Changes in Private Investments in Children across Three Liberal Welfare States: Australia, Canada, and the United States.

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#### Introduction

Public and private investments in children are of substantial interest given the potential importance of these investments for a wide range of outcomes, including children's well-being and future educational and earning capabilities (Becker 1980; Folbre 2008; Büchel and Duncan 1998). While children have always required some investment, the increasing complexity of modern economies means that children now require more intense and lengthy skill development. Increasing inequality in many countries may exacerbate the potential consequences of not having invested enough, as the earnings of workers with education below college have steadily fallen farther behind earnings of the college-educated (Levy 1998). Governments have largely increased investment in responses to increasing demands, as, for example, industrialized countries now provide free and mandatory primary and secondary education. More recently, public spending on children as a share of GDP has increased in most countries since the 1970s (Gornick 2006).

In private households, increasing pressures to invest seem to have manifested in several ways. First, across a range of countries, parents today spend more time with children than in the past (Gauthier, Smeeding, and Furstenberg 2004; Sayer, Bianchi, and Robinson 2004). Second, fertility rates have fallen, perhaps reflecting the greater investments parents must make now that the costs of child-rearing have increased. Finally, parents today express a greater desire to place their children in structured educational environments at earlier ages than in the past (Hertz 1997; Lareau 2003). In summary, evidence from this set of indicators suggests that private parental investment in children has grown substantially in modern industrialized countries and to some extent mirrors shifts in governments' expenditures. There is less evidence on long-term trends in another important type of private investment – parents' own spending on children.<sup>1</sup> Yet monetary investments are important to monitor. First, they provide another important measure of investments, gauging the extent to which parents purchase experiences they think will benefit their children. Second, unlike the previously listed investments, parental spending can manifest substantial inequalities. For example, in the case of time, all parents have, at least in theory, an equal allotment of twenty-four hours to use as they choose. Earnings, however, are unequally distributed and have become more so in most industrialized countries over recent years.

Recent evidence from one country, the United States, shows a substantial increase in parents' monetary investments in children (Kornrich and Furstenberg 2010). Parents in the U.S. spend more than in the past, particularly on education and child care, and much of the increase can be accounted for by increases in spending among the rich. Yet the United States is peculiar from a policy perspective, as it asks parents to shoulder the responsibility of investment for future generations more than a variety of other countries (Folbre 2008; Glass 2000). In other countries, governments assume more responsibility for investment in children through the direct provision of services and the provision of monetary incentives and rebates for certain expenses (most notably child care). The United States largely avoids government expenditures, with the exceptions of means-tested benefits and primary and secondary education (Folbre 2008).

While the United States may be an extreme case, it is not entirely unique in asking parents to pay for some or most of the cost of raising their children. A variety of other countries, typically thought of as liberal welfare states, have a history of little government provision of services. If increased parental spending in the United States occurred as a response to a lack of government provision, parental spending in other liberal welfare states

<sup>&</sup>lt;sup>1</sup> A number of studies document parental spending related to children over one time point or shorter periods of time (e.g. Bianchi et al. 2004; Lundberg and Rose 2004; Lino and Carlson 2009)

should also have increased. We thus examine changes in parental spending in three countries with similar (low) levels of provision of government services – Australia, Canada, and the United States.

Because investment in children begins earlier, lasts longer, and is more intense than in the past, the consequences of reliance on private households to provide investment become more important. Two potential consequences of private household responsibility stand out under conditions of increasing inequality. First, private household investment is more likely to generate inequalities of investment in children than public investment. If parents feel pressure to invest similarly across the income distribution, increasing inequality in resources should generate substantially more unequal investments by parents. Second, to the extent that parents feel similar pressures to invest and value the same types of investments across the income distribution, increasing expectations for investments will put pressure on those with lower incomes. Thus, the share of parental resources which flow to children may also be unequal, although lower-income parents' spending may be constrained if their resources are dedicated to other goods.

Yet we know little about how levels of or inequalities in spending on children vary over time or across countries.<sup>2</sup> Some research documents trends in time use, while other recent research highlights differences in the extent of public investment across children's early years (OECD 2009). In this paper, we provide a first step toward understanding variation in private spending on children. To minimize the importance of differences in the structure of welfare state regime and the overall public provision of goods and services for children, we rely on data from three countries typically identified as liberal welfare state regimes: the United States, Australia, and Canada. Using data from expenditure surveys from

<sup>&</sup>lt;sup>2</sup> Moentary investment in the United States is quite unequal and became more unequal over the last third of the twentieth century (Bianchi et al. 2004; Kornrich and Furstenberg 2010).

each country, we track spending on two goods specifically identifiable as targeted for or used on children: child care and education from the 1970s to roughly the present day.

#### **Background: Investing in Children**

Investment in children may be characterized as any set of activities which increase children's future capacities for earnings and overall well-being (cf. Becker 1980:9). Investment may take a wide variety of forms, ranging from time with children to money spent on enriching activities to the provision of adequate nutrition. In this study we are concerned with parents' monetary investments. Spending allows parents to purchase services – often of specialists – which help expand children's human and cultural capital.

Monetary investment is of particular interest because the ability to deploy money to build children's capacities is presumably one of the main advantages children from higherincome households have over other children.<sup>3</sup> More money buys higher quality child care, access to elite private schools and, later, extra-curricular programs and assistance which advantage children and elite private schools. Even more basically, the presence of financial resources plays a crucial role in determining whether parents are able or willing to help pay for children's higher education (Steelman and Powell 1991). Children's access to highquality educational environments is thus directly tied to their parents' spending, particularly in countries with greater variability in the quality of public schooling, like the United States.

The extent to which parents spend should vary within and across countries. Within countries, existing research shows that parental investment is linked to parents' economic resources as well as a variety of other family and child characteristics such as the total number of children or the age of the child (Steelman and Powell 1991; Powell and Steelman 1995; Kornrich and Furstenberg 2010). Given our interest in the consequences of increasing

<sup>&</sup>lt;sup>3</sup> Of course, children's home environments vary substantially across classes. Still, at least one study of parental investment in contemporary societies argues that the most important set of investments are ongoing and require substantial financial commitment (Hopcroft 2005).

income inequality – and the fact that income is one of the most important determinants of spending – we ask how spending varies with income in each country. One important source of differences across countries will be differences in the income distribution. Greater income inequality should lead to greater inequality in spending, at least if parents spend a similar share of income across contexts.

Other country characteristics may contribute to the intensity of spending at different points in the income distribution. Government support for child care may either increase or decrease the level of observed private spending on child care. If child care subsidies as tax rebates are provided, this may incentivize private spending, although it is not clear that this incentive will work similarly across the population. On the other hand, publicly funded child care might decrease private spending. Since our purpose is primarily descriptive, we are unable to systematically test for these types of effects, but we provide information below about the main policy features in the countries we examine.

#### Measuring Expenditures on Children: Cost and Investment

Empirical investigations of the amount spent on children are not new, typically coming in the context of a desire to determine the cost of children in order to determine appropriate levels of child support, poverty lines, and other benefits for parents (cf. Saunders 1999). These estimates are produced in an attempt to determine how much a family will need to spend when they add a child to their household, and what resources families need to maintain a given standard of living given the presence of children. A variety of methods may be used to determine the cost of children broadly, ranging from expenditure-based methods which, in essence, examine spending differences between households with and without children who are otherwise at the same standard of living to methods which sum the cost of a set of goods needed for a child (McDonald 1990). Perhaps the best known set of estimates for the United States is produced by the USDA and attempts to determine the additional spending added to a household across a wide variety of categories using a variety of budget-based methods (Lino and Carlson 2009).

Our approach differs substantially from cost-based approaches, as we are interested in spending which forms a close approximation to expenditure on the development of children's human capital. Rather than attempting to determine how much children might cost, we simply ask how much parents have spent on items identifiable as for children. While a "cost" approach is valuable for questions about the financial burden children generate for parents, our expenditure-based method allows a better understanding of the extent to which household investment in the development of children's human capital is accomplished by private households across different countries, since the cost of children may depend on the cost of a wide range of items such as food, housing, and transportation, which are less directly related to parents' motives to invest. While it would be ideal to focus on all goods purchased specifically for children, expenditure surveys rarely show for whom items are purchased. We thus focus exclusively on two goods with obvious targets and investment motives: child care and education.

#### **Data and Methods**

Using data from expenditure surveys from Australia, Canada, and the United States, we investigate the extent to which private households spend on child care and education, how this varies across countries, and how this has changed over time. Harmonizing expenditure surveys across different countries is a challenging task given a wide range of differences in survey formats, recall periods, populations covered, and the categorization of items recalled. However, we are able to construct comparable surveys and measures. We use a sample of households in which children under the age of 18 are present.<sup>4</sup> Households are required to have children below age 18 to be in the sample, they may also provide resources to children older than age 18 who live inside or outside the household. While it might be desirable to examine investment in older children in greater detail, it is not always possible to identify these households. For further details on the nature of the samples and data, see Appendix 1.

Because the years in which surveys were conducted are intermittent, we are unable to create a perfect match between years across countries. For Australia, we use four of the five waves of the Australian Household Expenditure Survey conducted since the 1970s, using data from surveys from 1973-4, 1984, 1998-9, and 2003-4. For Canada, data come from the Canadian Family Expenditure Surveys for 1974 and 1984 and the Household Spending Surveys for 1997 and 2006. For the United States, we use data from the Consumer Expenditure Surveys for 1972-3, 1984-5, 1996-7, and 2005-6. We adjust each of these for inflation with each country and generate Purchasing Power Parity (PPP) estimates of spending to approximate 2005 U.S. dollars. For estimates of income, we rely on household total income before taxes – this measure includes transfers but does not include taxes. We rely on income before taxes as we expect that it is more reliably measured than household income after taxes.<sup>5</sup> We examine the share of income spent as a way to gauge the intensity of spending net of resources.

## National Context: Three Liberal Welfare States

To investigate whether patterns of increasing spending and increasing inequality of spending in the United States are unique, we rely on comparisons with two other countries with similar policy arrangements: Australia and Canada. These three countries have typically

<sup>&</sup>lt;sup>4</sup> Due to data constraints, there are several years which must rely on children younger than 18 as the cut-off. The two earlier time points from Canada use cut-offs of age 16, while the most recent wave of the Australian data uses a cut-off of age 15.

<sup>&</sup>lt;sup>5</sup> While there are some differences in the tax structures of the countries we examine, analysis of LIS data suggests that on the whole, the tax burden is similar across the income distribution.

been identified as members of a liberal group of welfare states, although the existence of important differences between these states has led some research to question the extent to which they constitute a common cluster (Esping-Anderson 1990; O'Connor, Orloff, and Shaver 1999; Bambra 2006; Scruggs and Allan 2006). Below, we discuss these three national contexts, focusing first on child care and educational policies and then on measures of income inequality, child care support, educational investment, and the timing of government expenditures on children.

Child care policies have been relatively similar across the three countries over time. There is and has been little publicly funded child care, particularly for children under the age of two. <sup>6</sup> In the mid- to late- 1980s, one percent of children under the age of two were in publicly funded child care in the U.S., compared to two percent in Australia and five percent in Canada (Gornick, Meyers and Ross 1997). Rates were slightly higher among children age three to school age, with 14%, 26%, and 35% in publicly funded child care in the U.S., Australia, and Canada.

Perhaps because of the lack of publicly funded child care, each country has a set of rebates or incentives for private expenditures on child care. In Australia, the system changed over the years we examine. In 1984, a system of direct payments to child care providers was introduced to help families pay for child care (Blaxland, Mullan, and Craig 2009). In 1992, an additional set of tax rebates was introduced, producing a two-tiered system in which poorer parents relied on direct payments and wealthier parents engaged in direct spending and received tax rebates. In 2000, the system was again changed so parents only received direct payments as reimbursement for the use of care (Blaxland, Mullan, and Craig 2009). There are also tax rebates in Canada and the United States. In Canada, a first Child Care Expense Deduction was introduced in 1971 and has been altered several times since. The

<sup>&</sup>lt;sup>6</sup> The exception is the province of Quebec in Canada which has a highly subsidized child-care system since 1997.

current universal Child Care Benefit was introduced in 2006, and has a basic benefit of about \$1350 per year. There is, however, considerable variation across provinces in the provision of and governmental support for child care. The Child Care tax credit in the United States also provides parents deductions against their taxes and is a progressive deduction with values greatest toward the bottom of the income distribution. While the value of the deduction has changed over time, the basic structure has not.

Thus, while the systems of funding are not identical across the three countries, they similarly rely on reimbursing parents for pre-existing expenditures. To the extent that these rebates serve as substantial incentives, they may increase private expenditures. However, we suspect that cross-country differences in the level of this incentive are small. More important for our purposes is the shift in Australia from a system purely based on direct payments to providers to one which incorporated reimbursement, occurring between the 1988 and 1997 waves in our data.

The educational system shows large similarities, although there is cross-country variation. Table 1 shows the public/private mix of educational expenditures at the present day. For primary and secondary education, the share of spending from private households is highest in Australia, although in all three countries public expenditures constitute the majority of spending, and the difference is slight between Australia and the other two countries at only about 10 percentage points. For tertiary education, however, there is a substantial re-ordering, as government expenditures represent a larger share of spending in both Canada and Australia than in the United States. Canada shows a public share 12 percentage points higher than Australia and 25 percentage points higher than the United States. While we do not have comparable spending figures for the past, one shift in the Australian system is important to note. In 1989, payments were introduced for Australian higher education for the first time in the years we examine, through the introduction of the

Higher Education Contribution Scheme (HECS), which established a baseline payment that all students needed to make to attend university (Gregory 2009). Since then, there have been a variety of changes to the structure of the HECS such as the level of contribution required for different types of degrees.

#### [Table 1 about Here]

Table 2 shows a number of country-specific characteristics for inequality, taxes and transfers, and governmental funding for families with children and education. While the three are thought of liberal welfare states, there are clearly differences between them. The United States is the most unequal of the three countries as measured by the gini coefficient, though levels of inequality have increased in each country at similar rates over the past thirty years.<sup>7</sup> The extent of taxes and transfers provides one partial explanation for this inequality. Among the poor, transfers are most important in Australia: nearly half the income among families with children with household income below 75% of the median consists of transfers. This contrasts with roughly one third in Canada and a quarter in the United States. For measures of taxation, The United States has lower tax demands than do the other two countries, although the differences in magnitude are smaller. For families with incomes near the middle of the income distribution, Canada has the highest tax share, at 19%, while Australia's share is roughly 16% and the share in the United States is only 11%. For high-income families, the shares are even more similar, with the share in both Australia and Canada at roughly 26%, and the United States only three percentage points lower. Finally, cash benefits for families with children which may lower inequality are highest in Australia, lowest in the United States, and sit at a middle range in Canada.

#### [Table 2 about Here]

<sup>&</sup>lt;sup>7</sup> This gini is for one-person household equivalent income, calculated from LIS data.

Without a comprehensive presentation of data from other countries with more widely differing policies and outcomes, differences rather than similarities between these three countries seem more obvious. Yet compared to many European countries, which offer guaranteed public child care coverage, provide higher levels of public support to students in tertiary education, and have lower levels of inequality, these countries are similar. Still, the United States on the whole stands out for its higher levels of inequality, bolstered by low levels of transfers to the poor and lower taxation on upper earners.

Given the overall similarity, however – in the lack of public provision of child care, for example, or the general requirement for parents to pay for children's tertiary education we expect similar levels of parental spending across these three countries. Still, variation in levels of parental investment should reflect country-specific policies and environmental features. While we do not have strong expectations about the effects of country-specific features on levels of parental investment – and, indeed, we lack suitable data to test for these effects - we note several possibilities. First, to the extent that spending mirrors the income distribution, the United States should be marked by higher spending near the top of the income distribution and lower spending near the bottom of the income distribution. Incomes, particularly disposable incomes, are higher at the top and lower at the bottom in the United States. Second, to the extent that goods are publicly provided, there may be lower private spending. Unless the quality of public goods is low, parents will likely prefer the costless (at the time of purchase) services provided rather than spending independently. The only substantial public good provided in these countries, however, is primary and secondary education, although prior to 1989 Australia provided free tertiary education as well, which should influence observed spending. Finally, the presence of tax rebates may produce distortions in spending patterns, as rebates will lead to greater private household spending as households do not bear the full cost of this spending due to tax deductions.

#### Results

We first discuss absolute levels of spending across the income distribution and how this changed over time. We then turn to results showing shifts in spending as a share of income. Table 3 show shifts in absolute spending over time across the three countries, expressed in constant (year 2005) US dollars to maximize comparability. Table 3 shows mean spending within each decile for each country-year, with spending on child care in the left panel and spending on education in the right panel. There are two striking features of these results: increases in spending and increases in inequality.

#### [Table 3 about here]

To assess whether the United States is unique in high levels of spending in the present day or the extent to which spending has increased, we first examine the level of spending and growth in the three countries. These results suggest that while spending in the United States may be higher than in the other two countries, it is not unique in its level of parental investment. Indeed, spending on child care in Canada (\$522 per child per year) is higher than in the United States (\$508), while spending on education in Australia (\$911) is only eight dollars lower than in the United States (\$919).<sup>8</sup> Combining the two types of expenditure, the United States does have the highest level of expenditures, at \$1427, while Canada has slightly less spending at \$1387, and Australia has the lowest levels, at \$1316. Given the low absolute values of expenditures, spending in the United States appears meaningfully higher than in the other two countries – about 5 and 10%, respectively – although again not unique. The sharp increase in spending over time in the United States is also mirrored in the other two countries. Spending grew more rapidly in Australia than in the United States, likely from the policy shifts discussed

<sup>&</sup>lt;sup>8</sup> To be clear, these results do not reflect the true costs for these services, as they are average spending for all households with children under the age of 18. Thus, for example, many households with younger children which do not spend on child care are included in these results. Still, they are useful as a measure of the level of parental investment among all households with children present.

earlier, in which students were required to pay fees for the first time for tertiary education beginning in 1989, while child care payments were changed from a system of only direct payments to a system of tax rebates. Spending in Canada increased more rapidly on education, but not child care, and these differences may be partially attributable to changes in the universe of households present in the sample. The data for 1974 and 1984 refer to households with children below the age of 16 while the data for 1997 and 2006 refer to households with children under 18.

To the extent that prices for child care and education have increased more quickly than prices overall, spending would overstate the extent to which parents purchase more or higher quality child care or education.<sup>9</sup> Certainly, prices have increased. Yet parents continue to spend despite increasing prices, suggesting that they are willing to increase their investment even if it is more costly to do so. Thus, while rising prices may partly explain why parents are spending more, we argue that increases still represent greater investment.

Next, we turn to inequality in spending. Figures 1 and 2 are graphical representations of the spending displayed in Table 3 which show a limited number of deciles: the top three deciles, since there is the most change in spending in these deciles, the fifth decile to represent spending near the middle of the income distribution, as well as spending in the bottom decile. The lines displayed are linear interpolations between the years in our sample. Spending inequality in all three countries increased over time, as spending at the top of the income distribution grew more rapidly than spending near the bottom of the distribution in most cases. This is particularly true in the case of child care. In Canada, spending at the bottom of the income distribution increased by only 22% in constant dollars between 1974 and 2006 – from \$150 to \$183. Yet spending in the top decile more than quadrupled, increasing by 420% in constant dollars over the 32-year period we observe. Australia and the

<sup>&</sup>lt;sup>9</sup> In the United States at least, prices for college tuition have increased more rapidly than inflation (Baum and Ma 2009).

United States show similar figures, though the increases are more evenly spread throughout the income distribution, as spending increases by over 7 times in the bottom income decile and nine and a half times in the top decile in Australia, and doubles in the bottom decile in the United States and increases by seven times in the top income decile.

#### [Figures 1 and 2 about here]

For education, there was less growth in expenditures at the top of the income distribution. In Canada, spending in grew more rapidly at the bottom of the income distribution, as spending in the bottom decile increased by nearly six times, while spending in the top decile tripled. In the United States and Australia, growth in educational expenditures was also similar across the income distribution.

Yet while rates of growth across the income distribution were not very different, the gap between those at the top and the bottom certainly grew in real dollars. Figures 1 and 2 visually depict these changes, and the growth in inequality is striking. For child care, spending in the United States increased more rapidly than in the other two countries, and the dispersion of spending is greater by the most recent time point than in the other two countries, with inequality in spending actually declining in Australia between 1996 and 2004. For education, the United States is marked by particularly high levels of spending among those at the top of the income distribution in recent years, though Australian spending on education prior to the year 2000 appears remarkably similar to that in the United States. Thus, it is reasonable to conclude that the United States is not alone in liberal welfare regimes in the extent to which spending is unequal and has grown more so, although it is somewhat more extreme, showing high inequality of spending on both child care and education, while Australia exhibits lower levels of inequality of spending on child care and Canada lower levels for education.

Finally, we turn to a brief discussion of the share of income spent on these investments goods by households with children, shown in Table 3. We do so for two reasons. First, assessing the share of income spent can help explain whether shifts which have occurred are simply because income has increased or if households devote more of their incomes to spending. Second, examining the share of income spent is a rough measure of the burden of parental investment on families. We are interested to understand these two outcomes in a cross-national historic context.

The results in Table 3 suggest that the increases we observe in spending are not simply a result of growing income over time. If spending grew only because incomes grew over time, then the share of income devoted to spending would be constant over time. Instead, these results show that in each of the countries we observe, spending as a share of income increases over time. Interestingly, while there is variation across the income distribution in the share of income spent, for many of the groups, the share of income spent is roughly similar across the three countries, again demonstrating the similarity of spending profiles across these countries.

Finally, we focus on the share of income spent in the bottom decile of earners, as it is these households who might find high levels of investment in children burdensome. Here, the United States does stand out. Combining child care and education spending, households in the bottom decile spent over 10 percent of their income on these goods over the past three decades, while households in Canada reached only 5 percent of their incomes in the most recent decades, devoting lower shares in the range of 1.5 to 2.5 percent in earlier decades. Australia also saw greater spending as a share of income for this group in the most recent two decades, but still lower levels than the extremely levels seen in the United States. The difference in the share of income spent across these countries is attributable primarily to

lower incomes in the United States., as levels of spending (from Table 2) are quite similar across the three countries and do not account for the differences in the share of income spent.

# Conclusion

This paper began with the goal of assessing levels of parents' monetary investments in children across three countries over time, in part to assess whether increasing spending observed in the United States was a unique phenomenon or if increasing parental investment could be observed in other countries as well. Limited government provision of services for and support to children in the United States may be a cause of increased spending to the extent that parents feel greater responsibilities to invest. Thus, we asked whether the pattern observed in the United States could also be seen in two other states with relatively limited governmental support for children, Canada and Australia.

Our results show striking similarities. The level of parental spending, growth over time, and the extent of inequality have changed substantially over time. In all three, parents spent much more at the beginning of the twenty-first century than they did roughly thirty years earlier. In many ways, these similarities should be unsurprising given the overall similarities between the three country contexts. Still, the United States shows somewhat higher spending, at least among those at the top of the income distribution, reflecting higher incomes among those at the top of the income distribution. In addition, spending as a share of income was highest at the bottom of the income distribution, since families with children near the bottom of the income distribution had lower incomes and resources than in the other two liberal countries, which have higher minimum wages and more generous transfer systems.

While this research documents growing spending in several settings, it is unclear which factors primarily contribute to this growth over time. Higher parental investment may be a function of an increased perceived need for investment with a lack of government spending to help provide appropriate investments. Yet it is unclear what the relative role of government provision, shifts in the economy, or even shifts in inequality - which increase the importance of not 'falling behind - may be. Future research should consider a broader range of countries, including those which do engage in substantial government provision, to determine the extent to which each of these factors may contribute to the overall growth in private household spending as well as sources of variation across countries.

# **Appendix 1: Data Characteristics**

	Australia	Canada	United States
Years in sample	73-4, 84, 98-9, 03-4	74, 84, 97, 05	72-3, 84-5, 96-7, 05-6
Measures of child	Vary, but in most years	Day care centres and	Includes baby-sitting,
care	include baby-sitting and	day nurseries, Other	nursery schools, and
	more formal child care	child care outside	more formal child care
	arrangements (1973-4	home, Week-day	arrangements
	includes only 'child-	child care in the	
	minding services' as a	home, Other child	
	category)	care in the home	
Measures of	Vary, include tuition,	Supplies, Textbooks,	Vary, generally include
education	books, and other	Tuition fees, Other	tuition, books, and all
	educational and	lessons and courses,	non-rent components,
	enrichment expenditures	Other educational	in cases where these
		services	are associated with
			public and private
			schools from
			elementary through
			college
Selection criteria	All households with	All households with	All households with
for sample	children 18 and under	children 16 and	children 18 and under
	except year 2006, which	under 1974 and	
	includes children 16 and	1984; all households	
	under	with children 18 and	
		under for 1997 and	
		200610	
Response rate		1974 & 1984, not	Varies between 75 and
		available, 1997 =	90 depending on year
		76%, 2006 = 72%	
Recall Period		12 months	3 months; households
			tollowed for four
			quarters, so annualized
			estimates approximate
			12-month recall

<sup>&</sup>lt;sup>10</sup> The Canadian surveys also differ in their universe: 1974: private households in 14 major urban centres of Canada; 1984: private households in seventeen major cities of Canada as well as Whitehorse and Yellowknife; 1997: private households in ten provinces and two territories; 2006: private households in the ten provinces.

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	Primar seconda	y, secondary ry non-tertia	, post- ary	Tertiary			
	Public	Household	Other	Public	Household	Other	
			private			private	
Australia	81.1	15.7	3.2	44.3	38.1	17.6	
Canada	88.4	4.1	7.5	56.6	19.3	24.1	
USA	91.4	8.6	n/a	31.6	34.2	34.2	

Table 1: Public and private share of education (in percent) in 2007

Source: OECD, Key Indicators on Education (online) tables B3.2A, B3.2B

	Australia	Canada	USA	
Gini coefficient	212	218	272	
(2003/4, LIS data)	.312	.310	.372	
Share of income				
from transfers among				
families with less	51.0%	33.1%	24.5%	
than 75% median				
equivalized income				
Share of income to				
taxes among families				
with greater than	16.5%	19.1%	11.5%	
75% and less than	10.570	17.170	11.0 / 0	
125% of median				
equivalized income				
Share of income to				
taxes among families	-			
with more than 125%	26.6%	26.0%	23.1%	
of median				
equivalized income				
Expenditures on cash				
benefits to families	2.18%	0.89%	0.08%	
with children (as a %				
of GDP)				

Table 2: Policy, expenditure, tax, and economic characteristics, three countries,

Table 3: Spending on child care and education adjusted to 2005 US dollars.

# CHILDCARE

## EDUCATION

<u>Canada</u>								
	<u>1974</u>	<u>1984</u>	<u>1997</u>	<u>2006</u>	<u>1974</u>	<u>1984</u>	<u>1997</u>	<u>2006</u>
Decile 1	150	169	101	183	109	101	266	633
Decile 2	178	149	235	272	120	147	203	590
Decile 3	143	299	211	309	190	163	275	539
Decile 4	176	226	322	301	122	219	293	368
Decile 5	149	444	318	451	147	259	458	676
Decile 6	203	358	416	535	169	233	486	782
Decile 7	167	441	593	421	216	330	530	915
Decile 8	340	514	604	577	308	367	479	946
Decile 9	327	753	657	819	377	515	606	1136
Decile 10	286	852	936	1202	693	894	1355	1943
Total	211	411	452	522	244	314	511	865
					<u>Australia</u>			
	<u>1976</u>	<u>1984</u>	<u>1998</u>	<u>2004</u>	<u>1976</u>	<u>1984</u>	<u>1998</u>	<u>2004</u>
Decile 1	23	6	181	171	214	117	515	444
Decile 2	45	71	177	147	109	168	381	287
Decile 3	62	28	171	248	89	138	350	437
Decile 4	28	78	252	302	121	241	557	698
Decile 5	97	60	251	402	137	186	671	594
Decile 6	64	128	432	296	205	276	872	648
Decile 7	128	93	451	523	272	265	864	943
Decile 8	165	139	446	627	372	335	1031	908
Decile 9	238	195	624	604	304	687	1300	1658
Decile 10	91	221	985	860	1052	1143	2069	3052
Total	90	96	387	403	279	333	829	911
					<u>USA</u>			
	<u>1972-3</u>	<u>1984-5</u>	<u>1996-7</u>	<u>2005-6</u>	<u>1972-3</u>	<u>1984-5</u>	<u>1996-7</u>	<u>2005-6</u>
Decile 1	95	141	151	199	96	550	366	434
Decile 2	172	188	128	214	157	170	283	262
Decile 3	193	159	218	318	190	360	225	327
Decile 4	137	291	248	314	263	299	382	376
Decile 5	202	331	301	347	263	384	429	518
Decile 6	229	371	447	385	253	360	509	891
Decile 7	199	477	640	588	386	413	543	802
Decile 8	215	628	662	699	420	506	754	1217
Decile 9	248	555	801	851	578	707	852	1634
Decile 10	226	584	968	1630	933	1316	1836	3277
Total	191	365	448	508	354	538	656	919

Table 4: Spending on child care and education a	as a share of income.
CHILDCARE	EDUCATION

	<u>Canada</u>							
	<u>1974</u>	<u>1984</u>	<u>1997</u>	<u>2006</u>	<u>1974</u>	<u>1984</u>	<u>1997</u>	<u>2006</u>
Decile 1	0.79	1.10	0.74	1.24	0.58	0.66	1.95	4.30
Decile 2	0.58	0.55	1.02	0.95	0.39	0.54	0.88	2.07
Decile 3	0.38	0.81	0.66	0.79	0.51	0.44	0.86	1.38
Decile 4	0.40	0.51	0.80	0.63	0.28	0.50	0.73	0.77
Decile 5	0.30	0.87	0.66	0.79	0.30	0.51	0.94	1.18
Decile 6	0.37	0.63	0.74	0.80	0.31	0.41	0.86	1.17
Decile 7	0.27	0.68	0.91	0.56	0.35	0.51	0.82	1.21
Decile 8	0.49	0.70	0.80	0.68	0.44	0.50	0.63	1.11
Decile 9	0.40	0.86	0.73	0.76	0.46	0.59	0.68	1.06
Decile 10	0.23	0.68	0.65	0.65	0.55	0.71	0.95	1.05

<u>Australia</u>							
<u>1974</u>	<u>1984</u>	<u>1997</u>	<u>2006</u>	<u>1974</u>	<u>1984</u>	<u>1997</u>	<u>2006</u>
0.14	0.05	1.80	1.38	1.33	1.03	5.14	3.58
0.15	0.36	0.91	0.67	0.36	0.85	1.96	1.31
0.17	0.10	0.65	0.82	0.24	0.51	1.32	1.45
0.07	0.24	0.75	0.82	0.29	0.73	1.67	1.88
0.20	0.15	0.63	0.92	0.28	0.48	1.68	1.35
0.12	0.29	0.92	0.58	0.37	0.62	1.85	1.28
0.20	0.18	0.81	0.90	0.43	0.52	1.56	1.62
0.23	0.24	0.68	0.93	0.52	0.57	1.58	1.34
0.28	0.28	0.79	0.73	0.35	0.98	1.64	1.99
0.07	0.21	0.80	0.61	0.78	1.07	1.69	2.15
	19740.140.150.170.070.200.120.200.230.280.07	$\begin{array}{c cccc} 1974 & 1984 \\ \hline 0.14 & 0.05 \\ \hline 0.15 & 0.36 \\ \hline 0.17 & 0.10 \\ \hline 0.07 & 0.24 \\ \hline 0.20 & 0.15 \\ \hline 0.12 & 0.29 \\ \hline 0.20 & 0.18 \\ \hline 0.23 & 0.24 \\ \hline 0.28 & 0.28 \\ \hline 0.07 & 0.21 \\ \end{array}$	$\begin{array}{c cccccc} \underline{1974} & \underline{1984} & \underline{1997} \\ 0.14 & 0.05 & 1.80 \\ 0.15 & 0.36 & 0.91 \\ 0.17 & 0.10 & 0.65 \\ 0.07 & 0.24 & 0.75 \\ 0.20 & 0.15 & 0.63 \\ 0.12 & 0.29 & 0.92 \\ 0.20 & 0.18 & 0.81 \\ 0.23 & 0.24 & 0.68 \\ 0.28 & 0.28 & 0.79 \\ 0.07 & 0.21 & 0.80 \\ \end{array}$	1974 1984 1997 2006   0.14 0.05 1.80 1.38   0.15 0.36 0.91 0.67   0.17 0.10 0.65 0.82   0.07 0.24 0.75 0.82   0.20 0.15 0.63 0.92   0.12 0.29 0.92 0.58   0.20 0.18 0.81 0.90   0.23 0.24 0.68 0.93   0.28 0.28 0.79 0.73   0.07 0.21 0.80 0.61	Australia197419841997200619740.140.051.801.381.330.150.360.910.670.360.170.100.650.820.240.070.240.750.820.290.200.150.630.920.280.120.290.920.580.370.200.180.810.900.430.230.240.680.930.520.280.280.790.730.350.070.210.800.610.78	Australia1974198419972006197419840.140.051.801.381.331.030.150.360.910.670.360.850.170.100.650.820.240.510.070.240.750.820.290.730.200.150.630.920.280.480.120.290.920.580.370.620.230.240.680.930.520.570.280.280.790.730.350.980.070.210.800.610.781.07	Australia19741984199720061974198419970.140.051.801.381.331.035.140.150.360.910.670.360.851.960.170.100.650.820.240.511.320.070.240.750.820.290.731.670.200.150.630.920.280.481.680.120.290.920.580.370.621.850.200.180.810.900.430.521.560.230.240.680.930.520.571.580.280.280.790.730.350.981.640.070.210.800.610.781.071.69

					USA				
	<u>1972-3</u>	<u>1984-5</u>	<u>1996-7</u>	<u>2005-6</u>		<u>1972-3</u>	<u>1984-5</u>	<u>1996-7</u>	<u>2005-6</u>
Decile 1	0.80	2.64	3.34	3.10		0.81	10.30	8.10	6.75
Decile 2	0.74	1.39	1.03	1.23		0.67	1.25	2.26	1.50
Decile 3	0.59	0.75	1.11	1.19		0.58	1.71	1.15	1.22
Decile 4	0.34	1.01	0.89	0.88		0.64	1.04	1.37	1.05
Decile 5	0.42	0.91	0.81	0.75		0.55	1.05	1.16	1.12
Decile 6	0.41	0.83	0.96	0.66		0.46	0.80	1.09	1.53
Decile 7	0.31	0.89	1.11	0.82		0.61	0.77	0.94	1.12
Decile 8	0.30	0.97	0.93	0.79		0.58	0.78	1.06	1.37
Decile 9	0.29	0.68	0.88	0.74		0.67	0.87	0.94	1.42
Decile 10	0.19	0.46	0.63	0.75		0.77	1.03	1.19	1.50



Figure 1: Spending on child care by income decile by year for top 3 deciles, fifth decile, and bottom decile, in constant (2005) dollars



Figure 2: Spending on education by income decile by year for top 3 deciles, fifth decile, and bottom decile, in constant (2005) dollars.