^b	.50	0
Italy	0 (2001- 2004) 1.00 (2005- 2011) ^c	1.00	1.00	1.00	1.00 ^d	0e
Spain	1.00	1.00	.50	1.00	.75	1.00
Japan	0	0	.50	.25	.50	0 (2001- 2003) 1.00 (2004- 2011)
Korea	0 (2001- 2003) 1.00 (2004- 2011)	0 (2001- 2003) 1.00 (2004- 2011)	.50	.25	.50	0 (2001- 2003) 1.00 (2004- 2011)
Norway	1.00	1.00	.50	.25	1.00	1.00
Sweden	0	1.00	1.00	.50	.75	0
United Kingdom	1.00	1.00	.50	.66 (2001- 2003) 1.00 (2004- 2011)	.50	0 (2001- 2004) 1.0 (2005- 2011)
United States	1.0	1.0	.50	.66 ^f	.25	0

^aSource: Table C2.2. Characteristics of early childhood education programmes (2011, 2012) in *Education At A Glance* (OECD, 2014d, p. 328). The data refer to years 2011 and 2012. In cases where two ages were indicated in the table, e.g., "2 to 3," the youngest age was selected for coding. This source did not provide an age for the usual starting age for early education in Italy.

^dSources: Clearinghouse on International Developments in Child, Youth and Family Policies, 2005; OECD, 2006.

bIn Germany, childcare costs are free for up to 30 hours per week in the last year before formal schooling, but kindergartens which serve children ages three to six are fee-based (OECD, 2001-2011; OECD, 2006).

^cTax reliefs and means-tested vouchers for out-of-pocket childcare fees for Italy are not mentioned in the OECD's annual *Benefits and Wages* series until 2005. The OECD (2001-2011) notes that rebates and means-tested vouchers are administered at the local level and not universally provided. Ranci and Sabatinelli (2014) indicate that care vouchers were instituted in 2000. Sabatinelli notes that tax reliefs were introduced in 2005 for the 2006 budget law (personal communication).

^eClearinghouse on International Developments in Child, Youth and Family Policies (2005) makes reference to eligibility priorities for *Asilo Nido* childcare for "children of lone mothers, poor mothers, and handicapped children" but does not provide a policy description or specify the relevant policy years. This source also notes that despite such professed priorities, of the six percent of children in the under age group who attend *Asilo Nido*, most are from middle- or upper-class families.

^fIn addition to for-profit and non-profit providers, *Head Start* and *Early Head Start* are free federal public programs that primarily serve low-income families. Eligibility quotas apply to families with higher incomes. Kindergartens for 5-year-olds are customarily free.

Index Construction and Weighting

Each index is based on a score between zero and one. In order to fit this range of scores, cash expenditures relative to GDP are rescaled to a value between zero and one using the empirical cumulative distribution function (ECDF). The ECDF forces a distribution between zero and one wherein distance between countries has meaning for a given year. As noted earlier, policy design components are also coded by values that range from zero to one to fit within the parameters for computing the index score.

In the results described in Chapter 5, expenditures for each program type are weighted to contribute 50 percent of the total index value, and the full complement of policy design indicators for each program type is also weighted to comprise 50 percent of the total index value. In other words, the index for each of the three program types depicts an equal weighting of expenditures in relation to the combination of policy design components. The equal weighting is chosen in order to illustrate the difference between a policy analysis limited to expenditures versus an analysis that assigns equal value to expenditures and distributive aspects of the program types. The 50/50 scheme may perhaps provide the best condition for detecting similarities in regime pairs for expenditures *and* policy design components. Results for expenditures are examined and plotted separately before being combined with the policy design indicators, thus enabling a comparison across countries in two conditions: (1) by expenditures only; and (2) by an equal combination of expenditures and policy design components.

While this study focuses on a 50/50 split in index values for spending and policy design, the weighting for each index could be adjusted to depict a different mix of expenditures relative to policy design components. Alternative weights for expenditures versus policy design indicators are included in Appendix A to illustrate how countries compare under different weighting conditions. Appendix A discusses and plots comparisons of countries when expenditures are respectively weighted 25 percent, 50 percent, and 75 percent of each index value. For each weighting scheme, the weighting of individual policy design indicators for each index must be adjusted to comport with the total value of all the policy design indicators for each program type. The series of indices for each program type displays how expenditures can be combined with policy design indicators in a single metric, regardless of the weighting mix chosen.

As noted above, this chapter presents results for the weighting scheme in which combined policy design indicators for each program type comprise 50 percent of the index value. Consequently, 50 percent of the index value must be allocated across the several policy design indicators for each individual program type (child allowances, paid parental leave, and early childhood education and care) so that the combined value of all the policy design indicators for each index totals 50 percent. Allocating values to each policy design indicator requires that a judgment be made about the relative value of each indicator, and researchers may well differ in

the weighting valuations chosen in this study for the individual policy design indicators used for each program type.

In addition to expenditures, the Child Allowances Index (#1) has three policy design indicators. The overall benefit scheme is prioritized and consequently weighted more heavily (30 percent) than the other two policy design components (benefits specific to lone parents (10 percent), and benefits to larger families or children under age three (10 percent)). (See *Table 5*).

Table 5. Index #1: Child Allowances Weighting Scheme

Indicator	Weights
Child allowance expenditures as a percent of GDP	.50
Child allowances benefit scheme	.30
Child allowances designated for lone parents	.10
Child allowances designated for larger families or children under age three	.10

Note. The set of weights totals 1.0

A similar weighting approach is applied to the three policy design components for the Paid Parental Leave Index (#2), i.e., the overall benefit scheme is deemed more critical and consequently weighted more heavily (30 percent) than the other two policy design components (duration of paid leave (10 percent) and leave for fathers (10 percent)). (See *Table 6*).

Table 6. Index #2: Paid Parental Leave Weighting Scheme

Indicator	Weights
Paid parental leave expenditures as a percent of GDP	.50
Paid parental leave benefit scheme	.30
Duration of paid maternal, paternal, and	.10
parental leave Paid paternal leave availability	.10

Note. The set of weights totals 1.0

There are seven policy design indicators for the Early Childhood Education and Care Index (#3) in addition to ECEC expenditures. In this index, the types of care available for children ages zero to two and children ages three to five/six are prioritized and weighted slightly more (10 percent each) than the usual age for starting early childhood education (eight percent), benefits specific to lone parents (eight percent), tax relief for ECEC expenses (eight percent), and

a paid benefit or tax relief for purchasing public or private care alternatives to government-sponsored, center-based care (six percent). (See *Table 7*). The relative dominance of these policy design indicators varies considerably across the sample, hence the range of assigned weights is compressed between .06 and .10. The type of care (whether private, public with a fee, or free services) is considered more akin than the other indicators to the overall benefit schemes for Child Allowances and Paid Parental Leave. Therefore, the two age-based indicators for the types of ECEC services are weighted slightly higher than the other indicators.

Table 7. Index #3: Early Childhood Education and Care (ECEC) Weighting Scheme

Indicator	Weights
ECEC expenditures as a percent of GDP	.50
Tax relief for ECEC expenses	.08
Paid benefit or tax relief for	.06
purchasing public or private care	
alternatives to government-sponsored center-based care	
Type of ECEC for children ages zero	.10
to two	
Type of ECEC for children ages three	.10
to five/six	
Usual starting age for early childhood	.08
education	
Additional consideration or benefits	.08
for lone parents for ECEC services	

Note. The set of indicators totals 1.0

Chapter 5: Welfare State Regimes and Early Childhood Investment Policies

Overview

The three indices for Child Allowances, Paid Parental Leave, and Early Childhood Education and Care allow comparisons across ten member states of the OECD between 2001 and 2011. In this study, the central analysis focuses on five pairs of countries as examples of welfare state regime types in order to assess whether or not regime pairs exhibit similar patterns of expenditures and policy design components for investing in very young children.

As noted in the Chapter 4, the study covers the period from 2001 through 2011, the years for which detailed policy descriptions are available from the OECD's annual *Benefits and Wages* series. Consequently, the policy design indicators include the same years. (Recall that, for purposes of this study, "policy design indicators" refers to all indicators that categorize government benefits other than the monetary outlays).

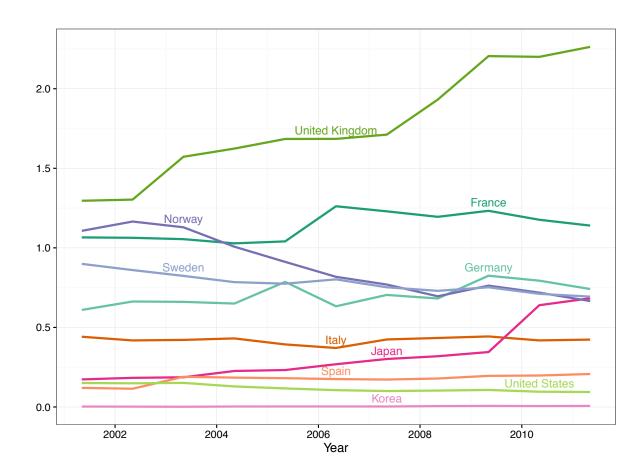
In this chapter, we report the findings of Research Question #1: To what extent do patterns of public social investments in young children conform to theoretical notions of welfare state regime types? Results are presented sequentially by program type: Child Allowances; Paid Parental Leave; and Early Childhood Education and Care (ECEC). For each program type, expenditures as a percentage of GDP are discussed first, followed by findings for the policy design indicators. The index for each program type is then presented, displaying how expenditures can be combined with policy design indicators in a single metric. The content of this chapter presents the results to the first research question without providing additional commentary. Findings are discussed in Chapter 7: Stasis, Change, and Challenges of Early Childhood Investment Policies.

Child Allowances (2001-2011)

Child Allowance Expenditures as a Percentage of GDP

The plot for child allowances as a percentage of Gross Domestic Product (GDP) reveals variation across countries from a low of near 0% for Korea in 2001 to a high of 2.26% for the United Kingdom in 2011 (see *Figure 4*). Over this period, expenditure levels in the United Kingdom display the greatest volatility, with a spread of nearly one percentage point (from 1.30% in 2011 to 2.26% in 2011), while Korea's low-level expenditures exhibit the greatest stability.

Figure 4. Expenditures for Child Allowances as a Percentage of GDP



Regime affiliations regarding cash allowances for children as a percentage of GDP are closest for Norway and Sweden when their spending levels diminish and converge from 2006 through 2011. For other regime pairs, similarities in spending levels and trends are limited. Korea and Japan occupy the low end of the distributional spectrum at the start of the period, but Japan's decisive upward trend soon widens the separation between the two countries. As regime partners, Italy and Spain each fluctuate little over the decade, but Italy's spending levels are substantially higher than those of Spain. While France and Germany demonstrate parallel trends from 2007 through 2011, they are quite far apart in spending levels throughout the period. The greatest incongruities are exhibited by the liberal regime pair of the United States and the United Kingdom, with the United States ranking ninth through most of the period in contrast to the distinctive performance of the United Kingdom as a high-spending outlier.

A series of t-tests indicates that the mean spending on child allowances over the course of the study period is significantly different (p < .001) between regime partners in each respective pairing except for the Nordic regime for which no significant difference is found (see Appendix B, *Tables 15-19*.) *Figure 5* provides a graphic illustration of the mean spending for each country in relation to regime partnerships and the total sample. The bar chart corroborates that Norway and Sweden are most closely aligned in spending levels, while the other regime pairs differ widely from their respective partners. Together, the significant differences in the means of

spending levels and the spending trends for all but the Nordic pair demonstrate that child allowance expenditures are not readily explained by regime categories.

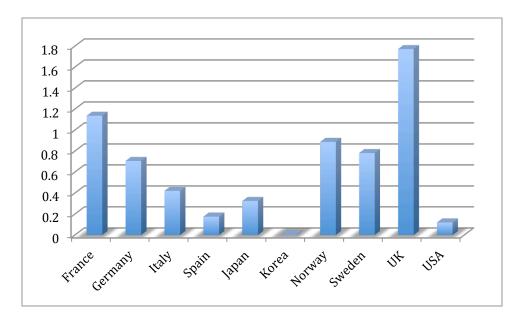


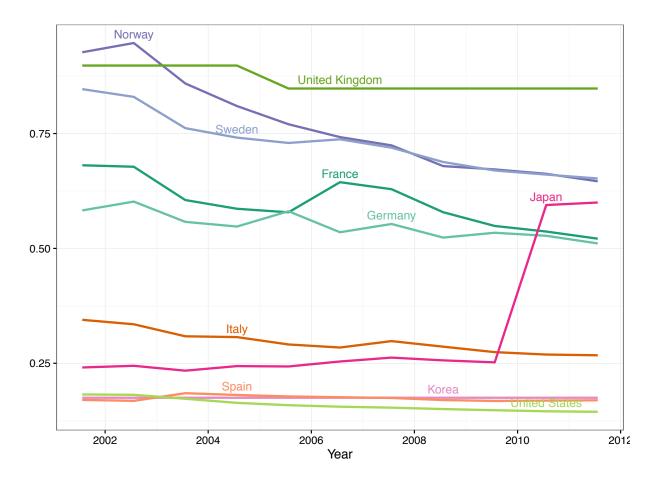
Figure 5. Mean Expenditures for Child Allowances as a Percentage of GDP

Index #1: Child Allowances

As noted in the previous chapter, a high score for the child allowances index is achieved by a combination of high government expenditures; universal benefits; non-means-tested benefits for lone parents; and non-means-tested or mixed (means-tested and non-means-tested) benefits for larger families or benefits for children under age three.

Regime similarities in scores and trends for the Child Allowances Index (*see Figure 6*) appear to hold well for high-scoring Norway and Sweden, and to a lesser extent for mid-range-scoring France and Germany. In comparison, Spain and Italy are less tightly paired. While Spain and Italy are both situated in the lower half of the rankings, their index scores are substantially different, with Italy rating higher than Spain. In relation to Spain and Italy, low-scoring Japan and Korea are more tightly paired, until Japan displays a marked upswing in 2010 to a rank just below that of the Nordic states. By far, the greatest rift between regime partners is evident by the vast differences between the United States and the United Kingdom in scores and rankings. The United States lies at the bottom of the index for most of the period, while the United Kingdom is in first place for all years except 2002.

Figure 6. Index #1: Child Allowances (expenditures and policy design are equally weighted)



A graphic depiction of the mean scores in the Child Allowances Index appears in *Figure* 7. In this bar chart, Norway and Sweden have the most similar mean scores, followed closely by the France/Germany pair. The remaining regime pairings display considerable differences between respective partners, with an exaggerated difference between the mean index scores of the United Kingdom and the United States. A series of *t*-tests for mean differences in scores for the Child Allowances Index confirms that Norway and Sweden are the only regime pair whose means do not significantly differ from one another. All other regime pairings evidence significant differences in mean index scores with *p*-values that range from < .001 through .019 (see Appendix B, *Tables 20-24*). In the Child Allowances Index, regime categorization alone does not fully explain the high-scorers and the laggards.

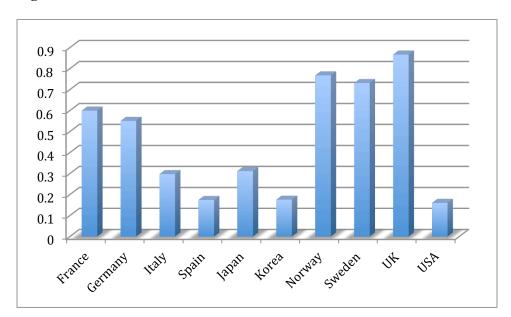


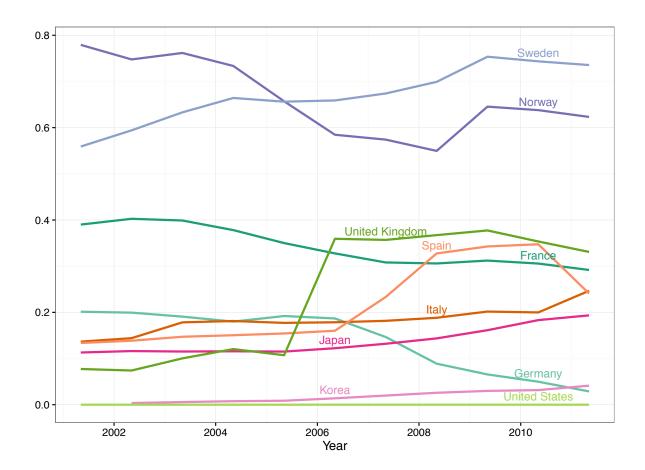
Figure 7. Mean Index Scores for Child Allowances

Paid Parental Leave (2001-2011)

Paid Parental Leave Expenditures as a Percentage of GDP

Paid parental leave expenditures as a percentage of GDP are depicted in *Figure 8*. The spending levels of Norway and Sweden as "high spenders" for paid parental leave are closer with each other as a Nordic pair than with other countries. While Norway and Sweden alternate rankings in the top positions, the regime pair of France and Germany shares an overall downward trend across the period. With few exceptions, the Nordic and Central European countries are far apart in spending levels from their respective regime partners.

Figure 8. Expenditures for Paid Parental Leave as a Percentage of GDP



At the low end of expenditures, regime differentiation is limited. Regime partners Japan and Korea exhibit a parallel pattern with a substantial gap in spending levels. (Expenditure data for Korea are missing in 2001.) In the liberal regime pair, the United Kingdom is distinct from the United States, which does not provide any national program for paid maternity, paternity, or parental leave. The difference between the liberal countries widens in 2006 and beyond when the United Kingdom sharply increases outlays for parental leave.

Italy and Spain are more tightly interwoven than any other regime pair until 2006, but they cluster with the United Kingdom and Japan during those years. In the latter half of the decade, Spain and the United Kingdom, respectively, make substantially larger investments in paid parental leave relative to GDP. In general, six of the ten countries are low spenders in the distribution relative to GDP, until some degree of divergence appears in 2006. However, the divergence is not based on regime type.

In the bar chart displayed in *Figure 9*, Norway and Sweden are nearly identical in high mean spending levels for paid parental leave across the study period, while the gap between Italy and Spain is somewhat wider. Strong contrasts in spending levels are indicated for respective partners in the other regime pairs. Further analysis using a series of *t*-tests indicates that indeed the differences between the means for paid parental leave expenditures by Norway and Sweden

are not significant. Neither are mean differences significant for Italy and Spain. However, differences in mean spending levels are significant for the other regime pairs (p < .001, CI = 95%). (See Appendix B, *Tables 25-29*.)

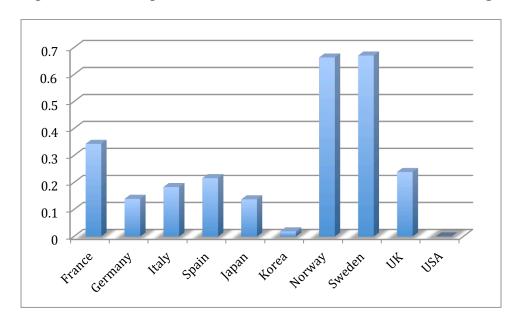


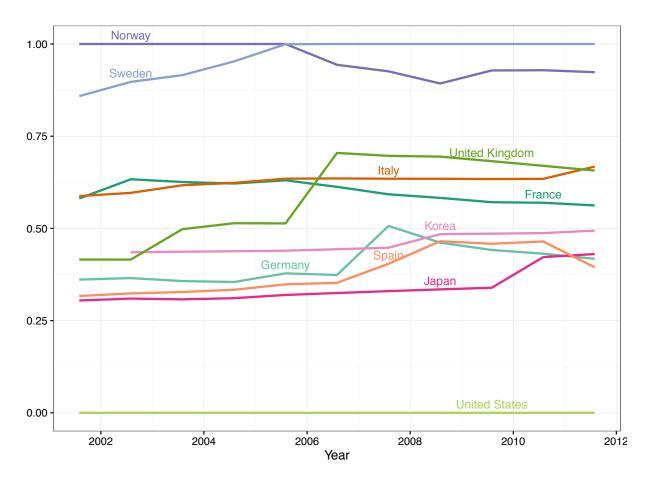
Figure 9. Mean Expenditures for Paid Parental Leave as a Percentage of GDP

Index #2: Paid Parental Leave

A high score on the Paid Parental Leave Index (#2) is achieved by high government expenditures; a universal benefit scheme; twelve or more months of combined maternal, paternal, and parental leave; and paid leave for four or more weeks that is dedicated exclusively to fathers.

When expenditures for parental leave as a percentage of GDP are combined with policy design indicators into the index, the United Kingdom emerges as the most dynamic of the ten countries for expanding paid parental leave, followed closely by Germany and Sweden (see *Figure 10*). The fourth largest expansion is accomplished by Japan. Sweden and Norway present as a bona fide regime pair, at similar high index levels throughout the period (between .9 and 1.0 for all years except 2001) that are consistently far above those of the other eight countries. However, Sweden's generosity for paid parental leave increases, while Norway's somewhat diminishes.

Figure 10. Index #2: Paid Parental Leave (expenditures and policy design are equally weighted)



Italy differs considerably from Spain in the index for paid parental leave, and by 2011 Italy achieves the highest score of the mid-range countries, edging just above the United Kingdom. Italy displays a consistent performance with a gradual and slight increase over the period. In Central Europe, France and Germany lack congruence until 2007 when they align more closely before sharing a gradual and parallel downward slide through 2011.

The separated, but parallel trend lines of Korea and Japan move towards convergence in 2010 and 2011 when Japan's generosity increases, suggesting a possible regime affiliation. In contrast, the United States and the United Kingdom are anomalous with respect to regime pairing for paid parental leave policies. Due to the lack of any paid benefits in the United States for maternity, paternity, or parental leave, its zero score throughout the period has no resemblance to the scores of any other country, including that of the United Kingdom, its liberal regime counterpart. The United States is an outlier.

When the performance of all ten countries regarding paid parental leave policies are considered from 2001 through 2011, the years 2006 through 2008 appear to be a time of pivotal change. During these years, the United Kingdom, Germany, and Spain achieve sharp increases in their scores, while Korea's score moderately increases, and Norway's score declines. Even

with the upward changes, by 2011, the United Kingdom, France, Germany, and Spain lose some of the ground they had gained in the 2000s.

Of the five pairs, regime affiliation is strongest for Norway and Sweden, which are distinguished as a high-scoring pair throughout the study period. Index scores for Japan and Korea are moderately aligned and parallel until becoming closely affiliated in 2010 and 2011, while France and Germany align more closely from 2007 onwards. Overall, regime affiliation for index scores is modest for paid parental leave.

Mean index scores for Paid Parental Leave over the course of the study period substantiate the close regime affiliation between Norway and Sweden in policy design as well as expenditures (see *Figure 11*). No other regime pair displays a tight pairing in the index. T-tests with *p*-values of < .001 (CI = 95%) affirm that significant differences in mean index scores exist for all regime pairs except for the Nordic countries, for whom no significant difference is found (see Appendix B, *Tables 30-34*.) While the trend analysis based on *Figure 10* provides a nuanced examination of congruities and disparities between regime partners across time, the blunt indication of a tight alignment in mean index scores for Norway and Sweden further supports the limitation of regime categories for understanding the complexities of paid parental leave policies and expenditures.

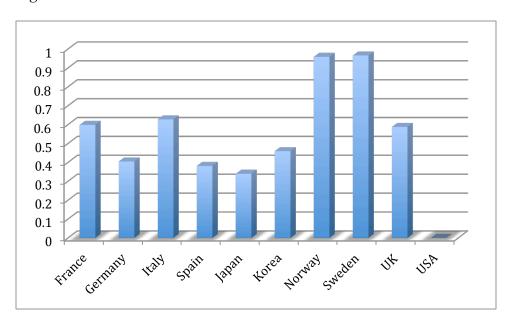


Figure 11. Mean Index Scores for Paid Parental Leave

Early Childhood Education and Care (ECEC) (2001-2011)

ECEC Expenditures as a Percentage of Gross Domestic Product (GDP)

Overall, most countries in the study demonstrate a modest or marked pattern of increased spending for family benefits regarding early childhood education and care relative to GDP from 2001 onwards (see *Figure 12*). The United States is the only country that ends the period with a small decline.

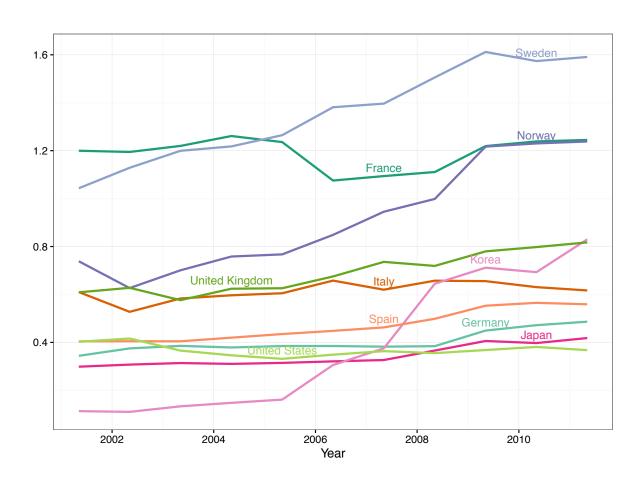


Figure 12. Expenditures for Early Childhood Education and Care as a Percentage of GDP

The Nordic regime partners are a considerable distance apart in spending levels, but display upward spending trajectories that are noteworthy for their parallel pattern. By 2005, Sweden surpasses France to rank first in expenditure levels relative to GDP throughout the remainder of the period, substantially distancing itself from the spending levels of the other countries. In 2011, Sweden's spending for ECEC benefits reaches 1.59% of GDP. In the context of regimes, the parallel trend lines for Norway and Sweden across the period indicate an affinity

in spending patterns for this pair, even though their expenditures relative to GDP are substantially far apart.

Contrary to regime-based expectations, spending levels bring countries together *across* regimes: France and Sweden from 2001 through 2005; France and Norway from 2009 through 2011; and Italy and the United Kingdom throughout the period. In the 2000s, Spain, Germany, Japan, and the United States are located in the lower portion of the distribution with similar spending levels and trends, yet they are all from different regimes. In addition, regime pairings experience disruption at different times when one partner in a regime pair sharply increases its spending level: the United Kingdom in 2004; and Korea in 2007.

Of the regime pairs, Italy and Spain appear to have the greatest congruency in spending levels and overall spending pattern, nearly converging by 2011. Norway and Sweden have similar spending trends, but do not align in spending levels, while Japan and Korea have some commonality in their ninth and tenth rankings, respectively, during the first half of the decade.

While Figure 12 depicts expenditure trends among the ten countries for ECEC over time, another comparison regarding regime affiliation is afforded by charting mean spending levels for each country throughout the entire study period (see Figure 13). In the comparison of mean spending levels, Japan and Korea demonstrate the closest affiliation, followed by Italy and Spain. The remaining regime pairs differ considerably from their respective partners. Information conveyed by the chart in Figure 13 is confirmed by a series of t-tests for significant differences in the means of regime pairs (see Appendix B, Tables 35-39). In the test series, Japan and Korea are the only regime pair that do not show a significant difference. All other pairs demonstrate a significant difference in mean spending levels (p < .001, CI = 95%). Consequently, both trend analysis and tests for mean differences attest that theoretical regime categorizations provide only a partial explanation for the changes and variations witnessed in expenditures for ECEC benefits as a percentage of GDP from 2001 through 2011.

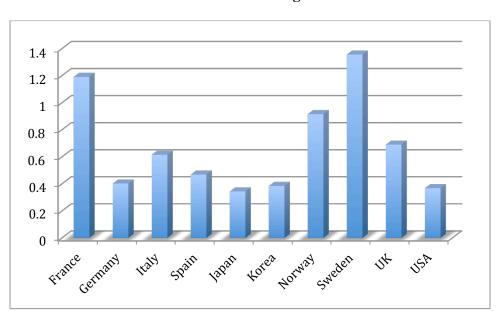


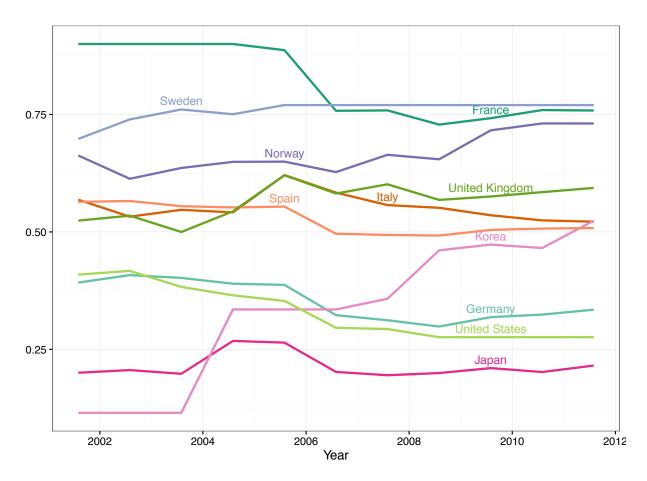
Figure 13. Mean Expenditures for Early Childhood Education and Care as a Percentage of GDP

Index #3: Early Childhood Education and Care (ECEC)

As described in the preceding chapter, a high score for the Early Childhood Care and Education Index (#3) is achieved by a combination of high government expenditures relative to GDP; tax relief; benefits for purchasing public or private care alternatives to government-sponsored, center-based care; publicly available ECEC for zero through two-year-olds; free ECEC for three- through six-year olds; the usual starting age for early education between ages zero through one; and additional assistance for ECEC to lone parents or preferential access to ECEC services by their children.

Upon visual inspection (see *Figure 14*), the scores of the ten countries are widely dispersed across the study period, but the spread narrows as the decade progresses. By 2011, the distribution can be grouped into high- (Sweden, France, and Norway), medium- (United Kingdom, Italy, Spain, and Korea), and low-ranking countries (Germany, the United States, and Japan). Norway and Sweden, and Italy and Spain, are grouped with their respective regime partner. In the higher echelon group, the Nordics are closely aligned in 2001 and from 2009 through 2011, but in other years they are not as tightly affiliated as Italy and Spain. Norway's index score improves over the course of the study period from a low of .61 to a high of .73. In comparison, Sweden's scores are far more consistent (.77 for most years).

Figure 14. Index #3: Early Childhood Education and Care (expenditures and policy design are equally weighted)



Italy and Spain demonstrate a particularly close affiliation from 2001 through 2004, and again from 2009 through 2011, and their index scores do not differ more than .08 index points at any point during the study period. As a consequence of introducing tax relief in 2005, Italy's index score rises briefly in that year, but the gain is not sustained. In contrast to the Nordic pair, which maintains or improves their ECEC index scores over the decade, Italy and Spain experience declines.

Regime pairings do not hold for France and Germany, or for the United Kingdom and the United States. Japan and Korea share low index scores from 2001 through 2003. In 2004, Japan and Korea effect policy changes, but Korea's expenditure and policy expansions far outpace and outlast Japan's modest development. Korea begins the decade at the lowest rank of the ten countries, but becomes a mid-ranking country by 2011 through a dynamic upward course. While Japan increases its index score in 2004, Japan remains the lowest-scoring country (between .20 and .27) for the remainder of the study years.

Regime affiliations for the ECEC index across the decade 2001-2011 are supported by the Southern European and Nordic pairs, but not for the other countries. In the first half of the decade, Japan and Korea align in the lower spectrum of the index, but this similarity is routed after 2006, when the regime partners markedly diverge from one another. The index scores for the liberal and Central European regimes are unaffiliated throughout the period.

A comparison of mean index scores for ECEC investments is illustrated in *Figure 15*. In this bar chart, Italy and Spain appear to have the closest affiliation, followed by Norway and Sweden, while affiliation is less pronounced for Japan and Korea, and not evident for the liberal and Central European pairs. A series of *t*-tests reveals that four regime pairs demonstrate significant differences in mean ECEC index scores at *p*-values that range from < .001 to .032 (CI = 95%). In the case of Italy and Spain, the *p*-value borders on significance at the .05 level (t = 2.074, df = 20, CI= 95%, p = .051). (See Appendix B, *Tables 40-44* for the complete series of *t*-test results). While the differences in mean index scores argue against regime affiliation for all regime pairs with the possible exception of Italy and Spain, the trend analysis affords more subtle considerations. In either perspective, regime affiliation by ECEC index scores appears weak overall.

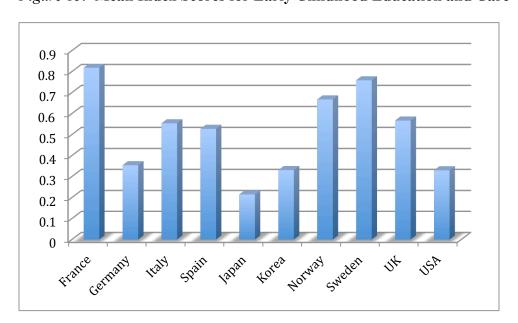


Figure 15. Mean Index Scores for Early Childhood Education and Care

Summary of Results for Research Question #1

The three indices for Child Allowances, Paid Parental Leave, and Early Childhood Education and Care each afford easily accessible visual plots that convey expenditure and policy design components of national programs across ten developed economies. In general, sharp step increases in index scores often indicate changes in policy, while less abrupt trends are usually indicative of changes in expenditures.

With respect to the central analysis, the indices suggest that government investments in early childhood vary considerably across countries in expenditures and policy design, and variations are often not based on regime types. Indeed, some nations have expenditure levels or index profiles that are more similar to countries from other regimes than to their own regime partner. Multiple examples of similarities across regimes weaken the notion of regime affiliation across program types.

Overall, the Nordic regime partners display the closest series of affiliations, and the liberal regime exhibits the greatest disparities. The congruent development of universalist social policies in Sweden and other Nordic states is largely attributed to common historic trends since the sixteenth century Reformation that supported compromise and coalition building, which were enabled by regional homogeneity in religion, ethnicity, and language (Harslof & Ulmestig, 2013; Salonen, 2009). In recent history, the strength and success of Nordic social democratic parties in the post-war era played a substantial role in the expansion of relatively generous and universal welfare state policies (Esping-Andersen, 1990; Harslof & Ulmestig, 2013).

Norway and Sweden demonstrate strong affiliations both in expenditures and policy design. According to their index profiles, their similarities are stronger for child allowances and paid parental leave than for early childhood care and education. Italy and Spain also display similar spending profiles that are not as tightly affiliated across all three program types as the Nordic countries, but are closer for ECEC expenditures and in the ECEC index than any other regime pairing. Italy outspends Spain in child allowances, although both countries are situated in the bottom half of the distribution for the child allowance expenditures and index. The two countries are closer in spending levels for parental leave, and are moving toward convergence in ECEC expenditures and in the ECEC index where they occupy middle rankings in the distribution.

France consistently outspends Germany for all three program types, with ECEC expenditures producing the greatest differentials. When policy indicators are taken into account, France and Germany align well in the Child Allowances Index, and in the Paid Parental Leave Index from 2007 through 2011, but remain markedly disparate in their ECEC Index scores.

In the East Asian regime, Japan and Korea start the decade with low levels of expenditures and low index scores. However, these countries evidence dramatic changes in expenditures and policies during the period under investigation. While these changes render them less similar as a regime pair across program types, they do share an overall trend towards increasing investments in early childhood across the decade. Japan increases spending in child allowances and expands its child allowance policy. Both Japan and Korea make policy changes in paid parental leave, and Korea makes large increases in spending for ECEC benefits while expanding ECEC policy coverage.

The liberal regime stands out as the welfare state model with the greatest differences. The United Kingdom and the United States rank first and ninth, respectively, in spending for child allowances. While the United Kingdom achieves high scores in the Child Allowances Index, the United States is at or near the bottom of the distribution. Another glaring difference is the absence of a national, paid parental leave policy in the United States, in contrast to maternal leave policies and expansion of existing paternal leave policies in the United Kingdom. The United Kingdom spends proportionately more on ECEC benefits and increases spending during the study period, while the United States has been in last place for ECEC expenditures since 2008.

Several important trends in child investment are observed across the ten countries between 2001 and 2011 regarding expenditures and policy design (see *Table 8*). *Table 8* indicates expenditures as a percentage of GDP for each country in 2011, the percentage point change since 2001 for each program type, and policy changes related to the policy design indicators.

Table 8. Trends in Expenditures and Policy Design for the Child Investment Package by Program Type: 2001 – 2011

(in order by percentage point change in expenditure relative to GDP)

Child Allowances					
Country	Percentage Point Change in Expenditure Since 2001 Relative to GDP	Expenditure in 2011 as a Percent of GDP	Policy Changes		
United Kingdom	+.96	2.26	Lone parent benefits shift from not means tested to means tested		
Japan	+.51	.68	Benefit scheme shifts from means tested to universal in 2010, including benefits for larger families and children <3		
Germany	+.13	.74	Consistent		
Spain	+.09	.21	Consistent		
France	+.07	1.14	Consistent		
Korea	+.003	.01	Consistent		
Italy	02	.42	Consistent ^a		
United States	06	.09	Consistent		
Sweden	21	.69	Consistent		
Norway	44	.67	Consistent		

^aChild allowance expenditures represented here for Italy include spending on couples without children.

Paid Parental Leave				
Country	Percentage Point Change in Expenditure Since 2001 Relative to GDP	Expenditure in 2011 as a Percent of GDP	Policy Changes	
United Kingdom	+.25	.33	Benefits change from no paternal leave to dedicated paternal leave for < 4 weeks	
Sweden	+.18	.74	Consistent	
Italy	+.11	.25	Consistent	
Spain	+.11	.24	Consistent	
Japan	+.08	.19	Leave for fathers increases from not dedicated to dedicated for 4 weeks or more	
Korea	+.04 ^b	.04	Leave for fathers increases from not dedicated to dedicated for < 4 weeks	
United States	0	0	Consistent	
France	10	.29	Leave for fathers increases from not dedicated to dedicated for < 4 weeks	
Norway	16	.62	Consistent	
Germany	17	.03	Eligibility changes from means tested to universal, per child benefits; leave for fathers increases from not dedicated to dedicated for 4 weeks or more	

^bDue to missing data for 2001, the year 2002 is used as the comparative year for Korea.

Table 8, continued.

Early Childhood Education and Care					
Country	Percentage Point Change in Expenditure Since 2001 Relative to GDP	Expenditure in 2011 as a Percent of GDP	Policy Changes		
Korea	+.72	.83	Tax relief, benefits for alternative forms of purchased care, and consideration for lone parents introduced		
Sweden	+.55	1.59	Consistent		
Norway	+.50	1.24	Consistent		
United Kingdom	+.21	.82	Universal early education was extended to three-year-olds; childcare assistance provided to lone parents to encourage work		
Spain	+.16	.56	Consistent		
Germany	+.15	.49	Consistent		
Japan	+.12	.42	Consideration for lone parents introduced		
France	+.04	1.24	Consistent		
Italy	+.01	.62	Tax relief introduced		
United States	03	.37	Consistent		

In the realm of child allowances, the United Kingdom radically increases spending as a percent of GDP and Japan's expenditures also trend markedly upward. From 2010 to 2011, Japan replaces means-tested eligibility with a universal, per child benefit and ceases means testing for children under three years of age and for the third child between the ages of three and the start of elementary schooling. In the United Kingdom, child allowances for lone parents shift from not means tested to means tested in the midst of dramatic overall spending increases.

With respect to parental leave, Norway and Sweden remain singular leaders in generosity and scope despite Norway's downward turn in expenditures, and five countries (France, Germany, Japan, Korea, and the United Kingdom) expand benefits for fathers. The United Kingdom accompanies its strong increase in spending by instituting dedicated paid leave for fathers where previously no paternal leave had existed. In Germany, conditional eligibility for paid leave changes to a universal, per child benefit scheme midway through the study period. While policy coverage in Germany becomes more inclusive, spending for paid leave drops by .17 percent of GDP, with most of the decline occurring after inception of the policy change.

Overall, all countries in the study except the United States increase spending for early childhood care and education during the decade. The rise in investments in ECEC by Korea, Norway and Sweden as a percentage of GDP are particularly noteworthy, while increases in France, a high spender, and Italy, a moderate spender, are modest. Regarding changes in ECEC policy design, Korea institutes tax relief and provides additional forms of assistance for care purchased in the market. Along with Japan, Korea also initiates additional program

considerations for children of lone parents. During the study period, Italy institutes tax relief, and Norway begins benefits for purchased care alternatives.

Across the three indices, Norway and Sweden display conformity to a social democratic regime type that is discernible from other regimes by high levels of investment in young children. Historically, the Nordic regime partners are early adopters of a package of family policies that may prove to be well suited to the human capital building paradigm for children in the twenty-first century. Other country pairs are less distinctive in maintaining fidelity to a regime-based pattern. Within-regime discrepancies are highest between the United States and the United Kingdom as examples of the liberal model.

In addition to an overview of expenditure and policy trends, a rank ordering of each index in 2001 and 2011 (see *Table 9*) reveals that a few countries substantially improve their relative positions for certain program types during this period, but these changes are independent of regime affiliation. The United Kingdom improves its rank across all program types, while Korea and Japan rise in rank for different programs – Korea for ECEC benefits, and Japan for child allowances. However, when all three indices are grouped together as a composite "early childhood investment package," the relative positions of individual countries change little.

Table 9. Early Childhood Investment Package in Ten OECD Countries: Summary Tables for 2001 and 2011

2001		Index #1	Index #2	Index #3
Average rank (for all 3 indices)	Child Investment Program Type	Child Allowances	Paid Parental Leave	Early Childhood Education and Care
1.67	Norway	1	1	3
2.33	Sweden	3	2	2
2.67	France	4	3	1
4.00	United Kingdom	2	5	5
4.33	Italy	6	3	4
5.67	Germany	5	6	6
6.33	Spain	8	7	4
6.67	Korea	8	4 ^a	8
7.00	Japan	7	7	7
7.33	United States	8	8	6

2011		Index #1	Index #2	Index #3
Average rank (for all 3 indices)	Child Investment Program Type	Child Allowances	Paid Parental Leave	Early Childhood Education and Care
1.33	Sweden	2	1	1
2.00	Norway	2	2	2
2.33	United Kingdom	1	3	3
3.00	France	4	4	1
4.00	Italy	5	3	4
5.00	Germany	4	6	5
5.00	Korea	6	5	4
5.33	Japan	3	6	7
5.67	Spain	6	7	4
7.00	United States	7	8	6

Note. The format for these tables is modeled after "Child Well-Being In Rich Countries: A Summary Table" (UNICEF, 2007, p. 2).

Note. In this table, spending and policy design contribute equally to the value of each index.

Expenditures and the set of policy design indicators each comprise half of the index score. Countries are assigned the same rank if their index scores differ by only .01 index point, and in the single case of index scores for ECEC 2011when three countries (Italy, Spain, and Korea) cluster within .02 index point.

^aDue to missing data for 2001, the year 2002 is used to compute the Paid Parental Leave Index ranking for Korea.

As footnoted in *Table 9*, countries are assigned the same rank if their index scores for a program type differ by only .01 (of 1.00). In one instance, three countries in the 2011 ECEC rankings cluster within .02 from lowest- to highest-scoring country among the trio. These countries (Italy, Spain, and Korea) are assigned the same rank for ECEC benefits. This procedure prevents very minor differences from distorting the ranking relationships among the countries.

Norway and Sweden exchange overall rankings in the first and second positions, and France and the United Kingdom exchange overall rankings in the third and fourth positions. Italy and Germany hold steady in fifth and sixth places for both years. While Korea and Japan improve their overall rankings from, respectively, eighth and ninth place in 2001 to seventh and eighth place in 2011, Spain drops from seventh to ninth place. The United States occupies the lowest ranking for both bookend years of the study. For the most part, the ten countries preserve generosity and scope relative to one another in the composite child investment package.

By parsing government investments in early childhood into several distinctive program types – child allowances, paid parental leave, and benefits for early childhood education and care – distinctions between individual countries become more salient than affiliation with a regime profile. Overall, regime theory does not appear to provide the specificity necessary to understand more nuanced differences across developed nations with respect to national policies for investments in young children between 2001 and 2011. We next discuss findings regarding the second research question by examining expenditures and policy trends within the context of the fiscal crisis.

Chapter 6: Early Childhood Investment Policies and Economic Recession

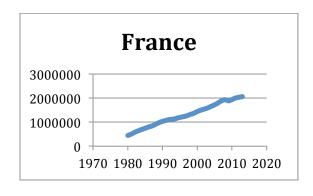
Overview

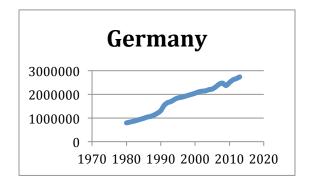
For many countries in this study, the fiscal crisis of 2008 heightened the new social risks of unemployment, poverty, and aging societies, casting a pall over the positive enthusiasm for the social investment approach in the United Kingdom as expressed in Giddens's 'Third Way' (1998) and the revitalization of social investment in the Nordic countries. In view of contracting economies and political demands for disciplined social spending, this chapter investigates trends in expenditures and policy design for social investments in early childhood to learn if any influence of the fiscal crisis can be detected. This chapter veers from the lens of regime affiliation to explore each country individually for the years surrounding the economic crash, with an emphasis on the three types of early childhood investments (child allowances, paid parental leave, and ECEC) in order to report the results of the second research question: "To what extent have patterns of welfare state investments in young children changed during the years preceding the fiscal crisis of 2008 as compared to the years that followed?" For each country, the analysis relies on actual spending in national currencies, spending as a percent of GDP, and growth and decline in GDP through 2011. Policy introductions or revisions that occur in the years surrounding the fiscal crisis are also considered.

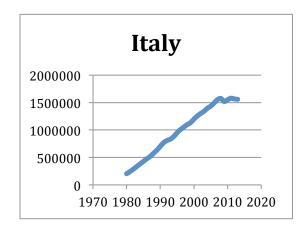
Changes in the Gross Domestic Product (GDP) of each country provide the context for the fluctuations in the government expenditures reported for each program type (see *Figure 16*). After years of steady economic gains, a plurality of countries in the study suffers a temporary loss in GDP in 2009 but then resume growth in 2010. This is true for France, Germany, Norway, Sweden, the United Kingdom, and the United States. After the 2009 contraction, Italy's GDP returns to pre-crisis levels, but the 2009 decline in Spain's GDP is sustained in the years immediately following the crisis. Japan's economy is stagnant for many years preceding the global fiscal crisis and suffers a decline in 2008 from which it does not recover by 2011. Korea's GDP appears unscathed in its upward trajectory throughout the study period.

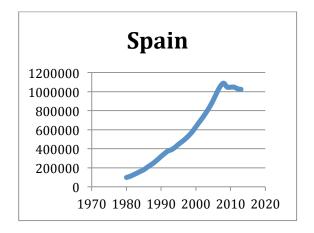
Figure 16.

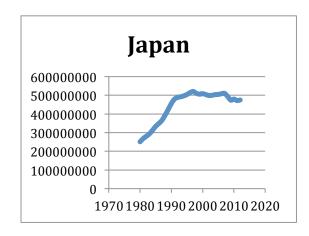
GDP in national currency, in millions, 1980 – 2012/2013

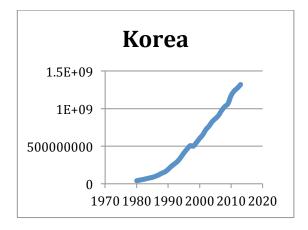




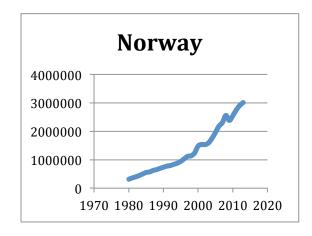


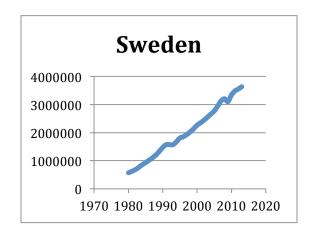


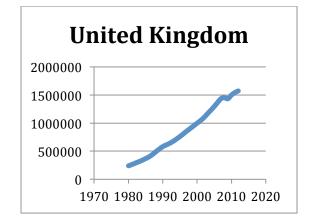


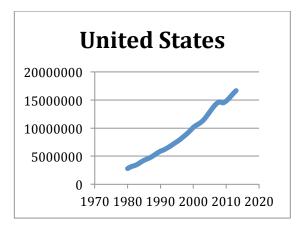


GDP in national currency, in millions, 1980 – 2012/2013









As a preface to presenting the results, some points are offered for the reader's consideration. A comprehensive determination for probable causes for spending fluctuations for the three program types is beyond the scope of this study. However, some reasonable speculations are provided based mainly on the quantitative data.

It is difficult to ascertain which fluctuations in spending could be partially attributed to the fiscal crisis. If spending increases, it could be due to the presence of means-tested programs for which an increased need arises during times of economic hardship. On the other hand, the fiscal crisis could possibly dampen increases in spending for programs for which benefit amounts would have increased further had not the crisis occurred. Spending fluctuations could also be attributed to significant changes in the numbers of children born during the study years. Additionally, it is conceivable that individuals could defer having a child until the economy improves, which would lessen government expenditures in the short run.

Changes in spending can also reflect new policies that were implemented in the years surrounding the fiscal downturn. Modifications in overall benefit schemes, and expansions, such

as dedicated paid leave for fathers, are two examples of policy shifts that could affect total expenditures. In this section, results for changes in child allowances, paid parental leave, and ECEC are reported by country, and presented sequentially by regime partners. Spending is reported in actual amounts and as a percentage of GDP.

France

France's GDP dips in 2009, but recovers in 2010 and further expands in 2011. The peak year for actual spending is 2009, while the peak year of spending relative to GDP is 2006. Actual spending by France for child allowances decreases slightly in 2008 from the prior year, but declines more severely in 2010. By 2011, France's actual spending on child allowances is only slightly above the 2006 level. Given a steady track record of expenditure increases in child allowances from 2001 through 2007, the findings suggest that the crisis may have partially stifled a prior pattern of increases in actual spending.

Actual spending for paid parental leave in France begins in 2001and ends in 2011 at nearly the same amount. Possible effects of the fiscal crisis are masked by declines in actual spending for paid leave that begin in 2004, well before the onset of the economic downturn. The pattern for ECEC spending differs considerably. After a low point in actual spending in 2006, expenditures rise consistently and peak in 2011, the last year of the study period. Spending on ECEC as a percentage of GDP follow this pattern, by declining in 2006 and thereafter rising to a peak of 1.24 percent in 2011. Actual spending for ECEC more than keeps pace with rises in GDP in the years surrounding the fiscal crisis.

Germany

In Germany, 2009 is the only year that the economy contracts, and by 2010, GDP is higher than pre-crisis levels. In the years surrounding the fiscal crisis, spending on child allowances as a percent of GDP fluctuates between a low of .63 in 2006 and a high of .82 in 2009. However, actual spending on child allowances is highest from 2009 through 2011, with a peak in 2010. The higher actual expenditures in the three years following the fiscal crisis may indicate increased need among recipients of child allowance programs.

Actual spending for paid parental leave in Germany declines substantially between 2001 and 2011. The downward trend in actual spending precedes the fiscal crisis. The peak year for actual spending is 2006, while 2011 is the nadir. At the start of the study period, Germany spends .2 percent of its GDP on paid parental leave, but by 2011, this drops to .03 percent. The biggest decline in actual and relative spending occurs in 2008, the year following a policy change in which eligibility shifts from conditional to universal, per child benefits. The strong decline in spending suggests that per child, universal benefits cost the government less than the previous conditional benefit scheme. Another policy change in 2007 enacted paid leave dedicated exclusively to fathers. However, take-up for this new policy may have been low, since this distributional expansion does not manifest as an increase in spending.

Germany displays consistent and substantial increases in actual ECEC expenditures from 2001 through 2011. The nadir for actual spending is 2001, and 2011 is the peak spending year. The increase in actual spending appears less dramatic when compared with several other countries in the study and when measured by spending as a percentage of Germany's GDP, which increases from .34 in 2001 to .49 in 2011.

Italy

Italy's GDP falls in 2009, but then reaches pre-recession levels in 2010 and 2011. Spending on cash allowances between 2006 and 2011 as a percentage of GDP fluctuates somewhat, from a low of .37 percent in 2006 to a high of .44 percent in 2009. In actual spending, Italy's expenditures for cash allowances peak in 2008, but then decline in 2009 and 2010. Given the timing of the declines, it appears that the fiscal crisis might be implicated for the dampening of expenditures. By 2011, actual spending for cash allowances rises but remains below the peak level.

Actual expenditures for paid parental leave rise steadily in Italy, peaking in 2011. The increase in spending is smaller in 2010 than in most previous years, while the increase in 2011 is highest than in any other year. As a percentage of GDP, Italy's spending for paid parental leave changes from .20 in 2009 to .25 in 2011. The increase in actual expenditures in Italy's paid parental leave between 2009 and 2011 appears to be part of a decade-long pattern and does not seem to be related to the fiscal crisis.

Actual expenditures by Italy for ECEC display some fluctuation amidst an overall increase. The peak year for actual ECEC spending is 2008, followed by three years of spending declines, which may be indicative of a pullback in spending that is related to the fiscal crisis and the slowed growth of Italy's economy from 2009 through 2011. As a measure of GDP, Italy's expenditures for ECEC drop from .66 percent in 2006 to .62 percent in 2011.

Spain

Spain exhibits steady growth in actual expenditures for child allowances, with a tepid increase in 2010 followed by a more vigorous peak in 2011. Increases in spending occur despite declines in GDP in 2009, 2010 and weak growth in 2011. In relation to GDP, spending on child allowances minimally increases from under .20 percent in 2009 to .21 percent in 2011. Actual spending is increasing during these years, while GDP is contracting.

With respect to paid parental leave, Spain displays an overall rise in actual spending, with marked increases in 2007 and again in 2008, and much smaller increases in 2009 and in 2010, when spending peaks. After four years of increases, actual spending tumbles sharply in 2011. Since the decline in Spain's GDP first occurs in 2009, and spending increases for paid leave occur from 2007 through 2010, the relationship to the fiscal crisis is unclear. The pronounced downturn in 2011 in actual spending and spending relative to GDP may indicate a delayed response.

Spain's actual spending for ECEC steadily rises from 2001 to a peak in 2011. The fiscal crisis does not appear to stop a multiyear trend in increases for Spain's ECEC spending, with the exception that growth in actual spending between 2010 and 2011 is much weaker than for previous years. This may suggest some fiscal constraints operating in the midst of declines or minimal growth in GDP during the years from 2009 through 2011. Expenditures as a percent of GDP rise from .45 in 2006 to .56 in 2011.

Japan

Japan exhibits steady growth in actual spending for child allowances, despite a plummeting GDP in 2008 from which the country does not recover. Further, spending markedly increases in 2010, and by 2011, spending nearly doubles from what it was in 2009. As a percent of GDP, spending for child allowances is .35 in 2009 and .68 in 2011. Policy expansions in 2010 that shifted the child allowance benefit scheme from means-tested eligibility to a universal, per child benefit may have played a role in the spending increases. Also in 2010, Japan changed a means-tested benefit for larger families or child age <3 to a non-means-tested (or mixed) benefit.

Actually spending for paid parental leave in Japan displays a rather steady upward trajectory between 2001 and 2011, with only two instances of cutbacks that are more than overcome in the following years. Spending as a percentage of GDP is rather flat between 2001 and 2005, but thereafter begins a gradual increase, from .12 percent of GDP in 2006 to .19 percent of GDP by 2011. Given that the economy peaks in 2007 and does not recover afterwards, the increase in spending for paid parental leave is noteworthy, both in actual terms and relative to GDP. This occurs in tandem with enacting dedicated leave for fathers in 2010.

With the exception of 2004, Japan spends progressively more each year on ECEC benefits from 2001 through 2011. ECEC spending as a percent of GDP was steady between .30 and .33 percent from 2001 through 2007, and climbs to .42 percent of GDP by 2011. This occurs against a drop in economic growth in 2008 and sustained economic contraction through 2011. Across all three program types, Japan's real spending and spending as a percentage of GDP increase rather steadily from 2001 through 2011, despite a long history of economic contraction since the Asian fiscal crisis in 1997.

Korea

Korea's lack of generosity for child allowances persists throughout the period, with only modest increases in actual spending, which are negligible as a percentage of GDP (varying from .001 to .006 percent of GDP). The increases occur amidst a growing economy that does not experience any declines in GDP over the period -- in marked contrast to the other nine countries in the study. Increases in Korea's paid parental leave, which are relatively larger than those for child allowances, range from .004 percent of GDP in 2002 to .04 percent in 2011. (Data are missing for 2001.) Payment in South Korean Won for paid parental leave nearly doubles between 2002 and 2011, but from a low bar. Increased paid leave expenditures in Korea are accompanied in 2008 and thereafter by a policy change that awards specified leave to fathers. Prior to 2008, father leave had not been dedicated.

In comparison to the modest expansions for child allowances and paid parental leave, Korea's spending for ECEC rises sharply in actual expenditures and dramatically as a percentage of GDP (from .11% in 2001 to .83% in 2011), even when GDP is rising. Several policy changes were instituted which expanded ECEC benefits over the study period: tax relief (2004); benefits for purchased care (2009); and specific benefits for lone parents (2004). Economic and political policies singularly focused on growing Korea's economy and "productive welfare" bore fruit after the 1997 Asian crisis (Ringen et al., 2011, p. 15), and the global fiscal crisis of 2008 appears not to have affected Korea's trajectories for investment in early childhood.

Norway

Actual spending for child allowances in Norway rises across the study period despite three downward oscillations (2004, 2006, and 2007). Nevertheless, increases in actual spending decidedly fail to keep pace with the rise in GDP. A rise in spending as a percentage of GDP occurs in 2009, but then is followed by declines in relation to GDP for 2010 and 2011 when GDP resumes growth. The rise in spending as a percentage of GDP in 2009 appears partially attributable to the solitary decline in GDP that year.

Actual spending in Norway for paid parental leave increases steadily from 2007 through 2011, but declines for most years relative to growth in GDP. The rise in spending for paid leave as a percent of GDP in 2009 appears partially due to the contraction of GDP in that year. As real spending for parental leave continues to rise in the post-recession years (2009-2011), spending as a percentage of GDP lowers, but remains higher than it was in several years preceding the fiscal crisis. The pattern of resuming the same or higher level of spending as a percent of GDP in the years of 2010 and 2011 holds for child allowances and parental leave. For both programs, however, increases in actual spending do not keep pace with economic growth.

In real terms, Norway steadily increases spending for ECEC from 2003 through 2011. Spending as a percent of GDP grows as GDP itself grows, but real spending slows relative to GDP from 2009 through 2011. Spending for ECEC as a percent of GDP is held relatively steady from 2009 through 2011, after seven years of continual increases. The ECEC profile differs from that of child allowances and parental leave, which do not keep pace with economic growth. Whereas spending relative to GDP for child allowances and paid leave declines precipitously across the study period, ECEC relative spending soars upward, but stalls in the post-recession years. The stagnancy in ECEC expenditures relative to GDP may indicate a quashing of spending increases due to fiscal constraints following the crisis.

Sweden

Real spending in Sweden for child allowances fluctuates mildly from 2006 through 2009, and rises somewhat in 2010 and again in 2011. As a percentage of GDP, there is a slow and steady decline in spending in the years preceding and following the fiscal crisis, with the exception of a rise in 2009 that corresponds to the temporary decline of Sweden's GDP that year. A clear pattern for actual spending is not apparent relative to the temporary decline of Sweden's GDP in 2009, since a prior pattern of decline in actual spending occurs from 2002 through 2004. However, actual spending for child allowances does not keep pace with Sweden's economic growth.

Real spending by Sweden for paid parental leave steadily increases at a rapid rate throughout the study period and, for most years prior to the fiscal crisis, also rises relative to economic growth. Sweden's expenditures for paid leave as a percent of GDP peak in 2009 and decline in 2010 and again in 2011. Sweden appears unable to maintain increases in generosity for paid parental leave in relation to GDP when GDP resumes growth in 2010 and 2011 after the 2009 contraction. This finding may indicate a constraint on the pace of increased actual spending attributable to the fiscal crisis.

Sweden's real spending for ECEC vigorously increases from 2001 through 2011. Spending in relation to GDP peaks in 2009 and is slightly lower in 2010 and again in 2011, demonstrating that Sweden is unable to maintain the previous rate of spending increases for

ECEC relative to growth in GDP in the post-crisis years of 2010 and 2011. In this regard, the findings for possible fiscal crisis effects in Sweden are similar for paid parental leave and ECEC expenditures. Additionally, with respect to regime commonality, the same post-crisis phenomenon is observed in the slowdown of Norway's rate of increases in actual spending for ECEC.

United Kingdom

Economic growth in the United Kingdom declines in 2009, but rebounds in 2010 and 2011 to levels higher than those of pre-crisis years. Through continual raises in annual outlays between 2001 and 2011, actual spending on child allowances increases by 250% in British Pounds, while spending relative to GDP almost doubles over the study period. In 2010, the year after the economic contraction, the pace of increase in actual spending slows and spending relative to GDP drops temporarily by a mere .005 percent. While the rate of increase diminishes in 2010 and 2011, other years of small increases in actual spending occur earlier in the decade, making it difficult to speculate about possible effects of the fiscal crisis. A policy shift occurs in 2005 that requires lone parents to demonstrate need for additional benefits when previously lone parent status had been sufficient. However, this change does not dampen overall spending on child allowances subsequent to enactment.

Actual spending by the United Kingdom for paid parental leave rockets upward in 2006, then increases more slowly but steadily through 2009. After subsequent declines in 2010 and 2011, actual spending sinks somewhat below that of 2007. Spending on paid parental leave relative to GDP also declines in 2010 and 2011, lending credence to the possibility of a post-crisis tumble.

Actual spending for ECEC in British Pounds between 2001 and 2011 nearly doubles. A slight setback in actual spending occurs in 2008, followed by rather large increases in each subsequent year. The same pattern holds true for spending on ECEC as a percentage of GDP, even amidst the overall rise in GDP in all years except 2009. ECEC spending by the United Kingdom does not appear to suffer retrenchment in the wake of the financial crisis.

United States

The United States' economy resumes growth in 2010 and 2011 to levels higher than those of pre-crisis years. In the years surrounding the fiscal crisis, actual spending by the United States for child allowances drops every year except 2008 and 2009. Given that child allowances in the United States are means tested, this finding indicates that 2008 and 2009 are likely years of increased family need. During the same two years, spending on child allowances as a percent of GDP rises by .003 percent annually. By 2011, spending on child allowances is .094 percent of GDP, down from .150 percent in 2001. Post-recession drops in actual and relative spending are not distinguishable from drops that occurred from 2004 through 2007 prior to the fiscal crisis.

As noted earlier, the United States does not currently have a national program for paid parental leave, and evidence for programmatic effects of the fiscal crisis does not exist. Actual spending by the United States for ECEC rises each year excluding 2003. In the years surrounding the fiscal crisis, spending as a percent of GDP drops in 2008 and 2011, but rises in the intermediary years. ECEC spending in the United States consequently does not appear

related to the 2009 downturn in the economy. Over the study period, increases in actual spending for ECEC by the United States lose ground relative to economic growth.

Summaries By Program Types

Findings relative to the examination of possible effects of the fiscal crisis vary by program type and country. This section draws on the country-by-country findings reported above in order to summarize post-crisis results according to program type.

Child Allowances and the Fiscal Crisis

The years following the fiscal crisis offer mixed results for child investment across the countries and their programs. For child allowances, some evidence suggests that the economic recession is related to declines in actual expenditures for France (in 2008 and 2010) and Italy (in 2009 and 2010), and slowed growth in actual spending increases for Spain (in 2010) and the United Kingdom (in 2010 and 2011). The evidence is less clear for increases observed for Norway (2008 through 2011) and Sweden (in 2010 and 2011).

In contrast, an increase in actual expenditures is observed for Germany (in 2009 and 2010) and the United States (in 2008 and 2009), which may be related to increased family need and means-tested or conditional eligibility schemes in these countries. Korea's economy does not exhibit the singular 2009 dip in GDP common to six countries in the study, and Korea's pattern of modest increases for low-level expenditures does not display an apparent effect of the global crisis. At the far end of the spending spectrum for child allowances in the post-crisis years, Japan markedly increases actual expenditures and spending in relation to GDP. In addition, Japan enacts a major policy shift in 2010 from a means-tested eligibility scheme to a universal, per child benefit. Japan accomplishes the expansions in benefits and coverage despite stagnant economic growth.

Paid Parental Leave and the Fiscal Crisis

Possible effects of the recession on paid parental leave vary considerably across the ten countries. In France and Germany, declines in actual spending begin in 2004 and 2006, respectively, and the downward trends do not appear to be related to the later crisis. The reverse is true in Italy, where actual expenditures for paid leave rise steadily through the decade and peak in 2011. In Spain, the picture is less clear. Increases in actual spending by Spain for paid parental leave slow in 2009 and 2010 and fall abruptly in 2011, perhaps signaling a delayed effect of the fiscal crisis. Comparatively low levels of spending for paid parental leave in Japan and Korea rise in both actual expenditures and in relation to GDP, apparently unaffected by the global recession. Japan provides dedicated leave for fathers in 2010 while the country's economic growth is suppressed, and Korea does the same in 2008 amidst an expanding economy.

In the Nordic countries, Norway's expenditures for paid parental leave increase steadily from 2007 through 2011, but do not keep pace with economic growth either before or after the 2009 contraction. In comparison, Sweden's spending increases steadily at a rapid rate while also growing in relation to GDP. However, spending as a percent of GDP peaks in 2009 and declines thereafter, indicating that the fiscal downturn may have had a dampening effect on the rate of spending increases for paid leave in Sweden. Evidence for crisis effects in the United Kingdom

is perhaps more convincing than for the other countries in the study. Actual spending for paid parental leave in the United Kingdom soars in 2006 and increases further through 2009. In the post-crisis years, spending diminishes to 2007 levels in actual terms and below 2006 levels relative to GDP, which suggests a recessionary response.

ECEC and the Fiscal Crisis

Of the three program types, ECEC appears the most resilient vis-à-vis the economic recession, and in some cases, flourishes despite economic contractions. Italy is the only country in the study that suffers decreased actual expenditures in the three years following the crisis after an upward trend that peaks in 2008. The United States increases actual spending over the study period, but is unique among the countries for a pattern of decline in spending in relation to a growing economy. Actual and relative spending for ECEC in the United States does not appear to be related to the economic recession.

In France and Germany, actual spending for ECEC peaks in 2011. Increases in France and Germany in actual terms track increases relative to GDP, even as GDP rises in both countries in the aftermath of the crisis. Spain's multiyear trend for increasing investment in ECEC is not halted, but the rate of increases in actual spending slows in 2010 and 2011, possibly providing evidence of fiscal constraint. Japan experiences a temporary decline in 2010 in actual expenditures and spending relative to GDP amidst an overall trend of increases in both measures for ECEC across the study period. The consistent, but modest, increases in spending appear to overcome Japan's lack of economic growth. In comparison, Korea infuses investment in ECEC through spending and policy expansion, dramatically increasing expenditures from .11 percent of GDP in 2001 to .83 percent in 2011, in a national economic context of steady upward growth.

Norway and Sweden display highly parallel trends for ECEC in actual spending and in meteoric rises in expenditures relative to GDP of approximately .5 percent or above. Additionally, both Norway and Sweden show some evidence of fiscal containment after the temporary contraction of their respective economies in 2009. Real spending in Norway slows relative to GDP from 2009 through 2011, and in Sweden, spending in relation to GDP decreases in 2010 and 2011. In the United Kingdom, a slight setback in actual spending in 2008 is followed by substantial spending increases in the following years, enabling this nation to nearly double its real expenditures between 2001 and 2011.

Summary of Results for Research Question #2

In relation to the aftermath of the fiscal crisis, national trends vary by country and program type. With respect to child allowances, some countries evidence declines or slowed growth in actual spending, while other countries with means-tested or conditional eligibility display spending increases. In Japan, expansions in spending and policy coverage for child allowances occur despite sustained economic contraction.

The United Kingdom provides the most convincing evidence for retrenchment in paid parental leave after the fiscal crisis through spending decreases after 2009 that follow a consistent pattern of spending increases prior to that year. Other countries sustain downward or upward trends in expenditures for paid parental leave that predate the crisis. Both Korea and Japan institute dedicated leave to fathers in 2008 and 2010, respectively, amidst opposing economic contexts of a growing economy in Korea and a stagnant economy in Japan. For

Norway and Sweden, the high-spenders for paid leave, increases in spending do not keep pace with economic growth after the 2009 jolt.

Of the three program types, ECEC investments appear to be the most resistant to possible effects of the fiscal crisis. While Italy's expenditures decline, spending by the other countries continues upward trends that were established before the crisis. The pace of spending slows in some cases after the crisis. Nevertheless, impressive increases in spending are evidenced by Sweden, Norway, and Korea.

The findings in this chapter indicate that states' responses to fiscal constraints are important for understanding future economic and political options for supporting the development of young children. With respect to family policy related to the very young, the fiscal crisis threatens to dismantle social investment agendas by intensifying challenges already posed by social risks that emerged in the latter decades of the twentieth century. Tensions regarding how to promote economic recovery pits fiscal conservatives in favor of austerity against those who look to human capital investment as a pathway to economic growth. These conflicts manifest in social policy, and may influence how nations prioritize family benefits that affect young children. In the latter part of the next chapter, the section "Trends in Relation to the Fiscal Crisis" offers some explanations that may account for these findings by drawing on theoretical perspectives of welfare state change and national programmatic goals.

Chapter 7: Stasis, Change, and Challenges of Early Childhood Investment Policies

Overview

This chapter begins at the point of departure from rejecting regime affiliation as a sufficient basis for understanding trends in government investments in early childhood to consider other aspects and theories of welfare state change that may better account for the results noted in the previous chapter. Concepts regarding welfare state change for early childhood programs will then be applied to a narrower window of time – the years surrounding the fiscal crisis.

Accounting for Welfare State Change in Early Childhood Investments

As discussed, the Nordic states of Norway and Sweden evidence a shared, universalist, and generous approach to early childhood investments that is distinctive from other pairs of countries in this study. At the other extreme are the liberal, market-based regimes of the United Kingdom and the United States, which are polarized in expenditures and policy design for child allowances and paid parental leave, and strongly divergent in support for early childhood care and education. Other regime pairs in the study display limited congruency with their respective regime partners across program types. Given that regime theory has limited explanatory value for trends in child investments, this section begins by exploring other theoretical orientations, specifically path dependency, political power resources, and convergence, to examine if they may better account for the changes witnessed from 2001 through 2011.

To examine the strength of path dependency, one can look for relative consistency or gradual change through the study period in expenditures and policy design in each country for each program type. Path dependency, which is characterized by incremental change from earlier institutional arrangements, manifests as trend lines of a single country that remain flat or show only modest inclines or declines over time.

On the other hand, radical departures in expenditure levels and policy design, displayed in the plots as sharp or abrupt increases or decreases, signal that political priorities may be responsible for disrupting the status quo of path dependency. The "political power" explanation is used in this analysis to describe changes that likely derive from policy leaders in positions to steer national family programs that pertain to investments in early childhood.

Trends for child allowances over the study period across the ten countries appear somewhat more reflective of path dependency than power politics. Overall, seven countries (France, Germany, Italy, Korea, Spain, Sweden, and the United States) maintain consistent policies for child allowances as measured by the index, and four of these (all but Germany and Sweden) do not change their expenditure levels relative to GDP more than a tenth of one percent.

In comparison, Japan and the United Kingdom buck the path dependency trend by strong increases in expenditures relative to GDP (.51 and .96 percent, respectively), a shift to a universal child allowance scheme in Japan, and the implementation of means-testing for supplementary benefits targeted to lone parents in the United Kingdom. Additionally, fiscal tightening is suggested by declines in relative spending by Sweden and Norway, even while Norway eliminates means-testing for supplemental benefits for lone parents. However, the

declines in spending relative to GDP in Sweden and Norway by -.22 percent and -.44 percent, respectively, occur while actually spending increases over the study period.

Of the ten countries, only three demonstrate policy changes accompanied by rather large changes in expenditures that together suggest political influences. Overall, this assessment suggests that path dependency is more common for child allowances during the study period than shifts in political agendas.

Changes in paid parental leave expenditures are less dramatic, with the largest upswings demonstrated by the United Kingdom and Sweden (.25 and .18 percentage points of GDP, respectively). The largest declines are exhibited by Germany and Norway (-.17 and -.16 percentage points of GDP, respectively). Of the five countries that make policy changes for parental leave, all of them strengthen leave for fathers (France, Germany, Japan, Korea, and the United Kingdom), and Germany switches from conditional to universal eligibility for its overall benefit scheme. Of note, the United Kingdom introduces designated paternity leave where previously no paternal leave had existed.

Dedicated, paid leave for fathers is a significant departure from the breadwinner model, which legitimates fathers' role and rights as caregivers, and encourages take-up through a "use it or lose it" benefit. This arrangement mitigates against gender-related constraints and workplace discrimination against fathers who take time off from work. By 2011, all countries except the United States offer some paid leave specifically for fathers.

While path dependency for paid parental leave programs is suggested for Spain, Italy, and the United States for the policy indicators used in this study, expansions in paternal leave policies for the five countries previously noted suggest a political shift in sentiment on this issue. In Germany, policy changes in 2007 are the result of a compromise by opposing political parties to advance a more active role for the state in promoting fertility and welfare sustainability through greater gender parity in the workforce and at home (Erler & Erler, 2008).

Expenditure changes for Sweden (up for actual spending and spending relative to GDP) and Norway (up for actual spending, but down for spending relative to GDP) are difficult to assign to path dependency or power resources in the absence of additional information, as spending changes are not accompanied by changes in policy design. In general, a mix of path dependency and power resources trends are exhibited by changes across the countries in paid parental leave expenditures and policy design.

A multitude of policy changes are observed for ECEC programs. Greater expenditures as a percentage of GDP, evident in all countries except the United States, suggest a prioritization of ECEC by policy leaders. Korea substantially increases investments in ECEC (up by .72 percentage points of GDP), as do Sweden, Norway, and the United Kingdom (up .55, .50, and .21 percentage points of GDP, respectively). With respect to policy design, Korea expands programs for ECEC by providing tax relief, benefits for purchased care, and special consideration for lone parents. Italy institutes modest tax relief, and Japan and the United Kingdom respectively offer priority access and assistance grants for children of lone parents. Even though other countries demonstrate consistency in their ECEC policies over the study period, ECEC programs as a whole exhibit notable expenditure increases and policy design shifts that suggest the influential power of leadership.

In summary, path dependency appears strongest for child allowances, while a mix of path dependency and political priorities are implied in patterns for paid parental leave policies. For ECEC, the impact of policy leadership appears to hold sway, and national policies as a whole appear to converge on prioritizing family benefits for ECEC services. While the force of path

dependency is apparent in the trends of the ten countries between 2001 and 2011, so is the flexibility to initiate new policies and substantially increase investments in early childhood when such investments are perceived as a national priority. Additionally, emphases for particular policy types, such as ECEC benefits, appear to hold similar national appeal across multiple countries.

Thus far, we have examined trends in investments in young children for three program types across ten OECD countries first by regime theory and alternatively by path dependency and power resources. Next, we turn to the convergence perspective to analyze if countries are growing closer in the percentage of GDP devoted to each program type by 2011, the last year of the study period. A trend towards convergence would be supported if variation in spending as a percentage of GDP diminishes across countries between 2001 and 2011.

An empirical measure of convergence can be obtained by deriving a coefficient of variation for expenditures (as a percentage of GDP) for each program type across the countries in the study in 2001 and again in 2011. Changes in the coefficient of variation between these years indicate whether the variation across countries is decreasing or increasing over time. The coefficient of variation is calculated by dividing the standard deviation of the expenditures of all ten countries in a given year by the mean expenditures of all ten countries in that year. A decrease in the coefficient of variation between 2001 and 2011 indicates that the ten countries are converging in their expenditures as a percentage of GDP.

In *Table 10*, the average spending for child allowances across all ten countries increases from .59 to .69 percent of GDP during the study period. The coefficient of variation for child allowance expenditures rises from .81 in 2001 to .94 in 2011, indicating a growing dispersion among the countries in the amounts paid for child allowance benefits. The substantial rise in spending by the United Kingdom amidst stagnant expenditure levels by other countries is likely driving the increased variation. When the convergence measure is recalculated using all countries except the United Kingdom, average spending between 2001 and 2011 changes relatively little (from .51 to .52 percent of GDP, respectively) and the coefficient of variation decreases from .85 in 2001 to .70 in 2011. When the outlying United Kingdom is removed, the remaining nine countries display convergent levels in spending.

Table 10.

Convergence Tests for Expenditures as a Percent of GDP for the Child Investment Package by Program Type: 2001 – 2011

Cash Allowances				
Country (2001) Expenditure		Country (2011)	Expenditure	
in order from lowest to highest	as a Percent	in order from lowest to highest	as a Percent	
	of GDP		of GDP	
Korea	0.003	Korea	0.006	
Spain	0.120	United States	0.094	
United States	0.151	Spain	0.207	
Japan	0.173	Italy	0.423	
Italy	0.441	Norway	0.666	
Germany	0.610	Japan	0.683	
Sweden	0.899	Sweden	0.693	
France	1.066	Germany	0.741	
Norway	1.107	France	1.140	
United Kingdom	1.296	United Kingdom	2.263	
Average for 2001	0.59	Average for 2011	0.69	
Standard Deviation, 2001	0.48	Standard Deviation for 2011	0.65	
Coefficient of Variation	0.81	Coefficient of Variation	0.94	
(sd divided by the mean)		(sd divided by the mean)		

Paid Parental Leave				
Country (2001)	Country (2001) Expenditure Country		Expenditure	
in order from lowest to highest	as a Percent	in order from lowest to highest	as a Percent	
	of GDP		of GDP	
United States	0	United States	0	
Korea ^a	.004	Germany	.029	
United Kingdom	.077	Korea	.041	
Japan	.113	Japan	.193	
Spain	.134	Spain	.241	
Italy	.137	Italy	.247	
Germany	.201	France	.292	
France	.390	United Kingdom	.331	
Sweden	.559	Norway	.623	
Norway	.779	Sweden	.736	
Average for 2001	.24	Average for 2011	.27	
Standard Deviation, 2001 .26		Standard Deviation for 2011	.24	
Coefficient of Variation	Coefficient of Variation 1.08		.89	
(sd divided by the mean)	2002: 1	(sd divided by the mean)		

^aDue to missing data for 2001, the year 2002 is used as the comparison year for Korea.

Table 10, continued.

Early Childhood Education and Care				
Country (2001)	Expenditure	Country (2011)	Expenditure	
in order from lowest to highest	as a Percent	in order from lowest to highest	as a Percent	
	of GDP		of GDP	
Korea	.113	United States	.368	
Japan	.299	Japan	.418	
Germany	.344	Germany	.486	
United States	.403	Spain	.559	
Spain	.404	Italy	.617	
United Kingdom	.609	United Kingdom	.817	
Italy	.610	Korea	.830	
Norway	.739	Norway	1.238	
Sweden	1.043	France	1.245	
France	1.200	Sweden	1.591	
Average for 2001	.58	Average for 2011	.82	
Standard Deviation, 2001	.34	Standard Deviation for 2011	.41	
Coefficient of Variation	.59	Coefficient of Variation	.50	
(sd divided by the mean)		(sd divided by the mean)		

For paid parental leave, the average expenditures as a percent of GDP increase slightly from .24 in 2001 to .27 in 2011. The coefficient of variation for paid parental leave decreases from 1.07 in 2001 to .89 in 2011, indicating a trend towards convergence across the ten countries accompanied by an increase in generosity.

The average spending for ECEC between 2001 and 2011 increases from .58 to .82 percent of GDP, while the coefficient of variation decreases from .59 in 2001 to .50 in 2011. Of the three programs, ECEC expenditures evidence the greatest convergence in 2001 and again in 2011. Variation in ECEC spending across the ten countries diminishes during this time frame, while average expenditures as a percent of GDP dramatically increase.

Convergence in spending across national ECEC programs, along with policy changes, suggest that policy leaders in different countries are adopting similar investment strategies for young children. Policy changes for ECEC provide an example of consistency between power resources and convergence theories. While convergence is said to occur in the form of similar policy responses to similar problems, policy responses must be developed by policy leaders in positions of power. In the case of increased investments in ECEC, policy leaders may be motivated by shared worries about the performance of their country's workers and industries amidst global economic competition. In addition, rather than developing policy responses in isolation, it is likely that policy leaders find inspiration for their strategies from their counterparts in other countries.

Kasza's (2006) term "international diffusion" describes the importing of policy strategies from foreign countries, which likely explains the spread of national ECEC policies across borders. He asserts, *international diffusion has been a feature of welfare policy making since the start of the modern welfare state* (Kasza, 2006, p. 174, author's italics). Using Japan as the exemplar to prove his point, Kasza (2006) finds that Japan bases its welfare policies largely on

foreign precedents. Consequently, Japan's form of capitalism, and the country's distinctive party system, culture, and history (all of which are customarily used to define regime types) does not override the influence of the global policy-making culture of industrialized states (Kasza, 2006). For Kasza (2006), the notion of international diffusion, with its acknowledgement of the role of human agency, is the "missing link" in Wilensky's theory of convergence (p. 170).

The analysis of expenditures and policy design factors across the ten OECD countries for three program types in this study from 2001 through 2011 indicate that no single theory of welfare state change can account for the trends in public investments in young children. Each perspective – regime, path dependency, political power resources, and convergence – provides partial explanations for some countries some of the time. The empirical findings of this study comport with Kasza's (2006) observations that few policies address a unified collection of practical goals or principles, but rather, that contemporary policies are composites of a succession of governments across countries and of different political persuasions through history, reflecting leaders' attempts to respond to the distinctive challenges of their times.

In addition to the above analysis by individual program type, the composite of the three indices for each country in an "early childhood investment package" in *Table 9* (the Summary Tables for 2001 and 2011) provides another tool for assessing the strength of path dependency and political power resources. In order to identify path dependent tendencies, the "package" approach considers which countries maintained overall consistency in expenditures, whether in the high, medium, or low range relative to other countries, and which countries perpetuated the status quo in policy design during the study period. Conversely, the influence of power resources is demonstrated by large changes in expenditure levels, and the enactment of new policies based on new national priorities and goals. Within this framework, it is useful to apply Hall's (1993) conception of three levels of welfare state change. The first order of change concerns the benefit level; the second order is manifested by expanded entitlements to benefits; and the highest order of change is a paradigm shift that incorporates the first two levels within a "pathbreaking" redirection of policy (Leon, Ranci, & Rostgaard, 2014, p. 12). Applying Hall's (1993) notion of degrees of welfare state change, I argue that path dependency could be part of the first order of change in benefit levels, if the change occurred gradually over a period of time, but that large changes in benefit levels, and the second and third orders of change are indicative of the work of power resources.

Additionally, the composite average rank across the three indices can be viewed as a measure of coherence or fragmentation across the three program types, with a high rank indicating coherence in high levels of investment and a low rank indicating coherence built on a lack of investment across the programs (see Table 9). Countries in medium rankings either display unevenness in investments across the three programs or moderate investment levels. The countries are discussed in order of their composite rank for the year 2011. In this investigation, the empirical findings indicated in the rank order table are anchored to a broader conceptual framework for welfare state change. The discourse entails a summarization of the historical context of welfare state configurations and political forces that shaped policies regarding investments in early childhood.

Norway and Sweden

As noted in Chapter 5, the rank order for the composite investment packages of the ten countries changes little over the study period. Norway and Sweden, the countries that most closely model regime affiliation, maintain the highest ranks in 2001 and 2011. Norwegian and Swedish governments have for over forty years engineered a comprehensive dual-earner, dual-carer model to facilitate childbearing and child rearing and to equalize access to early education. Both countries are avowed early pioneers in family policy, having taken the lead in promoting gender equality in the workplace and in the home sphere; long, flexible, and comparatively well-paid parental leaves; and universal low-cost or free early childhood education and care (Baran, Diehnelt, & Jones, 2014; Wells & Bergnehr, 2014).

Sweden's innovations in family policies were considered radical for their times (Wells & Bergnehr, 2014). In 1974, Sweden became the first country in the world to replace maternity leave with parental leave, allowing both parents to care for their children (Wells & Bergnehr, 2014). In the 1990s, total paid parental leave became evenly split for mothers and fathers, with an option for parents to trade their allotments to each other, with additional designated "daddy" and "mummy" months. By 2002, the parental leave benefit in Sweden had been extended to 480 days, with dedicated "daddy" and "mummy" months of 60 days each (OECD, 2012b). In Sweden and Norway, parents have been able to choose between a longer period of part-time leave and a shorter period of full-time leave.

In the years preceding and including the study period, Norway steadily expanded the benefit amounts and number of paid weeks for paid parental leave while simultaneously promoting gender egalitarianism. Building on the inclusion of fathers in leave policies in 1977, four weeks were designated as the "father's quota" in 1993. Also in 1993, a shareable arrangement for couples was introduced for thirty-nine weeks following the pre-existing nine mandatory weeks for mothers (OECD, 2012b). By the end of the study period in 2011, the father's quota had tripled (Ronsen, 2004).

As part of the child investment package, Sweden and Norway offer generous, per-child allowances, which in Sweden is supplemented according to increases in the number of children for the second through the fifth (or subsequent) child. An extra cash benefit is provided by Sweden for each child in a lone-parent family. In Norway, lone parents receive a child benefit for one more child than they actually have, and are also entitled to a "transitional allowance" for three years after the birth of the youngest child (OECD, 2001-2011).

In Norway and Sweden, public supply-side funding is the predominant means for covering the cost of early education services (OECD, 2006), supplemented by modest out-of-pocket fees that have statutory maximums (Chung & Meuleman, 2014). The average parental contribution is approximately ten percent (OECD, 2006). Public care in Norway and Sweden is available as early as the child's first birthday and until the start of compulsory education (at age six in Norway and age seven in Sweden).

In the context of welfare state change, Norway and Sweden demonstrate politically-driven policy evolution that began four decades ago when the government of each country incentivized childbearing and actively sought to change cultural norms regarding women's participation in the workforce and men's participation in childrearing (Baran et al., 2014; Wells & Bergnehr, 2014). In reference to Norway, this effort has been described as a "sustained governmental pressure in legislation and policy" (Baran et al., 2014, p. 89) and, in regard to Sweden, as a consistent "tweak[ing]" of family policies to "make family life more equal" (Wells

& Bergnehr, 2014, p. 103). Pursuant to these depictions, it can be argued that Sweden and Norway follow a path-dependent trajectory established in the 1970s – but one that is continually pushing the envelope of its original intentions through political motives and means – a phenomenon of politically-motivated change within a path-dependent course.

United Kingdom

The United Kingdom ranks third in the child investment package in 2011. While the United Kingdom introduced child allowances in 1946 and a paid maternity allowance for thirteen weeks in 1948 (OECD, 2012b), the agenda of the Labour Party since taking office in 1997 propelled a large and unprecedented investment in the nation's young children (Waldfogel, 2010). In addition to increases in the existing universal child benefit, the Child Tax Credit, claimable regardless of employment status, became the most important source of benefits for dependent children since its introduction in 2003 (OECD, 2012b). The Child Tax credit reached about 80 percent of families with children, which included nearly all lone-parent families, but excluded families with higher incomes (Waldfogel, 2010). A supplemental child benefit (through 2004) and additional tax-related benefits related to employment (since 2004) were awarded to lone parents (OECD, 2001-2011). Additionally, a one-time "baby tax credit," initiated in 2002, became available to families with a child under one year old (Waldfogel, 2010).

Substantial increases in the compensation and duration of paid maternity leave was considered an investment in child health and development, and an enabler of continued parental labor force participation that would reduce child poverty (Waldfogel, 2010). Expansions in paid paternity leave were viewed as important for newborns (Waldfogel, 2010, p. 81). In addition, low-income mothers benefited by increased generosity for a one-time maternity grant for the purchase of infant-related items (Waldfogel, 2010). By 2008, mothers were entitled to 39 paid weeks of maternity leave, with a 90 percent replacement rate for the first six weeks and a flat rate thereafter (OECD, 2012b). A flat rate payment for two weeks of paternity leave was introduced in 2003 (OECD, 2001-2011).

In the early education sector, the United Kingdom sought and succeeded to increase the enrollments of low-income children in preschool (Waldfogel, 2010). Starting at age three until the start of compulsory education at age five, the United Kingdom began offering free early childhood care and education for a period of two years on a part-time basis. As of 2010, a variety of settings in England offered free early education services for fifteen hours per week for 38 weeks per year (OECD, 2001-2011). From 2008 through 2010, 97 percent of three- and four-year-olds attended some form of free early education at public schools or in the private, voluntary or independent sector (OECD, 2001-2011).

As an additional boost to children from low-income families, the United Kingdom's *Sure Start* program for children from birth to age three took root in the most disadvantaged communities, and *Children's Centers*, begun in 2003 to serve poor children who did not reside in disadvantaged areas (and all other families in the neighborhood), became an important component in the government's national plans for child care (Waldfogel, 2010). Through the Child Care Act of 2006, local areas were made responsible for providing child care of good quality for all working parents who requested it (Waldfogel, 2010).

The *Sure Start* and *Children's Centers* programs, along with cash and tax benefits specified for lone parents, are examples of "progressive universalism," a welfare state strategy defined by targeting within a more universal approach (Waldfogel, 2010, p. 64). Despite the

progressive turn in the child investment package in the United Kingdom, and a quadrupling of expenditures for children's services (between 1997 and 2007), the early childhood investment strategy is not without its critics (OECD, 2006). More children participate in private sector care compared to other countries, and the United Kingdom has the highest cost for child care among OECD countries (Chung & Meuleman, 2014), with parents bearing most of the costs (OECD, 2006). Additionally, eligibility for child care tax credits has been narrowed (Chung & Meuleman, 2014). Another criticism concerns the lack of synthesis across the sequential phases of the child investment package. A 16-month gap exists between the end of paid leave and an ECEC entitlement, and a chasm of nearly three years divides the end of well-paid leave and an ECEC entitlement (O'Brien, Moss, Kowslowski, & Daly, 2014).

Nevertheless, the extensive changes made by the United Kingdom stand in stark contrast to the status quo in the United States, a partner nation in the liberal tradition. The successes of the United Kingdom fortify evidence that market-based economies can provide substantial support to families raising young children.

The Labour Party reforms related to young children begun in the late 1990s represented an historical departure from the path set by earlier policies. In 2004, the United Kingdom launched a ten-year child care strategy whose aim was "to make early years and childcare provision a permanent mainstream part of the welfare state" (Waldfogel, 2010, p. 85; Hodge, 2005). Waldfogel (2010) described the results as "impressive" and lauded them as "a truly remarkable set of accomplishments, reflecting major gains from where Britain started out" (p. 90). The concerted legislative and programmatic efforts to improve the lot of low-income children in the United Kingdom serves as a testament to the role of political power in disrupting path dependency in welfare states through a new paradigm that qualifies as a third order change in Hall's (1993) schema.

France

The fourth highest-ranking country in the composite index is France. France has a long history of state intervention in the family sphere, which has origins in protecting the health of mothers and infants. In response to concern about the nation's declining fertility rate in 1909, France became an earlier adopter of mandated maternity leave for pregnant working women (Fagnani & Math, 2011). Since 1920, ceremonial medals honoring the state's commitment to families, and to large families in particular, have been conferred annually by the French president (Howard, 2011). While France has since succeeded in achieving high fertility rates in comparison to other advanced economies, French family policy has continued to favor large families with three or more children, one hundred years later. In recent decades, France's path dependent traditionalism regarding the caring role of mothers reverberated through contentious political debates about mothers' participation in the workforce, how children are reared, and by whom.

Paid maternity leave in France was initially restricted to civil servants when it first emerged in 1928, but became more widely available after World War II. By the 1970s, when women in industrialized nations dramatically increased their participation in the labor force, France's priority became focused on the reconciliation between mothers' paid work and mothers' care work at home – in contrast to the Nordic countries, which simultaneously emphasized gender equality and buttressed women's labor attachment. Additionally, family associations, trade unions, women's organizations, the market sector, and the French state began to engage in

what would extend into decades of chronic, oppositional relationships regarding traditional maternalism, women's right to employment, the economic needs of families, and labor's demand for women workers (Howard, 2011). Contemporary history of French family policy regarding early childhood has revealed a complex overlay of programs reflecting ambivalent aims that support both stay-at-home mothers and mothers more inclined to maintain their employment and procure childcare services. Ambivalence aside, the plethora of programs has allowed families a number of choices regarding caring and paid work, partially contingent on their financial capacities.

Several political actors with conflicting ideologies and interests dominate the French family policy scene. At the institutional level, the National Family Allowance Office (*Caisse Nationale des Allocations Familiales* (CNAF)) is the family policy division of France's social security system. Members of the Executive Board of CNAF include trade unions, employers, and the *Union Des Associations Familiales* (UNAF), which represents family associations. The UNAF has consistently promoted a familistic agenda, for example, backing programs that support stay-at-home benefits for mothers with children under three years old (Fagnani & Math, 2011). As a generalization, employers seek to minimize costs for parental leave for which they are partially responsible, while trade unions fight both for workers' parental leave rights and universal, quality child care. In practice, however, recent governments have controlled policy decisions that may not have been approved by the CNAF Executive Board (Fagnani & Math, 2011). In the civil sector, women's associations, such as the National Association for Women's Rights, argue staunchly for mothers' rights to maintain work, expansion in the provision of high-quality childcare, gender equity, and shorter leaves to enable women to progress in their careers (Fagnani & Math, 2011).

Core pro-natalist programs for family allowances were introduced under Charles De Gaulle following World War II and have remained a cornerstone of contemporary policy (Howard, 2011). During the study period, the national family allowance funds overseen by CNAF were not means-tested, but families were required to have at least two dependent children to be eligible. The family allowance afforded a substantive supplement for each additional child that was higher than the payment for the first two children combined. France also provided several other cash allowance programs, including means-tested benefits for lone parents and for children under three years old.

Maternity leave was universally provided, while parental leave eligibility was generally allocated per family and conditioned on the number of the children, the age of children, and family income. In the 1980s and 1990s, high unemployment rates fueled programmatic incentives to diminish mothers' participation in the workforce, and a rhetoric of "freedom of choice" was invoked to spawn individualized care solutions, such as family day care and "nannies," that were thought to be less costly than collective "crèches" (Fagnani & Math, 2011). Between 2002 and the end of the study period, paid leave exclusively for fathers was limited to fourteen days around childbirth.

The *Allocation Parental d'Education* (APE), a parental leave payment program originally designed for families with three or more children, was criticized by women's rights activists when first instituted for offering low compensation that effectively barred uptake by fathers (Fagnani & Math, 2011). By 1994, APE was extended to parents with two children, while families with three children enjoyed less stringent employment requirements for eligibility. In 2004, a program similar to APE was extended to single-child parents, but benefits were curtailed sooner than those for larger families (OECD, 2001-2011). Over time, policy for cash allowances

and parental leave gradually became somewhat more amenable to smaller families of one and two children, part-time working mothers, and incorporating fathers into the caring role.

In the field of ECEC, France is known as an EU leader, along with the Nordic countries, in providing affordable and accessible child care (Gornick & Meyers, 2003). For children from birth through age two, France offers publicly available care with out-of-pocket costs that can be reduced by tax deductions (OECD, 2006). Employers subsidize an average of 25 percent of regional child care costs through payments to the family benefits treasury, which are viewed as contributions to the public good (OECD, 2006). ECEC provision for the three to six age group is largely dependent on public financing, with no parental contributions required (OECD, 2006). Almost 100 percent of children aged three and older are enrolled. In addition, the "écoles maternelles" are available at no charge for children between ages two and age six (OECD, 2006).

French social policy has been criticized for evolutionary deficiencies (Howard, 2011) and laggardly development (Fagnani & Math, 2011) in response to contemporary economic and social realities. In the economic sphere, France has been unable to quell rising poverty rates, which are partially attributed to pro-natalist policies that favor wealthy and middle-class families (Howard, 2011). In the realm of gender relations, despite a wide array of programs, leave and care policies are targeted explicitly or implicitly to mothers, and thus remain primarily a women's issue (Fagnani & Math, 2011).

France's ranking across all three program types declined between 2001 and 2011. The drop may be an indication that political inability to resolve differences between the traditional, maternalistic interest groups and the post-modern, economic and familial demands in relation to mothers' labor participation have left France mired in a tangle of atavistic path-dependent policy approaches for investing in young children.

Italy

Italy is also beleaguered by path dependency, but of a different sort. Women's labor participation rate in Italy is one of the lowest in Europe, as measured by the number of employed women as a percentage of all workers (Ginsborg, 2011). In addition, women's employment appears to decline after childbirth, and part-time work is not widely available (Ginsborg, 2011). While the influx of women into the labor market occurred later in Italy than in other western European countries, the lack of public childcare services has been evident since the 1990s (Ranci & Sabatinelli, 2014). Approximately half of all mothers of young children work, mostly full time (Saraceno, 2011), and grandparents and other relatives are the primary source of childcare support (Pfau-Effinger, 2014). Approximately one in five children under age three are cared for full-time by their grandparents (Boggi, Fraisse, Sabatinelli, & Trancart, 2009), and about one in four children in the same age group attend formal day care. Irrespective of the need for child care, no comprehensive reforms have been introduced at the national level (Ranci & Sabatinelli, 2014).

Family and child policies in Italy are widely recognized as familistic (Chiatti et al., 2013; Ginsborg, 2011) due to a social foundation of strong intrafamily, intergenerational allegiances accompanied by a history of low public provision (Saraceno, 1994). Despite the primacy of family relationships, the fertility rate in Italy in 2011 is lower than most other countries in this study (OECD, 2015a). Since women's entry en masse into the labor force, the capacity of Italian families to provide care for their elderly and their young in a traditional manner has been strained (Ranci & Sabatinelli, 2014).

Italy's family allowances reveal a lack of investment in early childhood. Child benefits are means-tested and considered among the lowest in Europe (Gianesini, 2014; OECD, 2001-2011). Cash allowances are provided to employees or former employees and are conditioned on the number of family members and relatives residing in the household.

Paid parental leave remains the de facto, near exclusive exercise of mothers, irrespective of legal entitlement for fathers. Despite the statutory leave entitlements, ninety-five percent of parental leave is taken by women (Gianesini, 2014; Trifeletti, 2009), and only 6.9 percent of working fathers used at least one day of parental leave in 2010. The constraints of traditional gender roles, the culture of men's work, and the low replacement rate all conspire against utilization of parental leave by Italian fathers (Riva, 2012).

Sharp distinctions in Italy exist between ECEC services available for children from infancy to age three, and preschool for children between ages three and six, with implications for unequal access and quality for the youngest children of low-income families. Child care policies vary widely across the country. The *asili nido* ("crèches") are established regionally and administered by local municipalities for children under age three, with means testing based on income and family composition (OECD, 2001-2011). For children ages three through five, Italy provides near universal and free *scuole maternal* ("maternal schools"), also known as *scuole dell'infanzia* ("infant schools"), (OECD, 2011, p. 27). Italy is below the average enrollment in OECD countries for children younger than three, but above the average for children over three (OECD, 2011).

While preschools came under state jurisdiction in 1968 and were defined by law in 2000 as the initial step in the education system overseen by the Ministry of Education, childcare provision remained as a negligible municipal service whose allotment of state funding failed to materialize for more than twenty years (Ranci & Sabatinelli, 2014). In part prompted by the European Lisbon Strategy and Barcelona targets set by the European Council, funding for crèches was incorporated into the state budget in the early 2000s. Costs for local child care services were offset by a tax on employers (OECD, 2006).

By 2011/2012, the enrollment rate for crèches had doubled from two decades earlier, but reached only 12 percent (Ranci & Sabatinelli, 2014). The slow growth in public service provision amidst high demand enticed the private sector to fill the gap, either with the help of government subsidies, or as independent agencies (Ranci & Sabatinelli, 2014). Some argued that governmental regulations enabled a private "takeover," which resulted in private crèches providing nearly 40 percent of available slots and a concomitant abdication of state responsibility in favor of subsidiarity and individual family solutions to the challenge of accessing child care (Ranci & Sabatinelli, 2014). While this approach may have been less costly for the government, opponents claimed that the preponderance of private care providers resulted in lower-quality services and higher fees, rendering care unaffordable for many families (Ranci & Sabatinelli, 2014). Thus, the problem of access and quality of care for children until age three remains unresolved in Italy, and grandmothers still remain the reserve army of childcare labor for low-income mothers.

The expansion of private providers for day care does not bode well for the long-term, as once a precedent for welfare provision has been set, path dependency predicts that future policies tend to build upon them. It may become difficult to establish a thriving, egalitarian public sector for daycare in Italy once the private sector has become entrenched.

The confluence of modest child benefits, discouragement of father care, comparatively low labor participation among women, and the privatization child care for children under three

years support Ginsborg's (2011) assertion that no clear direction can be discerned in Italy's family policy, which oscillates between the pressures of Catholic and other interest groups. Others attribute Italy's inability to redirect care policy to "institutional inertia" (Ranci & Sabatinelli, 2014, p. 233), or find that Italy's family policy is slowly gravitating towards a liberal work-family system with its collateral inequalities (Riva, 2012). The Italian arrangement may exacerbate the risk of poverty, limit fathers' engagement and mothers' earning power, and potentially deprive very young children of stimulating learning environments. The path dependent Italian model of family welfare upholds the "negative freedom of individual families" to procure the healthy development of their children in the presence of minimal and gender-bound state support (Ginsborg, 2011, p. 127), while elsewhere the male breadwinner model has been more or less put to rest.

Germany

In Germany, high unemployment, a stubbornly low fertility rate, and a population in dramatic decline brought mothers' labor participation and public childcare into sharp focus for German political and business leaders. Considered as "one of the most hotly debated areas of German politics" (Tooze, 2011), ongoing civic discourse ensued between advocates seeking to preserve the male breadwinner model and proponents of work-life balance for parents (Trzcinski & Camp, 2014). Following the clash of tradition and adaptation, a new direction in parental leave policy set in 1986 supplanted the prior emphasis on supporting stay-at-home mothers and thereby reducing the risk of poverty in favor of facilitating women's re-entry into the labor force and encouraging fathers to assume a more active role in childrearing (Erler, 2011). Erler (2011) considers this change as a "clear sign of a paradigmatic shift in German family policy" (p. 120).

Prior to 1986, German family policy was regarded as an exemplar of the male breadwinner model, with roots in the Bismarckian inception of mandatory, unpaid maternity leave in 1878 (Erler, 2011). The parental leave payment initiated in 1986 included both parents, irrespective of their employment status. Each parent was able to work part-time up to 19 hours per week and still collect the leave payment. While the duration of paid parental leave was extended in subsequent years to 24 months, family policy did not increase the supply of child care services (Erler, 2011). Men rarely availed themselves of parental leave and many women continued to drop out of the labor market (Erler, 2011). In 2001, a reform made it possible for each parent to work up to thirty hours per work, thus increasing flexibility for families in how they combined work and care (OECD, 2012b).

The *Elterngeld* reform was introduced in 2007 by the Federal Law of Parental Allowance and Parental Leave to entice parents to return to work after twelve months by providing a higher payment based on 67 percent of earnings (Erler, 2011; Trzcinski & Camp, 2014). This policy was welcomed by employers who were concerned about the drain of human capital resulting from well-educated women remaining at home for extended periods (Erler, 2011). In addition, a bonus of two "daddy months" was reserved for fathers (Trzcinski & Camp, 2014). By 2008, the uptake of parental leave by fathers had increased from 3.3 percent in 2006 to 15.4 percent (Statistisches Bundesamt, 2008; Erler, 2011). In 2013, after the study period, a cash-for-care allowance for parents to care for their children at home was implemented as a political concession to social conservative interest groups (Erler, 2011).

A low fertility rate of approximately 1.4 births per woman has persisted in Germany since 1990. Almost one-third of all women and 38 percent of well-educated women are childless

between ages 35 and 39. Alarmed by these facts, and confronted by a new voting bloc of women arguing for parental leave, parental benefits, and childcare policies, government officials across political parties acknowledged that women had difficulty combining careers with family life and turned their attention to increasing the provision of childcare services (Trzcinski & Camp, 2014; Erler, 2011).

In this regard, West Germany had much to learn from the experience of its East German neighbors. After the Second World War, the East German Constitution codified the duty of men and women to contribute to the country's work effort. East German policies promoted women's employment and supplied comprehensive, public childcare in addition to normalizing a one-year absence from work after childbirth (Erler, 2011). Prior to reunification, the government of East Germany had socialized 85 percent of the total cost of child rearing (Tooze, 2011). Largely due to pressures from East German women to preserve their long-established array of public child care services, the reunified Germany implemented a legal right to part-time child care for children ages three through six (Erler, 2011).

Since 2005, pursuant to national legislation, local nurseries for children under three years old received an infusion of 1.5 billion euros in annual funding (Erler, 2011). Between 2007 and 2013, the national government awarded an additional 4 billion euros to localities for creation of new childcare services, aimed at complying with the EU's Barcelona target to provide childcare for 35 percent of children under age three (Erler, 2011). However, the expansion in childcare provision has partially relied on an increase in the proportion of family day care, which is less costly than center-based care and may involve a tradeoff between universal access and quality of care (Leon, 2014). In 2013, after the study period, public or publicly paid day care for children under age three became a legal right (Pfau-Effinger, 2014).

Fees for childcare in Germany varied regionally by family income, number of children in care, and household size (OECD, 2001-2011). On average, out-of-pocket fees for parents approximated 14 percent of the total costs of services (Schilling, 2008; Schober, 2014). Since 2006, two-thirds of the cost for young children could be deducted as expenses from taxable income, for a maximum deduction of EUR 4,000 per child (OECD, 2001-2011). In 2010 and 2011, childcare was free up to 30 hours per week for the last year before school enrollment (OECD, 2001-2011). Center-based coverage for childcare ("Krippen") for German children between ages zero and three was substantially more extensive in former East Germany (37 percent) than in former West Germany (approximately three percent). Fee-based kindergartens, which enrolled 90 percent of children between ages three and six in East Germany, were full day programs in East Germany, but mostly half-day programs in former West Germany, a schedule that was problematic for full-time, working mothers (OECD, 2006).

Women's confinement to the home for childrearing was ultimately recognized by the German government as a barrier to fertility and economic prosperity. Long a stalwart purveyor of male breadwinners and women homemakers, Germany pursued a new course for family policy in 1986. Since then, Germany embarked on complementary goals of increasing mothers' attachment to labor, establishing the norm of fathers' role in caregiving, and increasing the public supply of childcare. Further developments in this new pathway engendered political compromises to accommodate interest groups that on principle favored historic, gendered divisions of labor, or preferred such an arrangement as best suited for a portion of German families. The new paradigm for family policy has gradually normalized a re-orientation in cultural values towards accepting the employment of mothers with very young children, caring by fathers, and greater reliance on formal care (Pfau-Effinger, 2014; Schober, 2014).

In the path dependent view, each country has its own story. Path dependency continues until the time when a new vector is chosen according to the impetus for political priorities set by those in a position of leadership. For Germany, that time was 1986, when the male breadwinner model was upended. Given the new trajectory in German family policy that ruptured more than 100 years of path dependency, the German welfare state may no longer be defined as narrowly conservative.

Korea

Under the authoritarian rule of President Park Chung Hee, which began by coup d'état in 1961, the development of Korea as a modern state pursued a course singularly focused on the coordination of social and economic policy to produce economic growth (Ringen et al., 2011). After more than two decades of President Park's dictatorship followed by a period of transition to democracy, President Kim Dae Jung was elected in 1998. President Kim was simultaneously charged with consolidating the democratic political process and lifting Korea out of the crushing debt crisis of 1997 through adherence to neo-liberal structural economic reforms mandated by the \$57 billion IMF bailout (Ringen et al., 2011). Unlike the contemporary invocation for austerity measures as an appropriate response, the Korean government embarked instead on a more inclusive social policy agenda. Consequently, the provision of state welfare increased, and the Korean state came to approximate European models (Ringen et al., 2011).

President Kim's social policy was based on the concept of "productive welfare," which borrowed from the contemporaneous "workfare" orientations of the United States and the United Kingdom (Ringen et al., 2011, p. 90). Despite the addition to the workfare reforms in 2000 of a national, guaranteed minimum income, Korea remained a low social spender. Korea's eighth and seventh rankings in the composite index for 2001 and 2011, respectively, mirror the low generosity in childhood investment (see Table 11).

High unemployment and precarious employment after the 1997 debt crisis dissuaded young people from marrying and bearing children which contributed to a further, significant drop in Korea's fertility rate and exacerbated worries about the nation's aging and declining population (Chin, Lee, Lee, Son, & Sung, 2014; Ringen et al., 2011). A residual welfare state approach that relied on the self-sufficiency of families was no longer tenable, and policymakers passed a series of legislative acts that together formed the basis for a new and comprehensive family policy paradigm to promote family well-being through greater emphasis on universality (Chin et al., 2014). A new government division, The Ministry of Gender Equality and Family, was created in 2005 to oversee national family policy (Chin et al., 2014).

Paid maternity leave in Korea was first enacted in 1987 (OECD, 2012b) and became more widely accepted within workplace culture after the reform of the Labor Standards Act in 2001 (Chin et al., 2014). The number of women who used maternity leave more than tripled between 2002 and 2010 (Chin et al., 2014). As of 2012, paid maternity leave was authorized for 90 days. Payment for the first 60 days was based on the mother's customary income, and a flat rate was provided for the last 30 days. In 2008, three days of fully paid paternity leave were introduced, which despite the paltry time frame symbolized the social acknowledgement of fathers as caregivers (Chin et al., 2014).

Paid parental leave for either parent after maternity or paternity leave was introduced in 2001 as a flat rate payment. Parental leave was shareable between mother and father and available until the child's first birthday (OECD, 2012b). Only one parent could receive the

payments, but both parents could take leave at the same time (Chin et al., 2014). Over the years, payments for parental leave increased in generosity and became linked to income at a 40 percent replacement rate in 2007 (OECD, 2012b). While the utilization rate for parental leave for mothers who took maternity leave rose to 63 percent in 2011, only about two percent of parental leave takers in 2011 were fathers (Chin et al., 2014).

In Korea, cash allowances have been targeted specifically to lone parents, and benefits are means-tested based on the number of family members and the combined value of income and property. Starting in 2009, cash allowances were also provided to mothers or fathers under the age of 25 who are heads of households. Mothers or fathers under age 25 received either the National Basic Livelihood Security Benefits (NBLS), which is the social safety net for minimum living standards, or child-rearing support if their income exceeded the NBLS.

The Child Care Act of 1990 and the Infant Care Act of 1991 established child care policies for young children and promoted the development of childcare facilities in the public and private sectors. The supply of both market and state childcare expanded through the years, with provision by the market sector dwarfing that of the government sector (Chin et al., 2014; An, 2013). In 2007, private daycare centers, which target children between the ages of three and five, accounted for 89 percent of all daycare centers (Kim, 2011). Costs for families have been offset by child care subsidies that are paid by the government to child care facilities until a child is six years old. For children younger than two years of age, the subsidy covered all expenses and was provided to families irrespective of their income and assets. Means-tested childcare subsidies for children have grown progressively more inclusive of higher-income families. By 2010, childcare subsidies encompassed the bottom 70 percent of income distribution levels (An, 2013). Welfare recipients, and low-income, single, and disabled parents have priority access to childcare services in the public sector. Additionally, the Nuri Curriculum, which combined child care and early childhood education, was available through subsidies to all five-year-olds regardless of family income. The Nuri Curriculum option was planned to extend to children ages three and four years by 2013 (Chin et al., 2014).

In addition to conditional fee-based structures for publicly supported ECEC services, tax deductions for childcare and preschool tuition expenses have also been part of Korea's benefit landscape (OECD, 2001-2011). For alternative care modes, a sliding scale fee structure related to family income was introduced in 2007 for part- or full-time publicly funded babysitting services delivered in the home (Chin et al., 2014). In the non-profit corporate sector, the Korean government mandated and monitored compliance for on-site child care provided by employers with 500 or more workers or 300 or more women workers (Chin et al., 2014).

While Korea has made large strides in expanding child care provision, affordability and accessibility have been prioritized over quality. Based on a survey conducted by the Ministry of Gender Equality in 2004, nearly 58 percent of respondents expressed a preference for public centers over private facilities, based on lower costs and higher-quality services (Kim, 2011). Unsatisfactory services by private childcare providers have become a "major social issue," precipitated by many years of government deregulation (Kim, 2011, p. 17).

Between 1991 and 2012, Korea increased its budget for childcare from the equivalent of US \$28.4 million to US \$3 billion (Chin et al., 2014). However, Korean governmental support of ECEC services appears to fit an "assistentialist" mode, in that care provision permits parents to work, but does not prioritize children's learning experiences. By sacrificing quality for access due to assistentialist needs, childcare services are purposed more towards easing mother's labor participation than investing in the development of young children. In other respects, Korea has

broken from tradition by establishing new options for fathers' involvement in caregiving, and by providing more fiscal and service supports to families rearing children through a quasi-universal approach supplemented by additional targeted benefits. Challenges still remain for redirecting cultural values at home and in the workplace to align with policy goals. Political leaders have made a paradigm shift in family policy, but it has proven weaker than the path dependent, gendered nature of the domestic and business worlds.

Japan

In Japan, traditional values regarding gender roles at home and at work have been changing slowly and in a manner similar to that of other advanced economies (Kasza, 2006). While the welfare state has reflected this evolution (Kasza, 2006), Japan is nevertheless considered the least redistributive of post-industrial nations, with low tax revenues, limited social spending, and minimal benefits (Estevez-Abe, 2008). In Chapter 5, low spending levels were noted across most or all of the decade between 2001 and 2011 for all three program types. Of the ten countries in the composite average of the indices, Japan ranked ninth in 2001 and eighth in 2011. In Japan, the family remained the primary source of social welfare, and means-testing for some programs likely reflected support presumably available from broader kinship networks (Estevez-Abe, 2008). Women continued to shoulder the burden of childrearing, in part due to the persistence of historically gendered divisions of labor (Sano & Yasumoto, 2014).

Elements of Japan's welfare system developed unevenly after World War II under conservative leadership that pandered to targeted constituencies, including those in the industrial sector. In the neocorporatist configuration of state, market, and family in post-War Japan, industrial policy became a form of social policy (Estevez-Abe, 2008). Programs that were "functionally equivalent" to social programs evolved in the market arena, but have not generally been included in welfare state statistics confined to governmental policies (Estevez-Abe, 2008, pp. 1, 3). While both the costs and benefits of functionally equivalent programs increased over time, the costs were passed on to taxpayers and consumers (Estevez-Abe, 2008).

The nature of the welfare state was altered after 1996 by the ascendancy of the Democratic Party of Japan and the establishment of a two-party system that awarded greater power to the prime minister and his Cabinet. This political development was accompanied by a diminishment of the power of specific interest groups in favor of individual workers, and the adoption of universalistic rhetoric for an improved social safety net (Estevez-Abe, 2008).

A declining population and very low fertility rates have plagued Japanese policymakers for many years, but this was not always the case. For several decades after the Second World War, high birthrates were achieved in a growing, male-breadwinner economy, and there was little public pressure for child allowances (Kasza, 2006). In the early 1960s, employers welcomed the prospect of government-financed family allowances as a way to assuage and mitigate growing wage pressures (Estevez-Abe, 2008). When the Children's Allowance (*Jido Teate*) was instituted in the early 1970s, much later than implementation of similar programs in other developed countries, new ground was broken. The child benefit, along with health care for the elderly, marked the debut of universalistic programs in Japan, and was applauded by the Japanese populace (Estevez-Abe, 2008). While not targeted to specific groups, the new child benefit was nevertheless means-tested. In 2010, the Democratic Party of Japan awarded the benefit on a per-child basis (as *Kodomo-teate*), but the more generous scheme was rescinded in 2012 when opposition parties came to power and reinstated the prior, lower allowance with

income caps, much to the dismay and confusion of benefit recipients (OECD, 2001-2011; Sano & Yasumoto, 2014). After the study period, in 2012, the benefit amount became determined by income, sibling order, and child age under three (OECD, 2012a). Lone parents in Japan received income-tested benefits according to the number of children (OECD, 2001-2011).

Building on paid maternity leave (first initiated in 1969), payments for parental leave until a child's first birthday were introduced at 25 percent of earnings in 1995, and raised to 50 percent in 2010 (OECD, 2012b). With a change in eligibility structure for paid parental leave from a per-family entitlement to an individual entitlement, fathers were incentivized to take at least some leave, and to split leave between mothers and fathers in order to receive a bonus of two additional months of leave (OECD, 2012b). However, fewer than two percent of fathers took parental leave (Ministry of Health, Labor, and Welfare, 2010; Sano & Yasumoto, 2014). The exceedingly low take-up rate was attributed to Japanese corporate culture, which rewarded fealty to the company and was antithetical to work and family balance (Sano & Yasumoto, 2014).

When the Child Welfare Law of 1987 introduced means-tested public child care, mothers were required to prove that they worked outside of the home to provide necessary income for raising a child and that no other relative was available to provide care assistance (Estevez-Abe, 2008). Childcare provision was structured by class divisions. Low-income working women could qualify for child care services, while middle-class mothers were expected to care for their young children at home (Estevez-Abe, 2008). As a consequence, the supply of public childcare services remained limited until more recent expansions were made to accommodate middle-class families (Estevez-Abe, 2008). During the study period, all children of working or ill parents were eligible for child care, but the amount of the fees related to the parents' taxes. If parents were eligible for Public Assistance, child care was free.

Since the mid-2000s, childcare providers in the market sector have grown to the point where they enroll far more children than in the previously dominant government sector, whose provision has diminished over the years (An, 2013). Licensed daycare providers in the public and non-profit sector received substantial public funding and were subject to higher standards by the Child Welfare Law than non-licensed commercial providers. However, due to increased and unmet need, the number of non-licensed commercial daycare centers has increased (An, 2013). Since the mid-1990s, the state has looked to childcare provision as a strategy to raise fertility rates and increase women's labor participation. However, the state's efforts have been considered "half-hearted," as the combination of public and private sectors has failed to meet the demand (An, 2013, p. 35). Kindergartens that provide educational and social stimulation for children between ages three and five are offered by national, public, and private providers.

As evidenced by the above history of child and family benefits, Japanese child investment policies have drawn heavily from the examples of other countries through "international diffusion" (Kasza, 2006). Accordingly, Kasza (2006) expects that universalistic trends are likely to grow stronger, while the targeting of specialized interest groups by functionally equivalent market-based programs is likely to diminish. Kasza (2006) is less sanguine about the citizenry's tolerance for tax increases to support universal programs, and projects that market-based welfare provision will continue to supplement underfunded public benefits.

In addition to fiscal challenges, cultural ideologies and values appear to be strangling the intent of family policies (Sano & Yasumoto, 2014). The state's reliance on experts to craft solutions is partially responsible for the disconnect between family policy objectives and deeply rooted cultural values regarding gender roles in relation to caregiving and work. This "top-down"

approach ignores and excludes the lived experiences of families, community members, and interest groups with respect to the culture and values of the domestic and corporate spheres (Sano & Yasumoto, 2014). Thus far, entrenched social and institutional norms in Japan concerning women as self-sacrificing caregivers and men as loyal corporate breadwinners have maintained dominance over insufficient family policy interventions. Japan's level of investment in early childhood may not even qualify as a first order of change in Hall's (1993) welfare state schema.

Spain

Spain is classified with Italy within a Southern European or Mediterranean welfare state model in which the family is a highly regarded social institution and the primary provider of social welfare, largely unaided by state protections (Esping-Andersen, 1999; Navarro, 2006; Mora-Sitja, 2014). The women of Spanish extended families have played a key role in providing informal care for children, while the development of state policies for public childcare services and the reconciliation of work and family has lagged. Spain's low level of expenditures and benefit schemes for child allowances and paid leave render Spain in ninth place in the composite index for 2011.

Rates of fertility and labor force participation of Spanish women are among the lowest in Europe and have been attributed to the dearth of state assistance for childrearing (Leon & Migliavacca, 2013; Mora-Sitja, 2011). Comparatively few part-time jobs are available to enable work-family balance, and mothers are more likely to detach from the labor market after childbirth in comparison to other countries (Mora-Sitja, 2011). A high degree of gender inequality in Spain derives from the undisputed role of women as care providers for children and the elderly, which is considered more definitive of the Spanish culture than the male breadwinner counterpart (Mora-Sitja, 2011). Saraceno (1994) uses the term "unsupported familism" to describe the nature of the relationship between the Spanish state and the nation's families (Ibanez & Leon, p. 277).

Contemporary family benefits in Spain reflect the legacy of Francoist family policies from the 1940s and 1950s that were aimed toward population growth and social control (Iglesias & Meil; Mora-Sitja, 2011). Under the Franco dictatorship, gender roles were reinforced through the male breadwinner/female homemaker arrangement. Childbearing and childrearing were considered the patriotic duty of women, and pro-natalist family benefits were designed to reward large families (Perez-Carames, 2014). During the transition to democracy, family policies were temporarily abandoned while the social and family organization of Spanish society incorporated more individualistic tendencies (Perez-Carames, 2014).

Changes in family structure wrought by divorce, cohabitation, and uniperson households came later to Spain than to other European countries. These changes occurred in a compressed time frame that coincided with Spain's delayed but rapid industrialization and economic growth (Mora-Sitja, 2011). New family laws dismantled the Francoist family model, the influence of the Church diminished, and the Spanish Constitution of 1978 upheld the rights of children while omitting a legal definition of family (Mora-Sitja, 2011). Family policy languished in the post-Franco period, but received new interest in the latter 1990s and early 2000s by political legislatures seeking to reconcile work and family life, provide fiscal support to families, and expand childcare services. Recent changes in state support have led some to see convergence

between Spain's family policies and the dual-earner models in France and Sweden (Leon & Migliavacca, 2013; Naldini & Jurado, 2013).

Family allowances in Spain were means-tested for eligibility, and the benefit amount varied by income. Since benefits were awarded on a per-child basis, larger families received more support (OECD, 2001-2011). However, the meager cash benefits were considered more of a hedge against poverty than a support for maintaining the quality of family life during the childrearing years. The amounts provided were the least generous of the European Union, after Greece (Perez-Carames, 2013).

Paid maternity leave in Spain became part of the social security system in 1966 and by 1989 was extended to sixteen weeks at full wage replacement (The Clearinghouse on International Developments in Child, Youth and Family Policies, 2004). While Spain has not instituted paid parental leave, fathers were awarded two days of paid paternity leave in 1980, which was extended to fifteen days in 2007 (OECD, 2012b).

The phenomenal influx of Spanish women into the labor market since the 1990s triggered and tripled the growth of ECEC services between 2001 and 2010 (OECD, 2013; Ibanez & Leon, 2014). The rapid expansion of ECEC provision cracked the edifice of the male breadwinner model (Ibanez & Leon, 2014). From earlier roots in an assistential approach aimed primarily at minding children while their mothers worked, ECEC services in the 1990s evolved to include educational and developmental goals (Gonzalez, 2004), in service to the new "social investment" logic (Ibanez & Leon, 2014, p. 279). Preschool education became part of the national education system and was divided into two age groups: from four months to three years old, and from three to six years old (Gonzalez, 2004; Ibanez & Leon, 2014). While the older group benefited from a significant infusion of spending that expanded coverage and improved quality, ECEC services for the under threes fell far short of meeting demand due to insufficient funding, lack of coordination among the local, regional, and national governments, and the economic crisis. Circa 2008, 300,000 places were planned, but only 71,000 were created by 2011 (Ibanez & Leon, 2014).

Preschool for the older age group is universal and free, while for the youngest children, access and affordability is determined by municipalities and the private sector (Ibanez & Leon, 2014). Private providers account for more than half of the services for children younger than three. While the fiscal structure of public ECEC services for very young children varies across the country, families are frequently responsible for about 33 percent of the cost. Rhetoric about ECEC services for the under threes is fodder for political campaigns, but then soon forgotten, resulting in an "unintended, path-dependency drift" (Ibanez & Leon, 2014, p. 280).

The lack of services for children under three has increased inequalities in access according to the educational, economic, and work status of the parents. Children of mothers with tertiary education and who belong to higher-income families are much more likely to be enrolled than children from families with less income and mothers with less education. Additionally, priority is given to dual-earner families, further exacerbating the socioeconomic divide (Felgueroso, 2012). For many families, it is common for maternal grandmothers to assist with child care (Fernandez & Tobio, 2005; Perez-Carames, 2014).

The case of Spain illustrates the staying power of cultural norms for traditional gendered divisions of labor and how the design and components of family policy can reinforce gender biases. The family-centered context prevails irrespective of family policies, with the woman as the predominant caregiver (Minguez, 2013). However, the policy landscape abets this tendency.

While parental leave is available to mothers and fathers, it is unpaid, which deters parents, and particularly fathers, from exercising this right. Additionally, the supply of public childcare services has not kept pace with the demand generated by the increase in dual-earning families. The majority of childcare services for very young children are privatized and the costs are high when compared with other countries (Ibanez & Leon, 2014; Thévenon, 2009).

In a study about individual factors that may predict family strategies for work-family reconciliation, Minguez (2013) found that gender stereotypes appear weaker among parents with more income and mothers with more education. The lower the education level of the mother, the less likely that care services will be procured in the market, and the higher the probability that the mother will be the care provider (Minguez, 2013).

Since women entered the labor market in large numbers in the 1990s, changes in Spain's family policy have not inspired a paradigm shift. While the preschool system for children between ages three and six embraces early education as a social investment, the provision of childcare in the private sector for very young children is stratified by socioeconomic class. Parents receive only minimal financial support from the state for childrearing, and caring remains primarily the province of mothers and grandmothers. In Spain, the male breadwinner model is declining, but progress is slow (Minguez, 2013), hence the low composite rank in the early childhood investment index.

United States

In 2011, the United States ranks last of the ten countries in the composite index of early childhood investment. This low ranking is largely due to meager, highly targeted and time-limited child allowances, and the lack of any federal program for paid maternity, paternity, or parental leave. While free, universal kindergartens are part of the public education system, other public programs for ECEC, most notably "*Head Start*" and "*Early Head Start*," fail woefully to meet the demand. As a result, the private sector predominates. Private providers offer a range of services from child care in family homes to early education in center-based care, and quality varies greatly.

Child allowances in the United States were restructured through the controversial Personal Responsibility and Work Opportunity Reconciliation Act of 1996, which replaced a federal entitlement as the basis for eligibility with more restrictive criteria. Benefits for children in the United States are now administered through the *Temporary Assistance to Needy Families* (TANF) program. Federal funding for TANF is provided in the form of block grants to the individual states to allocate within the parameters of federal mandates. Unlike TANF's predecessor, the entitlement program *Aid to Families With Dependent Children* (AFDC), the TANF program aims to encourage work and self-sufficiency. TANF is designed as a labor activation program in conjunction with expansions of the *Earned Income Tax Credit*, which supplements the wages of low-income workers with children, based on family size.

TANF benefits are subject to a federal lifetime limit of five years. States have wide discretion to determine eligibility criteria, benefit levels, and benefit duration (OECD, 2001-2011), which may include sanctions for failure to comply with the welfare-to-work orientation of the program. As an example, the state of Michigan bases benefit amounts on income and family size, with increments for additional family members. No special dispensation is provided for lone parents, although lone parent families are prevalent among recipients.

The lack of a national program in the United States for paid leave related to childbirth is viewed by many as a serious challenge to family welfare and child well-being, particularly for low-income workers. While it is common for companies to provide paid leave benefits for employees, particularly in professional sectors, large swaths of American workers, and especially low-wage workers, are left out. With the growing demand for work and family balance, four states have taken initiative to implement a paid leave program with at least a partial wage replacement: California, Hawaii, New Jersey, and Rhode Island (Gault, Hartmann, Hegewisch, Milli, & Reichlin, 2014). New York is soon to follow (Traister, 2016).

The window of opportunity for implementing a national policy for paid leave to care for young children and other family members is reflected in the current national agenda. In the televised State of the Union Message in 2016, President Obama expressed political determination to institute a federal paid leave program. Additionally, the municipality of San Francisco is the first American city to authorize the provision of six weeks of paid leave to begin in 2017 for firms of fifty employees or larger (KQED News Staff, April 6, 2016).

In the absence of a national program for paid leave, and limited options for affordable child care, almost half of all United States families with working mothers regularly enlist relatives to care for young children (U.S. Census Bureau, 2013; Adema et al., 2015). The major program for federal funding for child care services is the *Child Care and Development Fund* (CCDF), which provides federal grants to states to operate child care subsidy programs targeted to low-income families and families who receive social assistance (OECD, 2001-2011). Conversely, the *Child and Dependent Care Tax Credit* favors higher-earning families, as poor families who generally do not have income tax liabilities are not eligible for this tax benefit.

"Head Start," begun in 1965 under the Johnson Administration's War on Poverty, is the nationally funded preschool program of the United States purposed to meet the developmental and school readiness needs of disadvantaged children (Office of Head Start, 2016). Funding is provided from the federal government directly to local "Head Start" agencies, bypassing the states, and program specifics vary greatly across the country. The United States Census Bureau (2013) reports that less than one percent of families use "Head Start" (Adema et al., 2015). The related "Early Head Start" program, initiated in 1995, provides care and services to families with infants and toddlers (Office of Head Start, 2016). Other ECEC services available in individual states include nursery school, child care centers, pre-school, and pre-kindergarten (OECD, 2001-2011).

A quarter of American families enroll children in a formal care setting or preschool. The availability of services in the pre-primary public sector varies widely across the states. While 40 states provide state-funded preschool programs, 29 of 53 state programs have an income requirement (Barnett, Carolan, Squires, Brown, & Horowitz, 2015). Universal preschool is only available in three states: Florida, Georgia, and Oklahoma (Barnett et al., 2015). Projecting from the rate of program expansion between 2013 and 2014, the National Institute for Early Education Research predicts that it would take 75 years for pre-kindergarten services to enroll 50 percent of four-year-olds from families with incomes under 200 percent of the poverty level (Barnett et al., 2015).

The United States pursues a highly targeted approach to the few family benefits and limited ECEC services that are offered on a national level. States, and even municipalities, have stepped in to fill the huge gap left by market-based benefits and services to assist poor, low-income, and middle-class families for whom market-based solutions are insufficient. While paid parental leave may become a reality in the political future, the United States as a nation has

demonstrated token commitment to investing in young children. The OECD, an organization not known for hyperbole, states in its report by Adema et al. (2015), "[T]he lack of investment in children in the United States during the early years is striking" (p. 17). Path-dependent reliance on the market to provide social goods has dominated, and has incurred the high price of social exclusion, which is perpetuated through the generations.

Trends in relation to the fiscal crisis

Theories of welfare state change may shed light on the capacity for national responses to the fiscal crisis in the short term, and pathways to economic growth in the long term. Family policies that invest in children can be viewed within the overarching context of welfare state adaptation to the economic and social conditions of our time, including concerns about poverty, inequality, and social exclusion from equal opportunities. In the wake of the fiscal crisis, expenditure patterns for investments in early childhood are far from uniform across program types or countries. In the case of child allowances, countries exhibit a mix of increased spending, slowed spending increases, and spending declines. Most countries increased spending for paid parental leave, and of the four countries that experienced declines, only the United Kingdom provides evidence of a possible relationship to the recession.

One explanation for the lack of retrenchment in paid parental leave and child allowances is that these programs address social dimensions that present qualitatively different challenges for cutbacks than other types of social benefits. However, in some countries cash benefits for families raising children have become tightly linked with labor activation policies, and in the process, somewhat decoupled from an emphasis on supporting the development of children. In the case of paid leave for newborns, consider that the timing of family formation may only modestly be related to the onset of economic downturns, and more strongly associated, for example, with the need for prolonging education and delaying childbirth due to the premium for high-skilled labor. Similarly, it may be politically and economically unwise for policymakers to scale back abruptly the amounts of benefits for child allowances or to reconfigure policies towards less generosity. With the advent of new and more generous paid leave for fathers, which supports the dual-earner/dual-carer paradigm, policy reversals would likely meet with political resistance. After long histories of gradual and consistent expansions in rights and benefits, child allowances and paid parental leave may be more resistant to cutbacks than other types of social benefit programs.

Early childhood education and care appear to provide the most noteworthy findings relative to the occurrence of the fiscal crisis. While spending increases for ECEC benefits may have slowed overall, the resiliency of this program area and previously established expansionary trends reveal national and political dedication to broadening ECEC benefits and services. This steadfastness has been attributed to the connection between ECEC and its central place within the social investment paradigm (Chung & Meuleman, 2014). International diffusion of the social investment rationale regarding short- and long-term economic returns from child care and early education may trump fiscal constraints. For some countries, ECEC growth may happen at the expense of retrenchment in other social programs (Leon, Ranci, & Rostgaard, 2014). Buoyed by the social investment logic, child care provision may survive general welfare state retrenchment, particularly if services are provided under the education system, rather than as child-minding services, also known as "assistentialist" care, whose primary purpose is to enable mothers to

work, in contrast to educationally-oriented care aimed at promoting children's development (Leon, Ranci, & Rostgaard, 2014).

Other ramifications of the fiscal crisis for ECEC services extend beyond the scope of family benefits to issues of quality and professionalization. A major source of concern regarding the expansion of ECEC services is its rapid growth, which may defeat the very purpose -- long-term economic payoffs -- that makes such programs so appealing. Some claim that the quality of early childhood care and education programs has suffered in an attempt to widen access (Engel, 2014). When the assistentialist component of care is prioritized, the developmental component is likely to flag. Mothers are able to work, but the building of human capital in children may be compromised (Engel, 2014). In some cases, quality is preserved by lowering the entry age for public preschool within the education system (Leon, Pavolini, & Rostgaard, 2014). Even for environments that emphasize child development, costs may still be trimmed by cutting staff and restricting the hours of operation (Leon, Ranci, & Rostgaard, 2014).

Cuts may be more severe for children below age three than for children ages three to six, since the younger age group is more likely to receive assistentialist care. This applies to Spain, where the two age groups are bifurcated by an emphasis on education for the older children, and assistentialist care for the younger children. Austerity measures are affecting the younger group more seriously and compromising their development (Ibanez & Leon, 2014).

Another threat to the quality and professionalization of ECEC services is the refamilization of parent or informal care through cash-for-care programs. Cash-for-care is attractive to governments because it costs less than center-based care. However, it may be less supportive of human capital building because children do not have access to professional educators, and less-educated parents are more likely than higher-educated parents to choose cash-for-care as a care option. This shift is occurring implicitly in Germany, Italy, and Spain (Leon, Ranci, & Rostgaard, 2014). In Germany, state-subsidized ECEC services have greatly expanded for children younger than three, and this trend has not been dampened by the fiscal crisis (Schober, 2014).

The strength of ECEC prioritization in an era of austerity is counter to what would be predicted by path-dependent retrenchment tendencies that chip away at programs that are relatively new arrivals on the policy landscape, and which lack the deep embeddedness of program types that have long histories and entrenched bureaucratic and popular support. This provides evidence that a recent, politically-instituted policy change may resist cutbacks – perhaps at least as long as the party that implemented them remains in power. ECEC benefits and services constitute a power resources phenomenon energized by the social investment paradigm.

Chapter 8: Conclusion

The Evolution of Family Policy: From Promoting Fertility to Advancing Child Rights

This study captures trends in expenditures and policy design for three program types related to young children in ten OECD countries for slightly more than a decade in a much longer history of family policy. Across the spectrum of programs, four countries are conspicuous in their national commitments to investing in early childhood: Sweden, Norway, the United Kingdom, and France. The remaining countries appear less well adapted to the synthesis of the dual-earner/dual-carer/single parent phenomena and the child investment paradigm.

High spending levels accompanied by universal policies placed Sweden and Norway at the forefront of early childhood investments, while the Labour Party's pledge to eradicate child poverty in the United Kingdom propelled expansions across the board in child allowances, paid leave, and early childhood education and care. France maintained high levels of support for child allowances and early education while expanding an already wide array of options for care provision.

While Japan and Korea performed less well overall, these countries made noteworthy gains, respectively, in child allowances and early childhood education and care. Many countries, including Japan and Korea, supported granting fathers more time to spend with their young children. In addition, nearly all countries evidenced a commitment to expanding early education and care despite the challenges posed by the fiscal crisis. All told, these policy expansions and the anti-child-poverty campaign in the United Kingdom demonstrated the joint presence of political power resources and convergence in shaping the destiny of family policy related to early childhood.

The changes witnessed in the study period from 2001 through 2011 can be considered to represent a recent phase in the evolution of child-centered family policy that began in the late 1800s with national concerns about maternal health and fertility. In response, several industrializing countries mandated unpaid maternity leave. In the twentieth century, child allowances were introduced (see Table 11), and paid and unpaid maternity leaves were expanded. Paternity leaves were also provided in some countries along with parental leaves that could be shared between parents. After World War II, child allowances and leave periods continued to increase in generosity. In tandem with social changes such as divorce and lone-parenting, the policy landscape in many countries enlarged since the 1970s to include strategies for longer parental leaves, child care assistance, and preserving the labor attachment of mothers with young children. Starting in the 1990s, national preoccupations with building workforces educated for the ultracompetitive global information economy spurred extension of government reach into policies for early childhood care and education. In the social investment paradigm, government investments in the early years were justified by the expected rate of return to be garnered across lifetimes through adult economic productivity that was expected to sustain the tax base of welfare states.

Over more than a century, economic and demographic changes have driven evolutionary adaptations to new realities of child-centered policy in the arenas of work, family, and early childhood that have resulted in a shifting of national boundaries between the roles of the state, market and family. The historical policy vectors of fertility, cash assistance, mothers' labor

attachment, and investments in early childhood all continue to play a role in contemporary family policy for children too young to attend primary school.

Table 11.

Historical and Conceptual Phases of Public Investments in Early Childhood	
Phase I	Fertility and maternal/infant health (since late 1800s)
Phase II	Cash transfers to families with children (since 1930s)
Phase III	Labor activation and care policies for mothers with young children (since 1970s)
Phase IV	Social investment in children (since 1990s)
Phase V	Promotion of child rights (landmark UN Declaration of the Rights of the Child, 1959)

This study of public investments in early childhood affirms Kasza's (2006) observation that most programs of advanced welfare states are designed to serve the same purpose. In this broad canvas of convergence, Kasza (2006) implies that differences in program details matter less than overarching goals. However, in the details of policy design and expenditures lie national profiles of interconnectedness and frictions between the family, state, and market sectors. For example, eligibility requirements and benefit amounts of policies communicate the extent to which families can rely on government support for childrearing or whether families must procure for their needs in the marketplace or through extended family networks.

Additionally, and beyond the scope of this study, is the place of early childhood investments within the entirety of each nation's social, economic, and labor policies. Government policies for economic growth and labor activation amidst chronic unemployment or underemployment are but two major policy arenas that border family policy. Within the family policy arena of welfare states, gender equity and elder care are close tie-ins to early childhood issues.

This study provides a window into the configurations of child investment packages that demonstrate the most promise for children's development through family supports and services. The policies that appear to work best for children are those that confront the challenges of social and economic realities at the family level. Such policies require that states have adaptive capacity to make path-dependent adjustments or more radical political changes as national and

global social and economic environments speed onwards. Keeping up with the pace of change poses challenges for all welfare states. Policies that address current social risks and conditions must also aim to anticipate the future in order to remain effective, efficient, and equitable.

Behind the empirical focus of this study are larger questions about the role of government, and the ability of government to synchronize the fit among the state, market, and family sectors of society for the purpose of promoting child development throughout the population. The challenge of harmonization is ongoing, as social and economic conditions are perpetually in flux.

Scholars warn of several pitfalls in existent child investment policies. Established pathways of deeply embedded and rigid gender roles about childrearing and work appear to be a great hindrance to adaptation, and can even trump policies that seek to overturn them, as observed in the resistance of Japan's male-dominated employment sectors to admitting women who want a family and a career (Rosenbluth, 2007a). Italy and Spain also exemplify the staying power of conservative cultural values that have been institutionalized in social, civic and economic spheres, which has slowed the provision of childcare and part-time work options (Ginsborg, 2011; Ibanez & Leon, 2014; Mora-Sitja, 2011; Riva, 2012). It is not impossible for such countries to make incremental changes as evidenced by recent programmatic inroads in Italy, Spain, and Germany (Erler, 2011; Leon & Migliavacca, 2013; Riva, 2012; Trzcinski & Camp, 2014), but such modest revisions may well be inadequate.

Lack of coordination among the elements of a child investment strategy are also problematic, as noted in the case of the United Kingdom, where a gap of several years exists between paid leave and subsidized preschool (O'Brien et al., 2014), or in other countries where the operating hours for ECEC services do not match well with workday schedules. This gap is perhaps symptomatic of prioritizing children older than three more than infants and toddlers for receipt of services and parental supports. Another ramification of favoring older children is that infants and toddlers may receive only assistentialist care (i.e., "childminding") that is devoid of a developmental component (Ranci & Sabatinelli, 2014), even though the earliest years are perhaps even more critical for building children's brain "architectures" (Magnuson, 2013). Debate about assistentialist care and educationally-oriented care also occurs in relation to contrasts between public and private ECEC services.

From the standpoint of equalizing opportunities for all children, several trends are troubling. These trends begin and end with increasing social stratification, mainly according to where families are in the income distribution. Stratification may occur in multiple areas of family policy, such as tax systems that privilege families with higher incomes (Lindsey, 2004); eligibility requirements that favor working parents (Waldfogel, 2010); and privatization of childcare and early education services that renders them unaffordable to poor and low-income families (Ibanez & Leon, 2014). French policies, while among the most generous, have been criticized for failing many families by stratifying benefits according to the number of children, which diverts support away from the most needy to large, wealthy families (Howard, 2011).

While states attempt to provide a slate of family policy options to suit the needs of individual families, the touting of "choice" may masquerade the separation of the haves from the have-nots. The re-familization of care through low-paid, long-term cash-for-care programs, are most commonly selected by low-income, low-educated mothers (Saraceno, 2011). Withdrawing from employment for extended periods reduces chances for cash-for-care mothers to build workforce skills (Misra et al., 2007; Morgan & Zippel, 2003), and exclusive care at home or in informal care may deprive children of developmental opportunities that could be experienced in more educational settings. What appears as "choice" is actually a socially structured preference,

based on labor market conditions, and class and gender-specific options (Saraceno, 2011). States may favor such "choices" because they cost less than building and maintaining the physical and professional infrastructure of quality ECEC centers (Leon, 2014).

Another related concern regarding equal opportunities for young children is the interpretation of the term "universal." Whereas "universal" used to signify the uniformity of a benefit across an entire population, usually for no cost or low cost, the word now applies to an array of benefit options of varying cost, quality, and content under a "universal" umbrella. All families may be entitled to the same category of benefit, but the actual benefit received may differ substantially, whether delivered as a public or private service, or awarded directly to the family (Leon, Ranci, & Rostgaard, 2014). The term applies more to mere coverage, and less to the equality or equivalence of the coverage received. This new, diluted connotation of "universal" is closely linked with the concept of "choice," as if all options are more or less equal. As noted above, they are not. Different options have different ramifications for the development of young children. Maintaining options while avoiding the exacerbation of social stratification is a difficult balance.

The privatization of ECEC services is another source of inequality. In several countries, the private sector has filled the void left by the absence of state-run ECEC centers. Additionally, distinctions between the public and private sectors have become blurred by the outsourcing of public services, public subsidies for private facilities, or care benefits that can be used to pay nannies and home-based daycare services (Engel, 2014; Ibanez & Leon, 2014; Leon, Pavolini, & Rostgaard). While the proliferation of private sector services makes it possible for more mothers to work, quality and affordability have by no means been achieved through market competition. Particularly in times of fiscal constraint, evidence points to a tradeoff between expanded access and service quality (Engel, 2014). When low salaries for private caregivers render services affordable, lack of professionalization among providers is likely to compromise quality. State regulation may also play a part in enabling the growth of the low wage, under-professionalized caregiving sector (Ranci & Sabatinelli, 2014).

Private care options span a wide spectrum, including, at one extreme, low-cost service providers that may cause harm to children. At the other extreme, in liberal countries such as the United States, private preschools can cost as much or more than college tuition, and ultrawealthy parents must compete to gain access for their children to the most elite preschools. The bottom line is that market solutions tend to produce stratification. The poor can't afford to purchase the product at all, or can only afford products of lower quality than what can be purchased by more affluent families.

In comparison, public ECEC services in Europe generally offer higher-quality and professionalized care, particularly when early childhood education is subsumed under the state's education system that also oversees primary schooling (Leon, 2014). By connecting ECEC to education departments for primary schooling, preschools are subject to greater oversight and standardization, and quality services are delivered by well-qualified, better-paid professionals (Leon, Pavolini, & Rostgaard, 2014). Consequently, the wide array of ECEC services and families' preference for options pose strong challenges to states that aim to equalize quality care and education for the poor as well as the rich.

In states in which private ECEC services currently dominate, it may be likely that the public sector will have little chance to develop, due to the path-dependent effects of vested interest groups and ancillary institutional supports of privatization that become hard to dislodge. While a variety of public and private service alternatives recently provided an experimental

environment in which states could discover the most desirable forms of services, experimentation was dampened after the fiscal crisis because cost containment and coverage became to some extent more important than quality (Engel, 2014; Leon, Ranci, & Rostgaard, 2014). It was cheaper to rely on private sector provision that relies on low salaries for carers (Leon, Pavolini, & Rostgaard, 2014) than to expand public options (Engel, 2014; Leon, 2014). Consequently, quality and public provision have been sacrificed for the expansion of services in the private sector (Engel, 2014; Leon, 2014).

Caveats about the overall social investment strategy have also been expressed. The underlying goal of early childhood investment may tend toward the objectification of children as the productive labor force needed to sustain the future of the capitalist enterprise. Alternatively, the more humanistic goal of developing children's potential to the fullest, beyond the demands of the market economy, appears less prominent.

A danger of the social investment approach is that the demands for investments in education may only serve to intensify the competition for the same jobs (Ulmestig & Harslof, 2013; Boudon, 1974), and thus fail to solve the problem of chronic unemployment. If this scenario is combined with retrenchment of welfare state institutions, the market sector may overwhelm the state. In the present era of austerity, the capitalist state has a proclivity to abdicate social welfare for the sake of economic recovery (Shahidi, 2015; Bieling, 2012; Heyes, 2013). This propensity invites revisiting the "problematic relationship between capitalism and the welfare state" (Shahidi, 2015, p. 676; Streeck, 2011; Gough, 1979; O'Connor, 1973; Offe, 1984).

Supranational organizations may serve as a countervailing force for the preservation of the welfare state amidst increasing global economic competition. In the quest to unify and uplift economic and social conditions for families and children across and within nations, supranational organizations such as the European Commission have established progressive cultural norms and goals for the social investment policies of member states (Kasza, 2006). The European Commission Communication to the European Parliament (2013a) describes social investment as one of the three main functions of the welfare state, along with social protection and stabilization of the economy. Additionally, the Communication squarely places investment in ECEC services within the "Social Investment Package," citing a broad consensus about the value of ECEC for improving academic performance, employment outcomes and social mobility. The Communication (2013a) also states that a focus on children is "vital for a sustainable, efficient and competitive knowledge economy and an intergenerational fair society" (p. 9).

The Barcelona Summit of the European Council (2002) set specific targets for childcare enrollment (at least 90 percent of children between three years old and mandatory school age, and at least 33 percent of children under three years of age by 2010) and enrollment in early education (95 percent of children between four years old and the start of formal schooling by 2020) (Stratagaki, 2004). The provision of ECEC services was tied directly to the reduction of inequality (European Commission, 2013a).

Other European Commission edicts have "envisioned child care provision as a support measure for women's entry in the labor market" and stipulated the nontransferability of parental leave between father and mother (European Commission, 1997, 1998; Stratagaki, 2004, p. 48). The European Union Agenda for the Rights of the Child (2011) addressed the support of family incomes through family and child benefits, including adequate redistribution across income groups, and targeted the reduction of inequality through investments in ECEC. The ECEC section of the agenda addressed access, quality, and affordability. Member states were also

tasked with incentivizing the participation of disadvantaged children, especially children under age three, and raising parents' awareness about ECEC programs. The European Commission (2013b) further expanded nations' responsibilities for marginalized groups by devoting its Recommendation of February 2013 to breaking the cycle of disadvantage. In order to reduce child poverty and social exclusion, the Recommendations specified balancing universal with targeted approaches.

Pursuant to the Barcelona Summit and other proclamations of the European Commission, member states adjust their national agendas to meet the pan-European goals and targets (Fusulier, 2011, Gianesini, 2014; Perez-Carames, 2014). Such targets can push national governments to forego the sluggish changes of path dependency for the more rapid reforms rooted in the wielding of political pressure to achieve higher standards of welfare support and improved economic performance. Kasza (2006) notes that international institutions are "bountiful sources of policy convergence" (p. 159).

In addition to welfare state commitments to assist families with young children, the European Union formally recognizes children as autonomous holders of rights in the Charter of Fundamental Rights of the European Union. Under the Charter, the "best interest of the child" standard is to be considered by public and private institutions (European Commission, 2011, p. 3). Member states are also bound by the United Nations Convention on the Rights of the Child (United Nations, 1989). The Convention was based on the United Nations Declaration of the Rights of the Child (1959), which closely relates to the specifics and spirit of the child investment package discussed in this study. The United Nations Declaration (1959) explicates humankind's charge to give children "the best it has to give" (League of Nations, 1924), including prenatal and postnatal care, an adequate means of support, equal-opportunity education, and the promotion of healthy development in physical, mental, moral, spiritual and social spheres. The Declaration's vision of children's rights conjures the "full" development of the child's personality. The 1989 Convention further affirms that a child's "talents and mental and physical abilities" should be nurtured "to their fullest potential" (Article 29).-While the Rights of the Child are yet to be fully realized, the child rights framework may spearhead the next phase of evolution of family policy for young children.

The child rights framework differs considerably from the social investment paradigm, in which the development of human capital is central to the success of the social investment state (Esping-Andersen, 1999; Giddens, 1998; Hemerijck, 2013; Morel et al., 2012). The human capital perspective seeks to counter poverty and social inequality by improving the future life chances of children, whereas the children's rights perspective concerns the present needs of children for developing their capabilities (Saraceno, 2011). Both approaches require society as a whole to assume social responsibility for the development of children.

The framework of Amartya Sen (1993, 1999) known as the "Capability Approach" is based on human rights and offers a moral alternative to social investment approaches dependent upon human capital theory. In regards to young children, the Capability Approach coincides with the perspective of child developmentalists who argue for the intrinsic worth of experiencing childhood and the rights of each child to healthy, freedom-enhancing development. Among the foundational conditions for human development, are "good health, basic education, and the encouragement and cultivation of initiatives" (Sen, 1999, p. 5). By viewing human development as a human right, the Capability Approach has implications for formulating welfare state policy. The human rights framework inherently relies on the principle of universalism, in contrast to social rights that are frequently mutable and conditional.

In Sen's framework, poverty and inequality are not viewed exclusively in monetary terms, but rather as deprivations of opportunities that inhibit development. Just as Adam Smith was able to discern that a nation's wealth is not reflected in its storehouse of gold, but in the productivity of its people's labor, Sen explains that the well-being of a nation is not quantified by labor productivity reflected in its GDP, but by the capabilities of its people. For Sen (1999), human development is not optional; it is essential for economic improvement.

The human capital approach is oriented towards a social return on investment that also provides benefits to the individual. Children that are the beneficiaries of social investments are expected to become self-sufficient citizens who contribute to economic growth. In comparison, the capability approach is foremost for the benefit of the individual's quality of life, with secondary, positive externalities for society.

Sen's "capability" more fully embraces the scope of human experience than "human capital". It is also more humanistic: people are no longer purposed for the mission of capital; instead, human capital building is subservient to the primary goal of developing human capabilities. Sen's Capability Approach can be viewed as a new stage in the evolution of individual rights, one that sets a new paradigm for social organization and the relationship of the individual to society.

At present, few countries implement the social investment perspective, and it is argued that the social investment model may be economically unsustainable in the current fiscal environment (Hemerijck, 2013). However, given present-day conceptions of equality, freedom, and human rights, and expectations for a high quality of life, there are grounds for optimism that citizens may demand new forms of social organization that extend such cherished values beyond what has currently been attained.

As the rate of change continues to accelerate, preparing children for adult lives becomes more difficult to plan. While the sphere of work becomes increasingly diversified and specialized through advances in science and technology, the capabilities of basic critical thinking, creativity, adaptability, and applied intelligence that can be nurtured most effectively from the early years onwards will likely far outweigh one-to-one matches with projected job openings that occur in late adolescence and early adulthood. If a focus is maintained on building capabilities, rather than fitting children in to slots in the economy, nations will build more robust societies with greater opportunities for all citizens in multiple dimensions of life, beyond market capitalism and consumerism. Countries that lead in building capabilities in young children that are fortified over the life course will be in a position to approach the vision of human potential that will expand humanity's contributions to improve and enrich the quality of human lives.

Contribution of the Study and Future Directions

The three indices for Child Allowances, Paid Parental Leave, and Early Childhood Education and Care allow comparisons across ten developed economies between 2001 and 2011. The set of indices combines expenditures and policy design in one measure, while preserving the relative emphasis of each through weighting schemes (see Appendix A). As a set, the indices depict a "child investment package" that captures important distinctions in policy approaches for several dimensions of benefits and institutional structures that are likely to promote the development of young children. While more refinements and expansions of specific policy design indicators are possible for the future, this initial set of indices, from the vantage point of the best interest of the child within a human capital framework, is another step in the direction of

quantifying the importance that childhood is given in the public sector, i.e., in a country's political and social economy.

Explanations of welfare state configurations are exceedingly complex when programmatic details of eligibility, benefit amounts, and distribution across the population are taken into account. Future areas of research include adding components to the indices, expanding the knowledge base regarding ECEC service provision and program outcomes, and a deeper examination of the equalizing capacity (or lack thereof) of mixed public/private care options.

With respect to index components, enhancements include measures of ECEC quality and coverage, take-up rates for types of paid leave by income, gender, and educational level, and leave replacement rates, which are now only included as aggregate, country-level expenditures. Studies concerning long-term outcomes related to quality programs for ECEC would augment literature that until recently has been limited primarily to a few programs in the United States. Qualitative studies about family leave and care choices would also be informative for policymaking. Studies concerning child well-being outcomes that contrast the contemporary arrangements for non-familial childcare and early education with traditional, stay-at-home care by parents and relatives would be informative. Lastly, additional studies concerning strategies for equalizing opportunities in the early years, particularly in relation to disadvantaged children, could deepen understanding about the viability of the public/private mix in the opportunity context and probe the capacity and will of welfare states to achieve greater social justice.

In closing, each of the theories investigated in this study – regime, path dependency, political power resources, and convergence – can be viewed as an integrated collection of complex factors comprised of cultural, ideological, and fiscal values and constraints. What matters is the relative strength and timing of each factor in the evolution of a country's social policies. At certain points in time, path dependency will preclude change, while at other times, political will and sentiment will disrupt long-held policy trajectories and redirect policy development. The duration of path dependency and the frequency and intensity of its disruption through political leadership, whether through the weight of public opinion or political partisanship, are rarely uniform across or within countries. Conversely, in the web of world trade, economic realities that have global effects can spur leaders in developed countries to seek similar policy solutions within a brief span of time, for example, in the realm of labor and family policy and how they intertwine.

A central question in welfare state theory concerns how governments mitigate the shortfalls of capitalism in order to provide for the social welfare of all citizens. Ultimately, the measure of a country is likely not found in its GDP (Stiglitz, Sen, & Fitoussi, 2009), but in the quality of life distributed across the populace. When the economic productivity of a country is not well shared, people are precluded from contributing their talents to society, and the toll of human suffering is great. Without the intervention of governments to combine with the capitalist enterprise in such a way as to offer supports to parents and genuine opportunities for their children to realize their gifts, much will be lost to us, and instead, we will need to pay needlessly for the strife that we create. If the social investment logic is to be believed, then countries that are able to reduce child poverty, promote dual-earner, dual-carer families, and provide quality ECEC will best prepare their nations' children, and their economies, to thrive in the future. Ultimately, the Capabilities Approach may hold the most promise.

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Appendix A Alternative Weighting Schemes for the Child Investment Indices

The purpose of this Appendix is to illustrate how the values of the indices for child allowances, paid parental leave, and ECEC change when expenditures are weighted less, the same as, and more than the full set of policy design indicators for each respective program type. Three weighting conditions are applied to each index to vary the importance of policy design characteristics relative to quantitative expenditures. The flexibility for adjusting the relationship between expenditures and policy design indicators increases the utility of the index.

While Chapter 5 presents results for the weighting scheme that assigns equivalent importance to expenditures and policy design indicators in a 50/50 split, this Appendix presents two other weighting schemes for the Child Allowances and Paid Parental Leave Indices: (1) a 25/75 split in which 25% of the index value is assigned to expenditures and 75% to policy design indicators; and (2) a 75/25 split in which 75% of the index value is assigned to expenditures and 25% to policy indicators. Due to the greater number of policy design indicators in the ECEC Index as compared with the other two indices, the first weighting scheme for the ECEC Index assigns 14.29% to expenditures (instead of 25%). The ECEC index includes expenditures and six policy design indicators. In order to preserve the equality of each index component in the ECEC Index in the first weighting scenario, the seven components each comprise 14.29% of the index value (100% divided by seven), and the sum total of the six policy design indicators contribute 85.71% of the index value. Consequently, in the first weighting scenario for the ECEC Index, expenditures are undervalued and the full complement of policy design indicators are overvalued in comparison to the first weighting scenarios for the Child Allowances and Parental Leave Indices.

For ease of comparison, this Appendix provides alternative weighting schemes for each program type by assigning progressively more prominence to expenditures by weighting them 25% (14.29% for the ECEC Index), 50% (as discussed in Chapter 5), and 75%, respectively. As expenditures become more dominant in the index for each program type, the weighting of each individual policy design indicator needs to be adjusted accordingly. In tandem with expenditures progressing from 25% (14.29% for the ECEC Index) to 50% to 75% of the index value, respectively, the full complement of policy design indicators for a given index diminishes from 75% (85.71% for the ECEC Index) to 50% to 25% of the index value, respectively.

A table of adjusted weighting schemes for expenditures and each policy design indicator accompanies the discussion of each index in this Appendix. Since the assignment of weights involves subjective judgments, readers may disagree about the exact weight that is designated for any individual index component. As explained in Chapter 4, overall benefit schemes are weighted more heavily than more specific aspects of benefit coverage. All indices are scaled between zero and one.

Index #1: Child Allowances (2001-2011)

The Index for Child Allowances is comprised of four components: expenditures as a percentage of GDP, and three policy design indicators regarding the overall benefit scheme, benefits specific to lone parents, and benefits for larger families or for children under the age of three

In the first scenario, each of the four components is weighted equally, such that expenditures contribute 25% to the index score and the three policy design components together account for 75% of the total score (i.e., 25% each). The first scenario shall be referenced as the "equally weighted" index, since each individual index component is weighted 25%. In the second and third weighting scenarios, the policy design indicators together account for 50% and 25% of the index value, respectively, while expenditures respectively account for 50% and 75%. Adjustments in the weight assigned to each individual policy design indicator in the three different scenarios are noted in *Table 12*.

Table 12.

Index #1: Child Allowan	Index #1: Child Allowances Alternative Weighting Schemes									
Indicator	Expenditures weighted 25%	Expenditures weighted 50%	Expenditures weighted 75%							
Child allowance expenditures as a percent of GDP	.25	.50	.75							
Child allowances benefit scheme	.25	.30	.15							
Child allowances designated for lone parents	.25	.10	.05							
Child allowances designated for larger families or children under age three	.25	.10	.05							

Note. For each weighting scheme, the set of indicators totals 1.0

Upon initial observation of the equally weighted index (see *Figure 17*), four rather distinct groupings are apparent in the plot. Norway, Sweden, and the United Kingdom occupy the top echelon, while France and Germany are tightly aligned in the next most generous group. Italy, Japan, and Korea form the third tier for benefit generosity (until Japan expands policy coverage in 2010 and 2011), and the United States and Spain occupy the lowest rung. As expenditures become more dominant in the series of weighting scenarios, differentiation of the countries becomes more pronounced (see *Figures 17, 18, and 19*). Germany and the Nordic, Asian, and Southern European regime pairs rate higher on the index when policy design is weighted more heavily than expenditures. France and the United Kingdom are the only two countries that achieve higher scores when expenditures are a dominant component of the index. When expenditures as a percentage of GDP are weighted more heavily than policy design indicators, the United Kingdom assumes top rankings for most or all years, and Korea moves to the lowest rank.

Figure 17. Index #1: Child Allowances (expenditures weighted 25%)

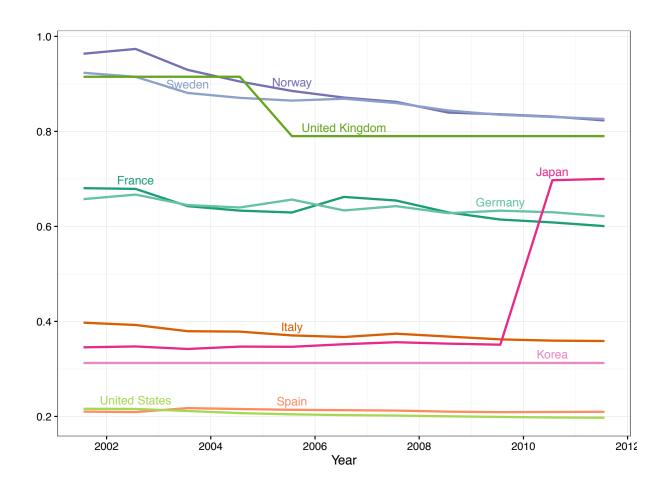


Figure 18. Index #1: Child Allowances (expenditures weighted 50%)

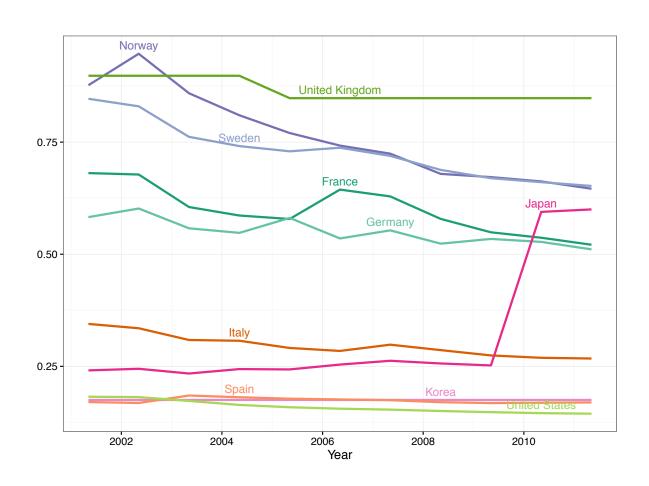
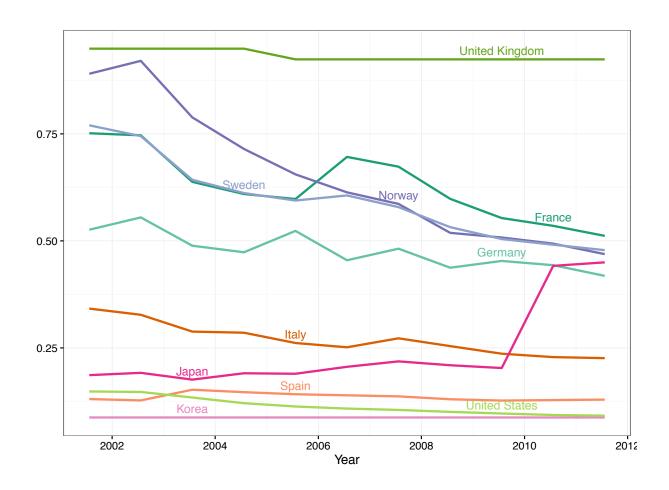


Figure 19. Index #1: Child Allowances (expenditures weighted 75%)



Index #2: Paid Parental Leave (2001-2011)

The Paid Parental Leave index includes expenditures and three policy design indicators: the overall benefit scheme; the combined duration of maternity, paternity, and parental leave; and paid leave specifically designated for fathers. As in Index #1, the equally weighted index for Paid Parental Leave assigns 25% of the index score to expenditures and 75% of the index score to the combination of the three policy design indicators (i.e., 25% to each indicator). In the 50/50 weighting scenario, expenditures comprise half of the index value and the full complement of policy design indicators comprises the other half. In the 75/25 weighting scenario, expenditures contribute 75% of the index value and the trio of policy design indicators contributes 25%. For each of these scenarios, the weight assigned to each individual policy design indicator is indicated in *Table13*.

Table 13.

Index #2: Paid Parental	Leave Alternativ	e Weighting Sch	emes
Indicator	Expenditures weighted 25%	Expenditures weighted 50%	Expenditures weighted 75%
Paid parental leave expenditures as a percent of GDP	.25	.50	.75
Paid parental leave benefit scheme	.25	.30	.15
Duration of paid maternal, paternal, and parental leave	.25	.10	.05
Paid paternal leave availability	.25	.10	.05

Note. For each weighting scheme, the set of indicators totals 1.0

Country performances in the three weighting scenarios are depicted in *Figures 20, 21, and 22*. In the equally weighted scenario, the countries are somewhat evenly spread across the valuations of the index between .4 and 1.0, with the exception of the United States. But as expenditures predominate, the trend lines of the countries (excluding the United States) assume a bifurcated pattern, with Norway and Sweden maintaining high rankings between .75 and 1.0, and the other countries occupying a progressively narrower range of values, mainly in the lower half of the scale. The Nordic regime pair retains a consistent relationship across the weighting spectrum by maintaining the highest rankings of the ten countries. Italy and Spain grow closer as expenditures are emphasized, as do Japan and Korea, while France and Germany spread farther apart. In the case of the United Kingdom, greater weighting of expenditures moderately diminishes scores.

Figure 20. Index #2: Paid Parental Leave (expenditures weighted 25%)

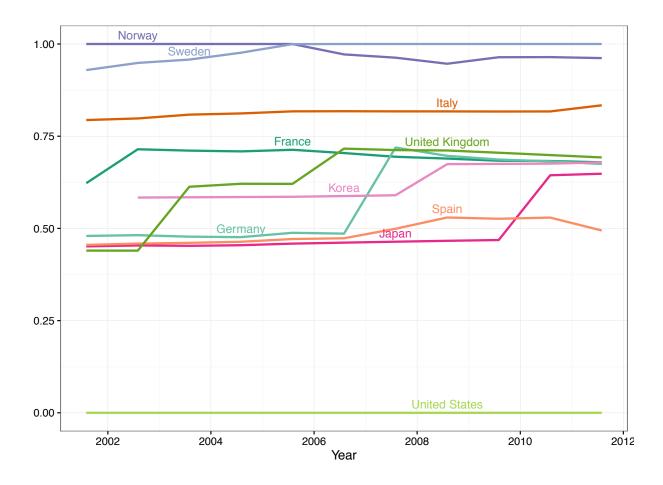


Figure 21. Index #2: Paid Parental Leave (expenditures weighted 50%)

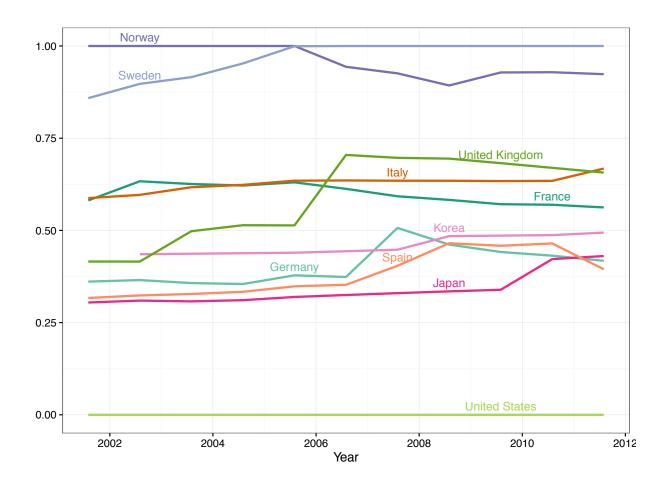
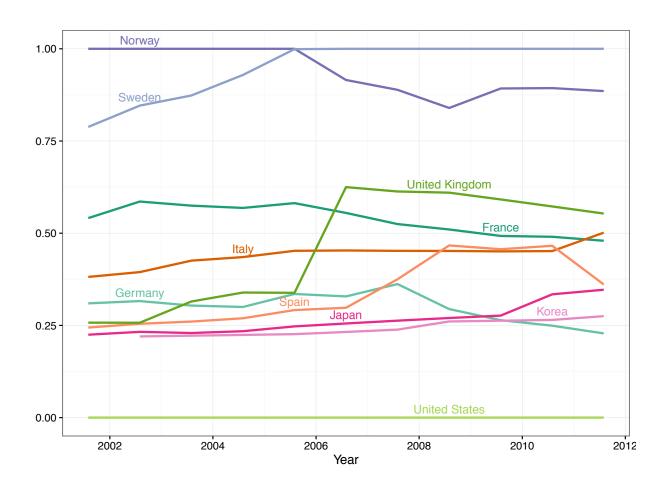


Figure 22. Index #2: Paid Parental Leave (expenditures weighted 75%)



Index #3: Early Childhood Education and Care (ECEC) (2001-2011)

The ECEC index includes expenditures and six policy design indicators: tax relief for ECEC expenses; benefits for care alternatives; the type of ECEC care available for (1) children ages zero through two; and (2) ages three to five/six; the usual starting age for early childhood education; and whether or not additional consideration is granted to children of lone parents. In the first weighting schema, expenditures and each of the six policy design indicators are equally weighted at 14.29% of the total index score (i.e., 100% divided by seven). In the second and third weighted schemas, expenditures assume, respectively, 50% and 75% of the value of the index, while the full complement of the policy design indicators respectively comprise 50% and 25% of the index value. The weighting for expenditures and each individual policy design indicator under all three weighting conditions is shown in *Table 14*.

Table 14.

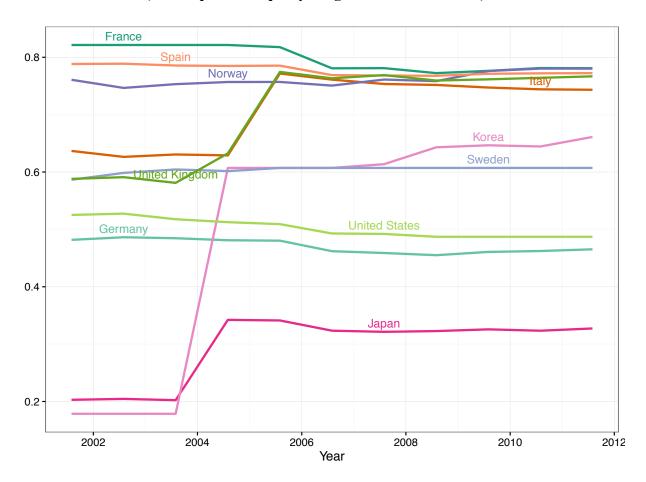
· ·	Childhood Education	`	C)
Indicator	Expenditures weighted 14.29%	Expenditures weighted 50%	Expenditures weighted 75%
ECEC expenditures as a percent of GDP	14.29	.50	.75
Tax relief for ECEC expenses	14.29	.08	.03
Paid benefit or tax relief for purchasing public or private care alternatives to government- sponsored center-based care	14.29	.06	.02
Type of ECEC for children ages zero to two	14.29	.10	.06
Type of ECEC for children ages three to five/six	14.29	.10	.06
Usual starting age for early childhood education	14.29	.08	.04
Additional consideration or benefits for lone parents for ECEC services	14.29	.08	.04

Note. For each weighting scheme, the set of indicators totals 1.0 (allowing for rounding)

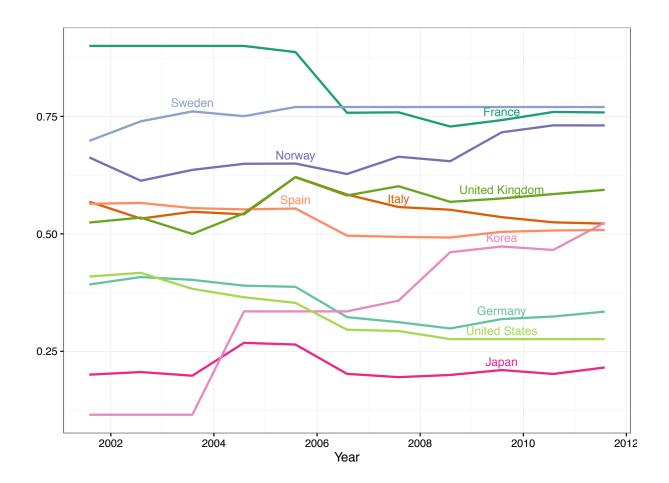
A comparison of results for each of the weighting schemes is depicted in *Figures 23, 24, and 25*. In the first scenario in which policy design indicators account for nearly 86% of the index value, several countries cluster around high index scores by the end of the study period: Norway, France, Spain, United Kingdom, and Italy. Korea and Sweden score next highest, followed by the United States and Germany, and Japan is the lowest-scoring country.

The ten countries display greater differentiation in index scores as expenditures become more prominent in the 50/50 and 75/25 weighting schemes. Sweden, France, and Norway are more distinguishable from other countries when expenditures are weighted more heavily, and the already large gap in index scores between France and Germany widens. Italy and the United Kingdom maintain mid-level scores as expenditures grow in importance, but index scores for Spain, Germany, the United States, and Japan decline. While Korea's rise in generosity is somewhat dampened as expenditures predominate, the growth in Korea's overall policy strength remains one of the most striking features of the ECEC Index plots.

Figure 23. Index #3: Early Childhood Education and Care (all components equally weighted at 14.29% each)







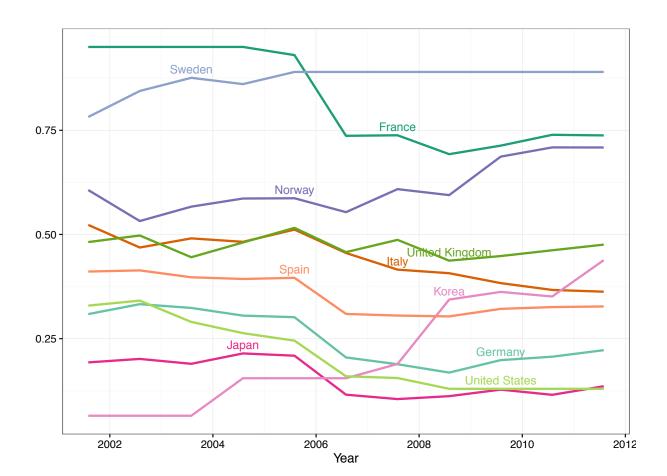


Figure 25. Index #3: Early Childhood Education and Care (expenditures weighted 75%)

Summary

Use of weighting assists with understanding the role of expenditures relative to policy design factors. The index scores are calibrated by a series of three weighting schemes that successively assign higher importance to expenditures relative to policy design indicators, so that the relative importance of each can be manipulated and interpreted. This becomes evident for each program when the equally weighted index, which assigns the highest value to policy design, is lined up with the weighted indices in a sequence that increases weighting for expenditures.

Appendix B

Test Results Regarding Significant Differences in the Means of Expenditures and Index Scores by Program Type and Regime Pair

This appendix contains six series of *t*-test results. The purpose of the *t*-tests is to determine whether or not significant differences exist between the partners of each regime pair for mean expenditures and mean index scores for each program type during the years of the study, 2001 through 2011. Results are organized by program type: (1) Child Allowances; (2) Paid Parental Leave; and (3) Early Childhood Education and Care. Within each program designation, expenditures are presented first, followed by index scores. Regime pairs in each series are presented in the following order: France and Germany; Italy and Spain; Japan and Korea; Norway and Sweden; and the United Kingdom and the United States. The results presented herein are referenced in Chapter 5.

Tests for Significant Differences: Child Allowance Expenditures

Table 15. Child Allowance Expenditures: France and Germany

Group Statistics

	Country Name	N	Mean	Std. Deviation	Std. Error Mean
Child Allowance	France	11	1.1352806	.0874951	.0263808
Expenditures	Germany	11	.7044111	.0719356	.0216894

	Independent Samples Test										
Child	Levene for Equ Varia	ality of	t-test for Equality of Means								
Allowance Expenditures			95% C Interv					nfidence Il of the			
					Sig. (2-	Mean	Std. Error	Diffe	rence		
	F	Sig.	t	df	tailed)	Difference	Difference	Lower	Upper		
Equal variances assumed	1.387	.253	12.616	20	.000	.4308695	.0341522	.3596292	.5021098		
Equal variances not assumed			12.616	19	.000	.4308695	.0341522	.3594581	.5022809		

Table 16. Child Allowance Expenditures: Italy and Spain

	Country Name	N	Mean	Std. Deviation	Std. Error Mean
Child Allowance	Italy	11	.4199292	.0211553	.0063786
Expenditures	Spain	11	.1742898	.0299810	.0090423

	independent Samples Test									
Child Allowance	Test for lity of nces				t-test for Ed	quality of Me	ans			
Expenditures					Sig. (2-	Mean	Std. Error		idence Interval	
	F	Sig.	t	df	tailed)	Difference	Difference	Lower	Upper	
Equal variances assumed	.776	.389	22.198	20	.000	.2456394	.0110657	.2225568	.2687220	
Equal variances not assumed			22.198	18	.000	.2456394	.0110657	.2223891	.2688897	

Table 17. Child Allowance Expenditures: Japan and Korea

	Country Name	N	Mean	Std. Deviation	Std. Error Mean
Child Allowance	Japan	11	.3234820	.1766647	.0532664
Expenditures	Korea	11	.0039184	.00181300	.0005466

	independent Samples Test									
	Levene's Equali Variar	ty of	t-test for Equality of Means							
Child Allowance Expenditures					Sig. (2-	Mean	Std. Error	Interva	Infidence al of the	
	F	Sig.	t	df	tailed)	Difference	Difference	Lower	Upper	
Equal variances assumed	12.767	.002	5.999	20	.000	.3195636	.0532692	.2084459	.4306812	
Equal variances not assumed			5.999	10	.000	.3195636	.0532692	.2008758	.4382514	

Table 18. Child Allowance Expenditures: Norway and Sweden

	Country Name	N	Mean	Std. Deviation	Std. Error Mean
Child Allowance	Norway	11	.8864616	.1864872	.0562280
Expenditures	Sweden	11	.7803735	.0627933	.0189329

	independent Samples Test										
Child Allowance	Levene for Equa Varia	ality of	t-test for Equality of Means								
Expenditures					Gia (S	Mean	Std. Error		dence Interval		
					Sig. (2-	Mean	Sta. Elloi	OI tile i	Silicitorios		
	F	Sig.	t	df	tailed)	Difference	Difference	Lower	Upper		
Equal variances assumed	18.974	.000	1.788	20	.089	.1060881	.0593300	0176721	.2298482		
Equal variances not assumed			1.788	12	.099	.1060881	.0593300	0229017	.2350778		

Table 19. Child Allowance Expenditures: United Kingdom and United States

					Std. Error
	Country Name	N	Mean	Std. Deviation	Mean
Child Allowance	United Kingdom	11	1.7705733	.3412702	.1028968
Expenditures	United States	11	.1184422	.0226541	.0068305

				iaopo	maonic our	npies rest					
	Levene's										
Child	for Equa	lity of									
Allowance	Varian	ices		t-test for Equality of Means							
Expenditures								95% Confide	ence Interval		
					Sig. (2-	Mean	Std. Error	of the Di	fference		
	F	Sig.	t	df	tailed)	Difference	Difference	Lower	Upper		
Equal											
variances	22.089	.000	16.021	20	.000	1.6521311	.1031233	1.4370196	1.8672425		
assumed											
Equal											
variances not			16.021	10	.000	1.6521311	.1031233	1.4226298	1.8816323		
assumed											

Tests for Significant Differences: Child Allowance Index

Table 20. Child Allowances Index Scores: France and Germany

Group Statistics

	Country Name	N	Mean	Std. Deviation	Std. Error Mean
Child Allowances Index	France	11	.5988594	.0541497	.0163267
	Germany	11	.5504887	.0282925	.0085305

					maepend	ient Sample:	3 1631						
Child Allowances	Tes	ene's t for llity of											
Index	Varia	nces		t-test for Equality of Means									
								95% Confider	nce Interval				
					Sig. (2-	Mean	Std. Error	of the Diff	erence				
	F	Sig.	t	df	tailed)	Difference	Difference	Lower	Upper				
equal variances	4.963	.038	2.626	20	.016	.0483707	.0184209	.0099453	.0867962				
equal variances			2.626	15	.019	.0483707	.0184209	.0091258	.0876157				

Table 21. Child Allowances Index Scores: Italy and Spain

	Country Name	N	Mean	Std. Deviation	Std. Error Mean
Child Allowances Index	Italy	11	.2968777	.0253560	.0076451
	Spain	11	.1735782	.0057650	.0017382

	independent Samples Test											
Child Allowances	Levene for Equ Varia	ality of	t-test for Equality of Means									
Index					Sig. (2-	Mean	Std. Error		ence Interval			
					= -							
	F	Sig.	t	df	tailed)	Difference	Difference	Lower	Upper			
Equal variances	11.378	.003	15.727	20	.000	.1232995	.0078402	.1069451	.139654			
assumed												
Equal variances			15.727	11	.000	.1232995	.0078402	.1060492	.140550			
not assumed												

Table 22. Child Allowances Index Scores: Japan and Korea

	Country Name	N	Mean	Std. Deviation	Std. Error Mean
Child Allowances Index	Japan	11	.3113922	.1415236	.042671
	Korea	11	.1750000	.0000000	.000000

				macpo.	iueni San	pioo root					
	Levene for Equ Varia	ality of	t-test for Equality of Means								
Child Allowances Index					Sig. (2-	Mean	Std. Error	95% Col Interva Differ	I of the		
	F	Cia.		df	tailed)	Difference	Difference				
	Г	Sig.	t	ui	talleu)	Dillefence	Dillerence	Lower	Upper		
Equal variances assumed	14.578	.001	3.196	20	.005	.1363922	.042671	.0473821	.2254023		
Equal variances not assumed			3.196	10	.010	.1363922	.042671	.0413154	.2314691		

Table 23. Child Allowances Index Scores: Norway and Sweden

	Country Name	N	Mean	Std. Deviation	Std. Error Mean
Child Allowances Index	Norway	11	.7671985	.1063278	.0320590
	Sweden	11	.7305611	.0641336	.0193370

				aopo	naont our	iipies rest						
Child	Levene for Equ Varia	ality of		t-test for Equality of Means								
Allowances Index					Sig. (2-	Mean	Std. Error	95% Confide				
	F	Sig.	t	df	tailed)	Difference	Difference	Lower	Upper			
Equal variances assumed	3.583	.073	.979	20	.339	.0366374	.0374393	.0414596	.1147344			
Equal variances not assumed			.979	16	.342	.0366374	.0374393	.0425635	.1158383			

Table 24. Child Allowances Index Scores: United Kingdom and the United States

	Country Name	N	Mean	Std. Deviation	Std. Error Mean
Child Allowances Index	United Kingdom	11	.8661818	.0252263	.0076060
	United States	10	.1596397	.0137272	.0041389

				acpci	ideint Odi	iipies rest						
Child		s's Test ality of nces		t-test for Equality of Means								
Allowances Index					a : 19				lence Interval			
					Sig. (2-	Mean	Std. Error	of the L	Difference			
	F	Sig.	t	df	tailed)	Difference	Difference	Lower	Upper			
Equal variances assumed	16.054	.001	81.594	20	.000	.7065421	.0086592	.6884793	.7246049			
Equal variances not assumed			81.594	15	.000	.7065421	.0086592	.6881316	.7249526			

Tests for Significant Differences: Paid Parental Leave Expenditures

Table 25. Paid Parental Leave Expenditures: France and Germany

Group Statistics

	Country Name	N	Mean	Std. Deviation	Std. Error Mean
Paid Parental Leave	France	11	.3428080	.0424001	.0127841
Expenditures	Germany	11	.1390667	.0671231	.0202384

independent Samples Test										
Paid Parental	Levene's for Equa Variar	ality of		t-test for Equality of Means						
Leave Expenditures					Sig. (2-	Mean	Std. Error		dence Interval of Difference	
	F	Sig.	t	df	tailed)	Difference	Difference	Lower	Upper	
Equal variances assumed	5.222	.033	8.511	20	.000	.2037413	.0239380	.1538077	.2536750	
Equal variances			8.511	17	.000	.2037413	.0239380	.1532103	.2542724	

Table 26. Paid Parental Leave Expenditures: Italy and Spain

	Country Name	N	Mean	Std. Deviation	Std. Error Mean
Paid Parental Leave	Italy	11	.1830858	.0290875	.0087702
Expenditures	Spain	11	.2160127	.0868531	.0261872

	independent Samples Test									
Paid Parental Leave	Levene's for Equality Variance	ty of			t-test for Equality of Means					
Expenditures								95% Confic	lence Interval	
					Sig. (2-	Mean	Std. Error	of the D	Difference	
	F	Sig.	t	df	tailed)	Difference	Difference	Lower	Upper	
Equal variances assumed	18.832	.000	-1.192	20	.247	0329269	.0276168	0905345	.0246806	
Equal variances not assumed			-1.192	12	.256	0329269	.0276168	0929813	.0271274	

Table 27. Paid Parental Leave Expenditures: Japan and Korea

	Country Name	N	Mean	Std. Deviation	Std. Error Mean
Paid Parental Leave	Japan	11	.1373592	.0293574	.0088516
Expenditures	Korea	10	.0187600	.0129012	.0040797

independent Samples Test												
Paid Parental	for Equ	e's Test lality of inces		t-test for Equality of Means								
Leave Expenditures					Sig. (2-	Mean	Std. Error		ce Interval of the			
	F	Sig.	t	df	tailed)	Difference	Difference	Lower	Upper			
Equal variances assumed	6.651	.018	11.763	19	.000	.1185992	.0100821	.0974970	.1397013			
Equal variances not assumed			12.168	14	.000	.1185992	.0097465	.0976947	.1395037			

Table 28. Paid Parental Leave Expenditures: Norway and Sweden

	Country Name	N	Mean	Std. Deviation	Std. Error Mean
Paid Parental Leave	Norway	11	.6630989	.0805449	.0242852
Expenditures	Sweden	11	.6701515	.0610945	.0184207

independent damples rest											
	Levene	e's Test ality of									
Paid Parental	Varia	inces		t-test for Equality of Means							
Leave Expenditures								95% Confid	ence Interval		
Experialitates					Sig. (2-	Mean	Std. Error	of the D	ifference		
	F	Sig.	t	df	tailed)	Difference	Difference	Lower	Upper		
Equal variances assumed	1.659	.212	231	20	.819	0070525	.0304810	0706348	.0565298		
Equal variances not assumed			231	19	.820	0070525	.0304810	0709323	.0568272		

Table 29. Paid Parental Leave Expenditures: United Kingdom and United States

	Country Name	N	Mean	Std. Deviation	Std. Error Mean
Paid Parental Leave	United Kingdom	11	.2385793	.1376713	.0415095
Expenditures	United States	11	.0000000	.00000000	.0000000

	independent Samples Test									
Paid Parental	Levene's for Equa Variar	ality of				t-test for E	equality of Me	ans		
Leave Expenditures					Sig. (2-	Mean	Std. Error	95% Confider		
	F	Sig.	t	df	tailed)	Difference	Difference	Lower	Upper	
Equal variances assumed	427.172	.000	5.748	20	.000	.2385793	.0415095	.1519921	.3251665	
Equal variances not assumed			5.748	10	.000	.2385793	.0415095	.1460905	.3310681	

Tests for Significant Differences: Paid Parental Leave Index

Table 30. Paid Parental Leave Index Scores: France and Germany

Group Statistics

	Country Name	N	Mean	Std. Deviation	Std. Error Mean
Paid Parental Leave Index	France	11	.5984870	.0268047	.0080819
	Germany	11	.4044589	.0507362	.0152975

			mac	Cilacii	t Sample	3 1031				
		Levene's Test for Equality of								
	Varia	nces	t-test for Equality of Means							
Paid Parental Leave Index								95% Coi Interva		
					Sig. (2-	Mean	Std. Error	Differ	ence	
	F	Sig.	t	df	tailed)	Difference	Difference	Lower	Upper	
Equal variances assumed	6.366	.020	11.215	20	.000	.1940281	.0173012	.1579384	.2301178	
Equal variances not assumed			11.215	15	.000	.1940281	.0173012	.1571893	.2308670	

Table 31. Paid Parental Leave Index Scores: Italy and Spain

	Country Name	N	Mean	Std. Deviation	Std. Error Mean
Paid Parental Leave Index	Italy	11	.6272795	.0214547	.0064688
	Spain	11	.3808701	.0593213	.0178860

	independent dampies rest									
	Levene's	Test for								
	Equality of	Variances	ces t-test for Equality of Means							
Paid Parental Leave Index								95% Co	nfidence	
Leave Index								Interva	al of the	
			Sig. (2- Mean Std. Error Differen							
	F	Sig.	t	df	tailed)	Difference	Difference	Lower	Upper	
Equal variances assumed	17.564	.000	12.955	20	.000	.2464093	.01901989	.2067345	.2860841	
Equal variances not assumed			12.955	13	.000	.2464093	.01901989	.2051767	.2876419	

Table 32. Paid Parental Leave Index Scores: Japan and Korea

	Country Name	N	Mean	Std. Deviation	Std. Error Mean
Paid Parental Leave Index	Japan	11	.3393950	.0444944	.0134156
	Korea	10	.4592579	.0250016	.0079062

				- G- G- G		iipies rest					
	Levene's										
	Varian	ices		t-test for Equality of Means							
Paid Parental Leave Index								95% Confid	ence Interval of		
					Sig. (2-	Mean	Std. Error	the D	ifference		
	F	Sig.	t	df	tailed)	Difference	Difference	Lower	Upper		
Equal variances assumed	.823	.376	-7.500	19	.000	1198629	.0159828	1533152	0864106		
Equal variances not assumed			-7.697	16	.000	1198629	.0155719	1528728	0868531		

Table 33. Paid Parental Leave Index Scores: Norway and Sweden

	Country Name	N	Mean	Std. Deviation	Std. Error Mean
Paid Parental Leave Index	Norway	11	.9584888	.0414569	.0124997
	Sweden	11	.9658030	.0519458	.0156623

	Independent Samples Test										
	Lever										
	Test	IOI									
	Equali	ty of									
Paid Parental	Variar	nces		t-test for Equality of Means							
Leave Index								95% Confider	nce Interval of		
					Sig. (2-	Mean	Std. Error	the Diff	erence		
	F	Sig.	t	df	tailed)	Difference	Difference	Lower	Upper		
Equal variances assumed	.456	.507	365	20	.719	00731425	.0200387	0491142	.0344857		
Equal variances not assumed			365	19	.719	00731425	.0200387	0492464	.0346180		

Table 34. Paid Parental Leave Index Scores: United Kingdom and United States

	Country Name	N	Mean	Std. Deviation	Std. Error Mean
Paid Parental Leave Index	United Kingdom	11	.5874185	.1165069	.0351282
	United States	11	.0000000	.0000000	.0000000

	independent samples rest									
	Levene's Equal Varia	ity of	t-test for Equality of Means							
Paid Parental Leave Index					Sig. (2-	Mean	Std. Error		lence Interval of	
	F	Sig.	t	df	tailed)	Difference	Difference	Lower	Upper	
Equal variances assumed	92.819	.000	16.722	20	.000	.5874185	.0351282	.5141425	.6606946	
Equal variances not assumed			16.722	10	.000	.5874185	.0351282	.5091481	.6656889	

Tests for Significant Differences: Early Education and Care Expenditures

Table 35. Early Education and Care Expenditures: France and Germany

Group Statistics

	Country Name	N	Mean	Std. Deviation	Std. Error Mean
ECEC Expenditures	France	11	1.1904099	.0655659	.0197689
	Germany	11	.4024991	.0452146	.0136327

	independent Samples Test										
ECEC Expenditures	Levene for Equ Varia	ality of	t-test for Equality of Means								
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error		ence Interval ifference Upper		
Equal variances	1.649	.214	32.811	20	.000	.7879108	.0240137	.7378191	.8380026		
assumed	1.049	.214	32.011	20	.000	.7679106	.0240137	./3/6191	.0300020		
Equal variances not assumed			32.811	18	.000	.7879108	.0240137	.7374103	.8384113		

Table 36. Early Education and Care Expenditures: Italy and Spain

	Country Name	N	Mean	Std. Deviation	Std. Error Mean
ECEC Expenditures	Italy	11	.6146379	.0382932	.0115458
	Spain	11	.4686620	.0646546	.0194941

independent Samples Test										
	Levene's Equal									
ECEC	Varia	nces				t-test for Ed	quality of Means	3		
Expenditures									nfidence	
					Sig. (2-	Mean	Std. Error	Diffe	rence	
	F	Sig.	t	df	tailed)	Difference	Difference	Lower	Upper	
Equal variances assumed	5.428	.030	6.443	20	.000	.1459759	.0226567	.0987148	.1932370	
Equal variances not assumed			6.443	16	.000	.1459759	.0226567	.0980051	.1939467	

Table 37. Early Education and Care Expenditures: Japan and Korea

	Country Name	N	Mean	Std. Deviation	Std. Error Mean
ECEC Expenditures	Japan	11	.3435855	.0444849	.0134127
	Korea	11	.3842407	.2815536	.0848916

						ampies rest				
	Levene'									
ECEC	Variar	nces	t-test for Equality of Means							
Expenditures					Sig.			95% Confide	ence Interval	
					(2-	Mean	Std. Error	of the Di	fference	
	F	Sig.	t	df	tailed)	Difference	Difference	Lower	Upper	
Equal variances assumed	33.096	.000	473	20	.641	04065524	.08594465	21993264	.13862217	
Equal variances not assumed			473	10	.646	04065524	.08594465	23092540	.14961493	

Table 38. Early Education and Care Expenditures: Norway and Sweden

	Country Name	N	Mean	Std. Deviation	Std. Error Mean
ECEC Expenditures	Norway	11	.9154349	.2267032	.0683536
	Sweden	11	1.3558369	.1985777	.0598734

				mao	portaont of	ampies rest				
	Lever									
	Test	tor								
	Equali	ty of								
ECEC	Varian	ices	t-test for Equality of Means							
Expenditures								95% Confid	ence Interval	
					Sig. (2-	Mean	Std. Error	of the D	ifference	
	F	Sig.	t	df	tailed)	Difference	Difference	Lower	Upper	
Equal variances assumed	.302	.588	-4.847	20	.000	44040206	.09086827	62994994	25085418	
Equal variances not assumed			-4.847	20	.000	44040206	.09086827	63016090	25064322	

Table 39. Early Education and Care Expenditures: United Kingdom and United States

	Country Name	N	Mean	Std. Deviation	Std. Error Mean
ECEC Expenditures	United Kingdom	11	.6898500	.0842184	.0253928
	United States	11	.3679065	.0246015	.0074176

					are the carrie	pies rest					
ECEC	Equa	Test for lity of		t-test for Equality of Means							
		11000	t-test for Equality of Means								
Expenditures								95% Confid	ence Interval		
					Sig. (2-	Mean	Std. Error	of the D	ifference		
	F	Sig.	t	df	tailed)	Difference	Difference	Lower	Upper		
Equal variances assumed	22.260	.000	12.170	20	.000	.3219435	.0264540	.2667614	.3771256		
Equal variances not assumed			12.170	12	.000	.3219435	.0264540	.2641376	.3797494		

Tests for Significant Differences: Early Education and Care Index

Table 40. Early Education and Care Index Scores: France and Germany

Group Statistics

	Country Name N		Mean	Std. Deviation	Std. Error Mean	
ECEC Index	France	11	.8174504	.0771556	.0232633	
	Germany	11	.3536453	.0417254	.0125807	

	independent samples rest										
	Levene's Equal Varia	ity of		t-test for Equality of Means							
ECEC Index					Sig. (2-	Mean	Std. Error		nce Interval of		
	F	Sig.	t	df	tailed)	Difference	Difference	Lower	Upper		
Equal variances assumed	49.120	.000	17.537	20	.000	.4638051	.0264472	.4086372	.5189730		
Equal variances not assumed			17.537	15	.000	.4638051	.0264472	.4075579	.5200523		

Table 41. Early Education and Care Index Scores: Italy and Spain

	Country Name	N	Mean	Std. Deviation	Std. Error Mean
ECEC Index	Italy	11	.5531730	.0291827	.0087989
	Spain	11	.5265995	.0308929	.0093146

	independent Samples Test										
	for Equ	e's Test uality of ances	t-test for Equality of Means								
ECEC Index					Sig. (2-	95% Confidence (2- Mean Std. Error the Differ					
	F	Sig.	t	df	tailed)	Difference	Difference	Lower	Upper		
Equal variances assumed	1.471	.239	2.074	20	.051	.0265735	.0128133	0001546	.0533017		
Equal variances not assumed			2.074	20	.051	.0265735	.0128133	0001602	.0533072		

Table 42. Early Education and Care Index Scores: Japan and Korea

	Country Name	N	Mean	Std. Deviation	Std. Error Mean
ECEC Index	Japan	11	.2146319	.0261459	.0078833
	Korea	11	.3301374	.1527025	.0460415

	independent Samples Test										
ECEC Index	for Equ	e's Test uality of unces		t-test for Equality of Means							
									95% Confidence Interval of the Difference		
	F	Sig.	t	df	tailed)	Difference	Difference	Lower	Upper		
Equal variances assumed	12.595	.002	-2.473	20	.023	1155056	.0467115	2129441	0180670		
Equal variances not assumed			-2.473	11	.032	1155056	.0467115	2188099	0122013		

Table 43. Early Education and Care Index Scores: Norway and Sweden

	Country Name	N	Mean	Std. Deviation	Std. Error Mean
ECEC Index	C Index Norway		.6668166	.0409950	.0123605
	Sweden	11	.7580635	.0223903	.0067509

	independent Samples Test												
	Levene	e's Test											
	for Equ	ality of											
50501.	Variances			t-test for Equality of Means									
ECEC Index								95% Confidence Interval					
					Sig. (2-	Mean	Std. Error	the Dif	ference				
	F	Sig.	t	df	tailed)	Difference	Difference	Lower	Upper				
Equal variances assumed	3.967	.060	-6.479	20	.000	0912470	.0140839	1206254	0618685				
Equal variances not assumed			-6.479	15	.000	0912470	.0140839	1211854	0613085				

Table 44. Early Education and Care Index Scores: United Kingdom and United States

	Country Name	N	Mean	Std. Deviation	Std. Error Mean
ECEC Index	United Kingdom	11	.5662004	.0364646	.0109945
	United States	11	.3291589	.0570786	.0172098

	independent samples rest										
ECEC Index	for Equ	e's Test uality of unces									
	Varia	11000			Sig. (2-	Mean	equality of Means Std. Error	95% Confid	ence Interval		
	F	Sig.	t	df	tailed)	Difference	Difference	Lower	Upper		
Equal variances assumed	6.941	.016	11.607	20	.000	.2370415	.0204220	.1944420	.2796411		
Equal variances not assumed			11.607	17	.000	.2370415	.0204220	.1939543	.2801287		