

#### DELSA/ELSA/WD/SEM(2018)18

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31 October 2018

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**Tackling Child Poverty in Korea** 

## OECD SOCIAL, EMPLOYMENT AND MIGRATION WORKING PAPERS No. 219

JEL codes: J13; I32; I38	

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## Acknowledgements

The report was prepared under the overall supervision of the OECD Secretary-General, Angel Gurría, and the Special Counsellor to the Secretary-General, Gabriela Ramos.

The OECD Directorate for Employment, Labour, and Social Affairs (ELS) prepared this report under the senior leadership of Stefano Scarpetta (Director of ELS), Mark Pearson (Deputy Director of ELS) and Monika Queisser (Senior Counsellor, Head of the OECD Social Policy Division).

The report was written by Olivier Thévenon under supervision of Willem Adema, and received contributions from Hyunsook Kim and Eunkyung Shin. Randall Jones, from the OECD Economic Department is acknowledged for the valuable comments given on a former draft. The opinions expressed and arguments employed herein do not necessarily reflect the official views of the Organisation or of the governments of its member countries.

The financial support provided by the Permanent Delegation of the Republic of Korea to the OECD for this report is gratefully acknowledged.



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## Abstract

This paper compares the situation of children in Korea relative to other OECD countries in terms of child poverty and well-being. First, trends in child poverty and living standards are described. An overview of key internationally available indicators of child well-being is also provided. The paper discusses the observed poverty trends in relation to social protection programs and to policies implemented to support families. Some priorities for action to make the alleviation of child poverty more effective are discussed.

## Résumé

Ce document compare la situation des enfants en Corée par rapport aux autres pays de l'OCDE en matière de pauvreté des enfants et de bien-être. Sont d'abord décrites les tendances de la pauvreté et de niveau de vie des enfants. Un panorama de la situation en matière de bien-être des enfants est aussi propose à partir des principaux indicateurs disponibles au niveau international. Le document discute les évolutions constatées de la pauvreté au regard des politiques mises en œuvre en matière de protection sociale et d'aides aux familles. Certaines priorités d'action pour rendre la lutte contre la pauvreté des enfants plus effective sont discutées.

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## **Key findings**

- Child poverty is relatively low in Korea (7%) compared to other OECD countries (13% on average). Because of Korea's solid labour market performance over the past decade and its persistently low fertility rate, its growing wealth can be shared among a smaller number of children.
- Between 2006 and 2012, the proportion of poor children in two parent families with a father in employment increased which had a small but significant effect on poor children's standard of living in these families. Changes in maternal employment had no noticeable effect, most likely because mothers in low-paid non-regular employment only marginally affect the overall standard of living of poor families.
- The proportion of poor children with a father with higher education increased (+15 percentage points) between 2006 and 2012, mainly as a result of a growing number of highly educated workers in non-regular employment. Nevertheless, as their income from work is higher than that of less skilled workers, their increasing proportion among poor families has contributed to raising the standard of living of children. More generally, reducing the dichotomy between well-paid regular and low-paid non-regular workers will reduce inequality in Korea's income distribution.
- Another key poverty-risk factor for Korean families is the cost of education a factor that may also affect the fertility decisions of parents. Korean households pay for about 42% of the cost of educating a child of primary and secondary school-age compared to an OECD average of 22%. The cost is so high notably because more than two thirds of children attend "Hakwon" or "cramming schools" offered by private providers outside of the regular school classes, and reducing attendance hours which in some parts of the country last until 10 PM or midnight - could curb household spending on education.
- Improving the financial situation of poor families can help reduce further child poverty, as tax and benefit transfers do little to reduce child poverty in comparison to other OECD countries. The planned introduction of an income-tested family allowance can help, as well as measures to improve take-up of social assistance benefits.
- Improving the work-life balance of parents and avoiding labour force dropout among mothers -by promoting use of parental leave and subsided after-school care services, can help raise the standard of living among many poor children.

## 1. Child income poverty in Korea: an overview

To better understand recent trends in child poverty, this report provides a detailed 1. analysis of the context and trends in child poverty and children's living standards in Korea. It starts with an overview of key trends and risk factors and a summary discussion of policy development, which could secure family income and durably lower child poverty. The following sections provide information on the institutional environment of child poverty trends. It also reports the main results of an empirical analysis of factors explaining the evolution of children's living standard since 2006 at different levels of household income are reported. Thereby, the characteristics and groups of children can be identified whose standard of living has deteriorated or improved since the beginning of the economic recession. The way in which changes in family status, in the employment situation of parents, in their origin and level of education and in the status of housing affect changes in living standards are examined to help identify child poverty risk factors and set up policy priorities. Undertaking this analysis for children at different levels of the income distribution, reveals large differences between children in extreme poverty and children whose standard of living is close to the poverty line. The paper also summarises the information available in the OECD Child Well-Being Portal which facilitates a comparison of a range of Child Well-Being outcomes in Korea with the OECD countries.

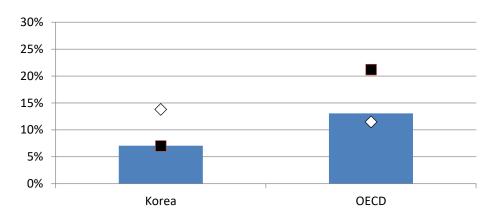
## 1.1. Child poverty trends

- The number of children (0-14) in Korea has almost halved over the past 4 decades: from 13,2 million children in the 1975 to 7 million in 2015. Over the same period, the youth dependency ratio - the number of children and young people (aged 0-20) per one hundred people of working age (aged 20-64) – fell dramatically from 108 to 31 (OECD, 2018<sub>[1]</sub>). The growing income in Korea can be shared among a smaller number of children, which helps to explain why the child poverty rate in Korea is below the OECD average (Figure 1) and poor children today live in smaller families than only a few years ago (Yeo, 2017). Despite the relatively low poverty rate for children, the rate for the entire population is above the OECD average due to an exceptionally high poverty rate (45.7%) for the elderly (OECD,  $2018_{[2]}$ ).
- The family situation of poor children has changed. The percentage of children aged 18 or below who live with a divorced parent in Korea increased from 3.0% in 2000 to 6.2% in 2010 (Park, Choi and Jo, 2016<sub>[3]</sub>), and in 2012-13 around one quarter of the income poor children live with a single parent.

Figure 1. Child poverty before and after taxes and transfers in Korea

Percentage of children (0-17) in relative income poverty.

- Child Poverty after tax & transfers
- Child Poverty before tax & transfers
- ♦ Poverty rate total population (after tax & transfers)



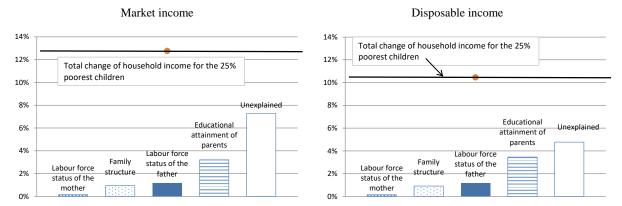
Source: OECD Income Distribution Database

- Employment rates, which are close to the OECD average for both men and women, limit child poverty in Korea. The Great Recession did not have a negative effect on parental employment as in Canada or Spain (see below). The employment rate of fathers is comparatively high, including among poor families - 70% of fathers of poor children had a iob in 2014, compared to less than 40% on average in the OECD. However, the employment rate of mothers with poor children (28%) is well below the OECD average (34%).
- 5. Key poverty-risk factors for Korean families are the costs of education and housing and the increasing risk of low-income employment – factors that also affect the fertility decisions of parents. Korean households pay for about 42% of the cost of educating a child of primary and secondary school-age compared to an OECD average of 22% (OECD, 2018<sub>(4)</sub>). Overall spending by families on education is even higher as more than two thirds of children attend "Hakwon" or "cramming schools" offered by private providers outside of the regular school classes. The cost of these "cramming-schools" is remarkably high amounting to about 18% of median household income per student (Statistics Korea, 2017<sub>[5]</sub>). Poor households often overspend on the education of their children: for example, 16.5% of poor Korean households spend at least 30% of their income on children's education, compared to an average of 5% for households with higher incomes (Yeo, 2017<sub>[6]</sub>). Housing costs are also increasing in Korea but the dataset does not allow for the measurement of its effect on the standard of living of children in poor families.
- Low-income workers are particularly exposed to poverty risks and labour market dualism is pronounced in Korea. A third of all employees are non-regular workers, such as fixed-term, part-time and dispatched workers. In contrast to regular workers with long-term employment tenure, these workers have limited career prospects and experience high turnover in employment-relationships (see Annex A2 for detail). On average non-regular workers were paid 34% less than regular workers on an hourly basis (OECD, 2018<sub>[2]</sub>); (OECD, 2018<sub>[7]</sub>).

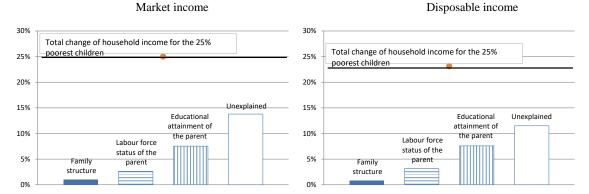
- This makes the financial situation of households that include non-regular workers more often women than men - rather unpredictable, with a risk of poverty that can discourage workers of childbearing age from having children. Furthermore, Korean women are often still expected to leave employment at the birth of a child, so that mothers with children often are not in employment, or in a low-paying non-regular job, which increases the overall cost of having children (OECD, 2018<sub>[2]</sub>).
- Nevertheless, the overall standard of living of children increased from 2006 to 2012 in Korea, regardless of their family situation. Disposable income grew by 10.5% for the poorest 25 percent of children in two-parent families, and by 22% for the 25 percent poorest children in single-parent families (Figure 2).
- Nowadays, about a third of non-regular workers in Korea have completed tertiary education (OECD, 2018<sub>[7]</sub>), and a growing proportion of families headed by a highly educated fathers are in non-regular employment. In fact, the proportion of poor children with a father with higher education increased (+15 percentage points) between 2006 and 2012. Nevertheless, the income position of such families headed by a parent who has completed higher education is better than that of low-skilled workers of jobless families and their inclusion in the pool of poor families has increased the average standard of living among poor Korean children (Figure 2).
- Between 2006 and 2012, the proportion of poor children in two parent families with a father in full year employment increased from 74 to 80 per cent. This raised children's standard of living, but the effect is relatively small compared to the above-mentioned influence of the changes in parental educational attainment (Figure 2). Also, close to 7 out of every 10 poor children do not have a mother in paid work. This proportion increased by 5 percentage points between 2006 and 2012, but it had no noticeable effect on market and disposable income. This lack of effect may be related to the decline of maternal employment mainly for mothers with low-income jobs whose remuneration only marginally impacts the overall standard of living of poor families. Unlike data for other countries, the Korean data do not facilitate the identification of changes in job quality - measured by industry and occupation.
- 11. Changes in family structure have also contributed to an increase in the standard of living of poor children, but their effects are limited. By contrast, a large part of the increase in children's living standards is not explained by a change in the observed characteristics of poor families, but by changes in the effect characteristics have on children's place in the income distribution. For example, the effect of having an additional child on the standard of living has become more pronounced over the sample period. Compared to larger families (3+children), the standard of living of families with two children has increased noticeably (Figure 12 and Annex A2).

#### Figure 2. Changes in living standards of children - Korea (2006-2012)

Panel A: Contribution of changes in family and work characteristics to changes in living standards of poor children in two parent families.



Panel B: Contribution of changes in family and work characteristics to changes in living standard of poor children in single-parent families



Note: Market income is the sum of: wages and salaries, net self-employment net income, interest and investment income, private pension and registered retirement savings plan income, and includes alimony or support income received, and other income; Disposable income is total income less: income tax, employment insurance contributions, public and private pension plan contributions, union dues (incl. professional membership dues, and malpractice liability insurance premiums), childcare expenses incurred in order to hold a paid job, alimony or support payments paid, and public health insurance premiums. Household income is equivalised using the square root scale and adjusted for price inflation. The term 'standard of living' refers to the equivalised disposable income.

Family structure includes information on the number of children, age of children and parents, and possible presence of other adults.

Source: OECD Estimates based on data from the Luxembourg Income Survey.

#### 1.2. Improving the financial situation of poor families

12. In addition to measures that could promote the stable integration of parents into regular employment and better conditions to combine work and family, policy measures that would improve the financial situation of poor families would help further reduce child poverty. Different types of financial supports could be considered, such as: increasing coverage of social assistance benefits; supports for low-income workers; reducing the cost education and housing; and, helping larger families.

- Also of note; social insurance and social assistance schemes in Korea have been expanded, and the introduction of family allowance in September 2018 will likely improve the financial situation of families with children. However, its low level (3% of the average earnings) and its universal character, unconditional on families' income level, will limit its ability to reduce child poverty. A more critical issue is to reduce the risk of families falling into poverty after the birth of a child, because of the cost of caring, educating and housing children, and because of the frequent interruption of the mother's labour market attachment due to caregiving responsibilities.
- Despite the expansion of the social protection system in Korea, social transfers have done little to lift families out of poverty (Figure 1). One reason is that non-regular workers have less access to social insurance benefits (OECD, 2018<sub>[2]</sub>); another is that prevailing norms limit the use of the social insurance system. For example, women are still expected to leave employment upon having a child rather than using parental leave provisions, while fathers fear the career repercussions of making use of their entitlements (OECD, 2017<sub>[8]</sub>).
- 15. Take-up of social assistance benefits is lower in Korea (13% of the working age population is covered by the Basic Livelihood Security Programme) than in any other OECD country and far below the OECD average at 30% (OECD, 2018<sub>[7]</sub>). Given that approximately 20% of poor children in two-parent families lived with a father who was not working for most of the year in 2013, increasing coverage of unemployment and/or social assistance benefits could improve the standard of living of many poor children.
  - The introduction of family allowance in September 2018 is likely to improve the financial situation of poor families with children (OECD, 2017<sub>[9]</sub>), even though payment rates are not high (3% of average earnings).
  - Generally speaking, parental employment reduces family poverty, but low-wage earners remain at risk and in Korea this most often concerns one-earner couple families (see Annex A2). Relative poverty is 16% among households headed by a non-regular worker compared to only 5% in those headed by a regular worker (OECD, 2016): reducing the barriers between regular and non-regular employment is key to improving the living standards of one-earner households.
  - The share of household expenditure on education financing is particularly high in Korea. Therefore, setting cost limits on private after-school hours education ("the cramming schools") is important. For example, one option may be to further limit opening hours. However, regulation recently reduced these from midnight to 10PM, but the impact on the hours and resources spent on private tutoring has been limited because households then tend to use alternative forms of private tutoring (Choi and Choi, 2015<sub>[10]</sub>). In these circumstances, the development of affordable after-school childcare services as an alternative to private education hours can help reduce the number of hours spent in expensive afterschool education. Reducing the reliance on the entrance exam to the university system is also necessary to encourage less use of private tutoring (OECD, 2014<sub>[11]</sub>).

#### 1.3. Continue to develop work-family support

Since the early 2000s, Korea has invested considerable resources to help parents reconcile work and family life. In particular, government spending in the Early Childhood Education and Care (ECEC) system has increased tenfold (OECD, 2017c and e). This investment is key to combatting child poverty, as it promoted parental employment, especially for single parent families. Korea should sustain this investment and ensure that children from low-income families can make full use of subsidised ECEC facilities.

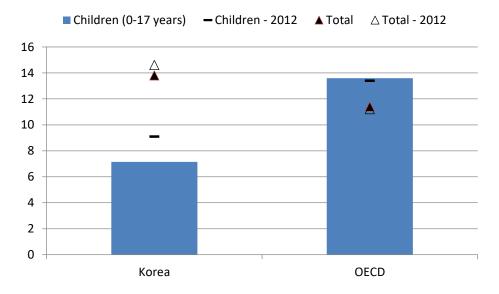
It is important to collect further statistical information on the economic and social situation of families, which facilitates policy evaluation. This includes conducting surveys and compiling other available data sources that illustrate the employment status of both parents in relation to household composition and the number of children, and providing information on participation in childcare services by socioeconomic groups.

## 2. Key characteristics of child poverty and the family context in Korea

16. The number of children (0-14) in Korea has almost halved over the past 4 decades: from 13,2 million children in the 1975 to 7 million in 2015. Over the same period, the youth dependency ratio - the number of children and young people (aged 0-20) per one hundred people of working age (aged 20-64) – changed dramatically from 108 to 31 (OECD,  $2018_{\text{II}}$ ). The growing wealth in Korea can be shared among a smaller number of children, which helps to explain why the child poverty rate in Korea is lower than among other age groups and far below the OECD average (Figure 3). Moreover, child poverty rate fell slightly but remained around 10% from 2006 to 2012, and since decreased to 7% in 2015 while the average poverty rate for the total population remained twice as high due to the exceptionally high rate for the elderly.

Figure 3. Child poverty is decreasing in Korea

Share (%) of the population with an equivalised post-tax and transfer income of less than 50% of the national annual median, for the total population and for children (0-17 year-olds) – year 2015 for the blue bars.



Source: OECD Income Distribution Database, http://oe.cd/idd.

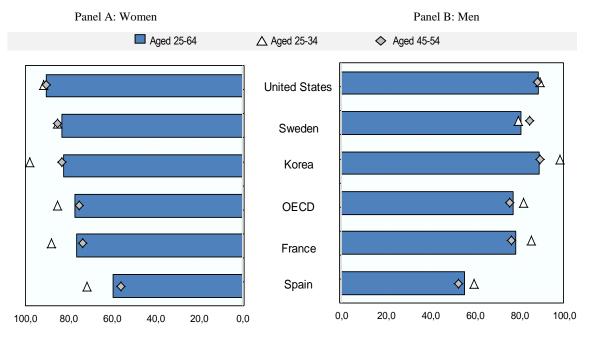
Employment rates are close to the OECD average in Korea for both men and women and this contributes to limit child poverty. Public policy helps, especially by means of the rapid development of policies to reconcile work and family responsibilities (e.g. childcare) which facilitate parental employment and maternal employment in particular. However, Korean workers frequently experience low quality and/or unstable employment conditions with limited coverage and/or only limited income support provided by the employment insurance and social assistance system.

- Societal changes have also contributed to rapidly evolving changes in the profile of poor families. Educational attainment of the younger generations has risen sharply, and increased competition for regular employment with long tenure and seniority-based earnings and career development. However, an increasing number of high skilled workers end up in non-regular employment and a growing number of their families are poor. In addition, very low birth rates indicate that only a small fraction of the population of childbearing age is making the decision to have additional children; in other words, not having another child is a way of avoiding poverty.
- The following sections describe the changing context of children's lives, marked by the growth of women's employment (3.1) and a sharp decline in fertility (3.2). The high burden of household expenditure on education and the cost of housing places in the Seoul region severe constraints on household budgets, which are important factors in deciding whether or not to have a child and at the same time heightens the risk of poverty (3.3).

#### 2.1. Women's increased educational attainment and labour force participation

20. Korean society has undergone profound changes during the past decades. Most noteworthy is the increase in educational attainment across generations. Almost all men (98.5%) and women (98.1%) below age 35 have attained at least upper secondary education in Korea, which is above the OECD average (Figure 4). For men, this proportion is 10 percentage points higher than for their older counterparts, and for women this is almost 15 percentage points higher than for the older generation aged 45 to 54 years.

Figure 4. Percentage of population that has attained at least upper secondary education, by gender and age group, 2015



Note: Data for most countries are based on ISCED 2011. Source: OECD (2016), Education at a Glance 2016: OECD Indicators.

In Korea, as in many other OECD countries, female employment has increased gradually since the early 2000s (Figure 5): 61,5% of women aged 25 to 64 are in employment today, which is almost 7 percentage points more than in 2000 but still below the OECD average at 64%. The increase in female employment is a factor contributing to the rise in the number of couples with two earners, whose proportion has increased by 4 percentage points since 2006. Yet, a large minority (43%) of two parent families have only one or no parent working.

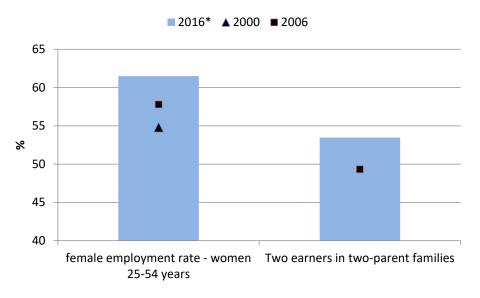


Figure 5 Female employment is increasing

Note: \*2015 for the proportion of two earner families and the proportion of working single parent. Source: OECD Employment database and Income Distribution Database.

#### 2.2. Persistent low fertility

22. Female employment growth has progressed in an environment of persistently low fertility rates. Korea had one of the highest fertility rates in 1960 and within a period of just one generation, the country became the country with the lowest birth rate in the entire OECD, at 1.21 children per woman in 2015 (Figure 6), and it fell further to 1.05 in 2017. These trends suggest that many adults experience difficulties reconciling work and family life, which contributes to Korean adults not having as many children as they might like to have.

Figure 6. Fertility is lowest in Korea compared to other OECD countries

Total period fertility rate.

Source: OECD Family Database.

- 23. There are many factors that underlie the decline in fertility, including the economic cost of children. The costs of child-raising are high, and represent a large part of the budget of low-income families. Without additional income, having a child leads to a lower standard of living, and low-income families face a poverty risk. Conversely, giving up or postponing childbearing is one way to avoid poverty, and this may have contributed to the decline in child poverty that is observed in Korea (Yeo,  $2017_{[6]}$ ).
- 24. Long hours of work are an obstacle to balancing work and family life, and for some employees it is difficult to accommodate the birth of an additional child. Men are more likely than women to work very long hours. However, in Korea the proportion of women also working very long hours in paid work is relatively high: around 17% of women work for sixty hours or more in Korea, while the OECD average is at 3 per cent; and 71% work at least 40 hours when it is only 51% on average across the OECD (OECD, 2018<sub>[7]</sub>).

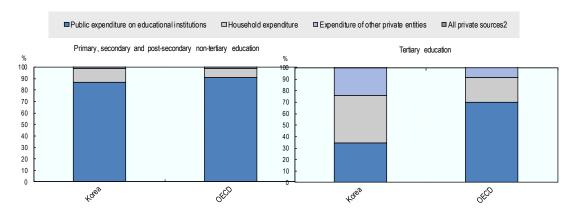
#### 2.3. High costs of raising children

#### High education costs

The share of household's expenditures in the financing of education is higher in Korea than on average across the OECD, especially with regard to tertiary education (Figure 7). As in many countries, wealthier households tend to spend higher amounts than the average on education. However, poor households "overspend" more frequently: for example, 16.5% of poor households spend at least 30% of their income on children's education, compared to an average of 5% for households with higher incomes (Yeo, 2017<sub>[6]</sub>).

Figure 7. Household expenditures on education are comparatively high in Korea

Distribution of public and private expenditures on education.



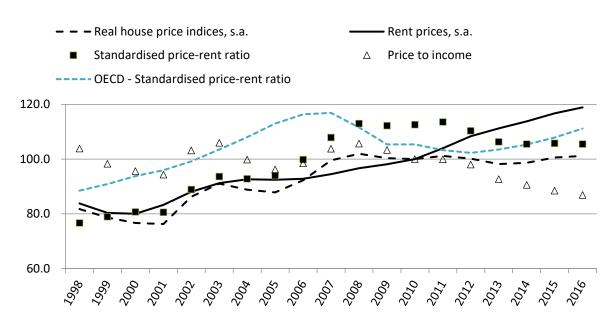
Source: OECD (2017), Education at Glance, Indicator B3.1.

A striking feature of Korean education is the high proportion of children participating in extracurricular lessons (known as 'cram schools', Hakwon). In total, nearly 68% of children - but 80% of primary school children - attend such courses, for an average of 4.6 hours per week (Statistics Korea, 2017<sub>[5]</sub>).

#### Rising housing costs

In Korea, rents have gradually and continuously increased since the early 2000s while the increase in real house prices halted during the late 2000s (Figure 8). A substantial part of household budgets is allocated to rent payments, particularly among poor households: they spend on average 41% of their budget on rent payments, compared with 17.3% for all households (Yeo, 2017). Almost one-third (31.7%) of poor households live in housing that does not meet minimum standards, which is twice the average (Yeo, 2017<sub>[6]</sub>).

Figure 8. Housing costs are rising



Note: Nominal house prices deflated using the private consumption deflator from the national account statistics. The standardised price-rent and price-income ratios show the current price-rent and price-income ratios relative to their respective long-term averages. The long-term average, which is used as a reference value. Price to income ratio ris calculated as nominal house prices divided by nominal disposable income per head. Source: OECD House Price Indicators.

#### 3. Labour market environment

28. The increasing participation of women in employment contributes to increased family incomes. However, in Korea's dual labour market women are over-represented among lowpaid workers with limited employment security, which limits the poverty-reducing effect of maternal employment.

## 3.1. Labour market dualism

- Labour market dualism is very strong in Korea. Non-regular workers<sup>1</sup> account for a little over one-third of all employees (OECD, 2018<sub>[7]</sub>). Their pay and other working conditions are considerably less attractive than those for regular workers: non-regular workers are more likely to get fixed-term contract, and are twice as likely to work part-time as regular workers. Non-regular workers are more frequently female (54.9%) than male (45.1%). Workers with a secondary or lower level of educational attainment are overrepresented among non-regular workers, but almost a third of non-regular workers (31.8% in 2016) have a tertiary level of education.
- Labour market duality is also a major cause of income inequality. In 2016, nonregular workers were paid 34.6% less than regular workers on an hourly basis. The wage gap with regular workers has gradually increased since the early 2000s and mobility between regular and non-regular employment is very low (OECD, 2018<sub>[7]</sub>).
- Earnings from low-wage employment are heavily taxed in Korea compared to other OECD countries. As a result, the net income resulting from low-wage full-time employment is relatively low in Korea for a couple with two children and only one working parent (49%) of the median income) compared to many other OECD countries (Figure 9).

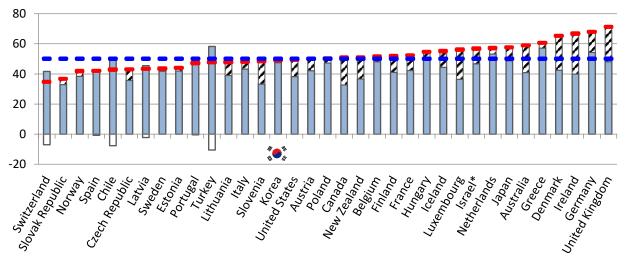
<sup>&</sup>lt;sup>1</sup> Non-regular workers are categorized into contingent and part-time workers depending on the contract period, and into daily workers, dispatch workers, temporary help agency workers, independent contractors (semi self-employed workers), and home-based workers depending on the contract type.

Figure 9. Income levels provided by full-time low wage employment

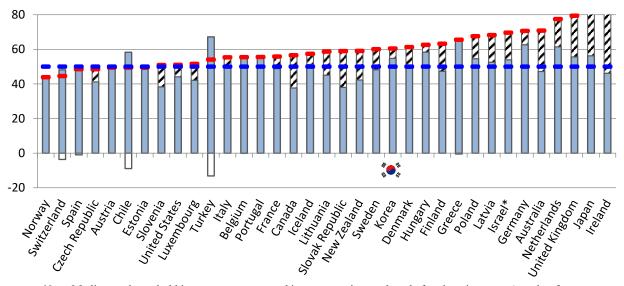
Net income value in % of median household incomes<sup>1</sup>, 2015

■ Gross Earnings □ Net taxes ☑ Net transfers ■ Net Income (
(
¬) ■ Poverty threshold - 50% of median income

Panel A. One earner couple, two children



Panel B. Single parent, two children



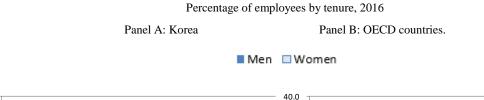
*Note*: Median net household incomes are expressed in current prices and are before housing costs (or other forms of "committed" expenditure). Results are shown on an equivalised basis (equivalence scale is the square root of the household size) and account for all relevant cash benefits (social assistance, family benefits, housing-related cash support as indicated). US results represent the situation in Michigan and include the value of Food Stamps, a near-cash benefit. Income levels account for all cash benefit entitlements of a family with a working-age head employed full-time earning 50% of the average wage, no other income sources and no entitlements to primary benefits such as unemployment insurance. They are net of any income taxes and social contributions. Calculations for families with children assume two children aged 4 and 6 and neither childcare benefits nor childcare costs are considered.

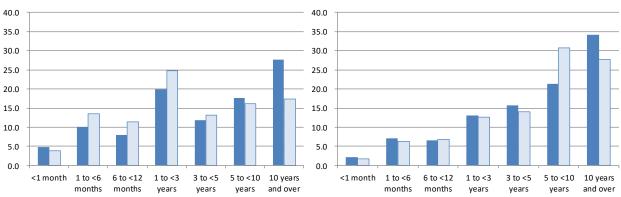
Source: OECD Tax & Benefit model, http://www.oecd.org/els/soc/benefits-and-wages.htm.

#### 3.2. Labour market instability and informality

Korea's average job tenure is the shortest in the OECD countries (5.8 years on 32. average in Korea for employees while the OECD average is 9.6 years). Also, more than 25% of dependent employees separate from their jobs within one year (compared with an OECD average of 15.4%) (Figure 10); and 47% of them separate within three years, while the proportion is 28.3% for the OECD. Women are also much more likely than men to get jobs with short tenure.

Figure 10. High prevalence of short job tenure in Korea





Source: OECD Employment Database.

- The high prevalence of self-employment is another distinctive feature of Koreas' labour market. Self-employment represents 25% of all employees in Korea – despite a sharp decrease since the early 1980s (52.8%), compared with less than 16% on average across the OECD. Many workers – around 40% of all wage workers in 2011 – also engage in some form of informal work, defined as work that is not fully covered by minimum wage regulation, labour standards and social insurance, and receive no replacement income in the event of loss of work (Lee, 2012[12]).
- Long-term unemployment (unemployed for 12 months and over) is very low in Korea (only 0.4% of total unemployment compared with an OECD average of 33.8% in 2015). One of the reasons is that many people move back into work relatively quickly, which partly reflects Korea's relatively good labour market conditions, but also the lack of income support for jobseekers. Nevertheless, many Koreans (especially married women) move into labour force inactivity within their first year of unemployment, which contributes to the labour force inactivity rate in Korea being somewhat higher than the OECD average - 31.7% vis-a-vis 28.7% in 2015.

## 4. The policy context

## 4.1. Social protection policies

- 35. Korea has significantly strengthened its system of social protection for employees and their families. However, labour market features (the high share of self-employment, high level of informality and persistent duality) lead to gaps in coverage for many workers and job seekers. Despite progress, many workers and their families do not have access to social supports: for example, social assistance take-up is in Korea well below the OECD average: the Basic Livelihood Security Programme covers around 13% of that population compared with an (unweighted) OECD average of around 30% (OECD, 2018<sub>[7]</sub>).
- Korea's Employment Insurance covers only half of the workforce, despite measures adopted to increase coverage (Box 3). Some efforts have been made also to customise Korea's social assistance payment (Basic Livelihood Security Program) to claimants needs, as well as to improve the situation of the working poor.
- From September 2018 onwards, Korea has introduced a family allowance paid to families with children aged 0-5 years old, and which is loosely means-tested, with only households on incomes at or above the 90th percentile of the income distribution not eligible. Before this date, families had to rely largely on a patchwork of financial supports through the tax system or by local governments. Korea has introduced several new child- or familyrelated tax breaks and supports over the last decade or so with the aim of providing financial assistance to families with children. These range from a standard child tax allowance providing a deduction on gross taxable income, to a per-child non-refundable tax credit for all taxpayers and a per-child refundable tax credit for low-income families (OECD, 2017<sub>[9]</sub>). However, these measures are fairly small in scale, with the amounts provided relatively low compared to some equivalent measures in other OECD countries. As a result, cash support for families is an area in which Korea's family policy is currently less developed than in most other OECD countries (OECD, 2017<sub>[9]</sub>). In 2013, excluding maternity, paternity and parental leave, Korea spent only 0.33% of GDP on family financial supports through either cash or tax breaks, a smaller share than in all OECD countries other than Turkey - and the OECD average being at 1.2% of GDP.
- Korea operates a relatively low-tax and low-benefit approach to tax and benefit policies in comparison to many other OECD countries, which means that net family income depends heavily on market earnings (OECD, 2017<sub>[9]</sub>). Moreover, despite the strengthening of cash supports, the Korean system has very weak impact on poverty outcomes in contrast to all other OECD countries. Thus, child poverty rate after transfers is at the same level before taking into account these transfers, while there is a 10 percentage points difference on average across the OECD (Figure 1).

#### Box 4.1. Aid to the unemployed and the working poor in Korea

Korea has four main support systems in place to assist the unemployed and the working poor:

- Unemployment benefit provided by the Employment Insurance (EI);
- Employability support with a benefit component provided under the Employment Success Package Programme (ESPP);
- Social assistance provided through the Basic Livelihood Security Programme (BLSP);
- In-work support provided through the Earned Income Tax Credit (EITC).

EI provides support and income replacement benefits for workers who lose their job involuntarily, provided they are insured and eligible for payments. BLSP provides a meanstested safety net for people living below the poverty line, provided they fulfil all entitlement conditions. Given the strictness of both EI and BLSP criteria, many Koreans fall between the cracks (OECD, 2018<sub>[7]</sub>). ESPP covers some of this gap for a small number of jobless people needing particular help to access the labour market. EITC covers some of the income gap for workers who earn too little to support their families. The size of the non-protected group, however, remains large (OECD, 2018<sub>[7]</sub>).

Korea introduced its EI programme in mid-1995, much later than most other OECD countries. EI is a comprehensive labour market and social security measure including the employment security and vocational skills development programmes aimed at preventing joblessness, promoting employment and improving workers' vocational skills as well as providing the traditional unemployment insurance income support to displaced workers. EI in principle covers all employees on a mandatory basis, except for most persons working less than 60 hours a month or 15 hours a week, and family labour. Most self-employed workers can opt in on a voluntary basis. EI benefits have long suffered from the low coverage of the programme and more recently face the additional challenge of having turned over time into a relatively low and de-facto flat-rate payment (OECD, 2018<sub>[7]</sub>).

The Basic Livelihood Security Program (BLSP) was introduced in 2000 to provide cash and in-kind benefits for eligible persons living in absolute poverty. The BLSP consists of 4 types of benefits: cash benefit, housing benefit, health care and education benefit. To be eligible for the cash and in-kind benefits, a household should pass two means tests: the "income" criterion, which takes into account assets such as a house or a car; and the family support obligation rule which means that potential beneficiary with relatives (parents, children or spouse) earning above a certain income level cannot be entitled to the benefit, even though the family members are not living together. In 2015, the BLSP was reformed by differentiating the means-test criteria of each benefit in order to provide tailored assistance to households.

The ESPP scheme was introduced in 2008 as a way of helping jobseekers who are neither entitled to EI nor receiving BLSP but facing considerable disadvantages, especially in the form of low income. ESPP combines targeted employment support with some income support. Over the years, ESPP was expanded rapidly in many different ways.

The EITC was introduced to better support the large number of people not able to earn a decent living despite being in employment. The maximum tax credit allowed by Korea's EITC in 2016 ranged from 1.8% of the average wage for singles to 4.3-5.3% for childless couples and 8.1-9.1% for couples with three children (the higher rates apply for dual-income families). This puts Korea on the higher end in an international comparison, especially for

couples. Only the systems in the United Kingdom (for all family types) and in the United States (for families with two or more children) allow significantly higher maximum credits. However, EITC is phased out at lower income levels in Korea than in any other OECD country with a comparable scheme (OECD, 2018<sub>[7]</sub>).

The number of EITC recipients has increased and the composition of recipients changed somewhat. The total number of EITC recipients increased from 0.5-0.6 million in 2008-10 to around 0.8 million in 2011-13 and around 1.3 million in 2014-15. Total spending on EITC has increased in line with the increase in the number of recipients. More families with higher incomes became eligible for EITC and people could receive slightly higher payments. The average payment, however, has changed little over time and fluctuated around KRW 850 000 or 2% of the average wage per year, with 30-40% receiving less than KRW 500 000.

In total (if only considering recipients of working age) these four systems served 3.88 million people in 2015, which corresponds to around 10% of the working-age population. This is 1 million more than just four years ago, in 2011, largely because of the expansion and maturing of EITC and ESPP. The total cost was over 10 trillion KRW in 2015, up from around 8 trillion in 2011.

39. Korea is taking steps to expand its package of family cash supports and in September 2018 has introduced a new means-tested family allowance for children aged 0-5 years old. The allowance is paid at a flat-rate of KRW 100,000 (USD 92) per child per month, equal to roughly 2.8% of 2015 average earnings, and is loosely means-tested, with only households on incomes at or above the 90th percentile of the income distribution being not eligible. A simulation of its effect on the net income of families with two children suggests that the new family allowance provides a valuable boost to net income for families with young children (OECD, 2017e): the new family allowance may increase disposable family income by slightly more than 10% for a working single-parent earning half of the average wage and with two children aged 2 and 3; and by around 3.6% for a dual earner couple families with earnings at 150% of the average wage.

#### 4.2. Work-life balance, fertility and child policies

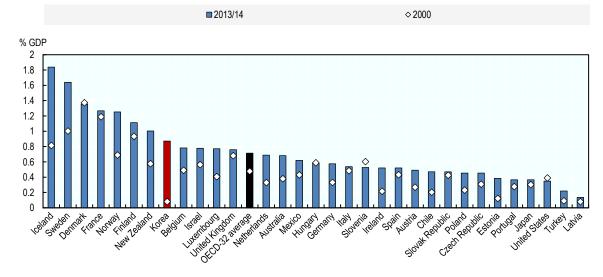
- In response to declining fertility, the Korean government has implemented several action plans since the early 2000s to promote fertility and make family life with children more compatible with employment (Lee,  $2009_{[13]}$ ) (Lee,  $2017_{[14]}$ ).
- Three plans have been adopted since 2006, each with a specific development focus: 41.
  - The first Basic Plan on Low Fertility and Ageing Society developed for the 2006-2010 period, introduced measures to facilitate the reconciliation of work and family life, including financial support for childcare for low-income families. Employees' rights to leave for childbirth were strengthened, and other measures to assist in the treatment of infertility and medical assistance for pregnant women were also introduced.
  - The second Basic Plan covered the period from 2011 to 2015 and included, in particular, the introduction of free childcare services for all families regardless of their income level.
  - Finally, the third Basic Plan adopted in 2016 for the period up to 2020, aims to improve the standard of living of families through measures to reduce housing and education costs and better address labour market barriers. The introduction of a

family allowance for most children aged 0 to 5 years in September 2018 is also part of this plan to reduce the costs of raising young children.

- 42. In total, a fairly comprehensive set of measures has been adopted since the mid-2000s. Workers' rights to leave after childbirth have been considerably extended, and various measures have been adopted to both stimulate the provision of childcare services and reduce the cost for households using these services (Box 4).
- Investment in families has increased considerably, with Korea allocating 1.37% of GDP to family spending in 2013 compared to only 0.24% in 2001 (Figure 11). Among these expenditures, those related to the development of childcare services increased most strongly, from 0.13 to 0.95% of GDP over the period considered. While the focus of government investment is on childcare services for children aged 0-5, as observed in the Nordic countries or France, the level of expenditure remains much lower in Korea than in these countries, but above the OECD average.

Figure 11. Public spending on ECEC in Korea has increased tenfold since 2000

Public expenditure on early childhood education and care, as a % of GDP, 2013/2014<sup>a</sup>.

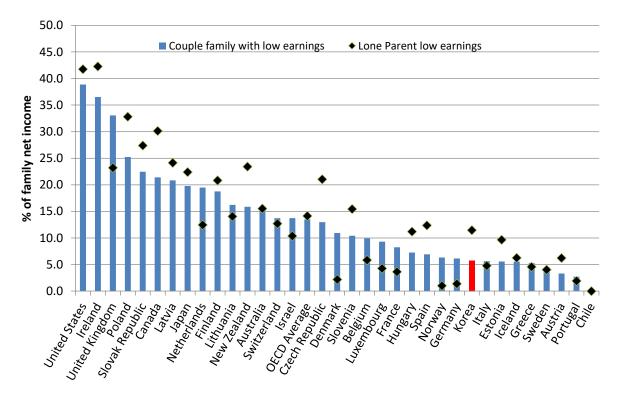


Note: Note: In some countries local governments play a key role in financing and providing childcare services. Such spending is comprehensively recorded in Nordic countries, but in some other (often federal) countries it may not be fully captured by the OECD social expenditure data. a) Data for Poland refer to 2012 and for Australia, Israel, Korea, and New Zealand to 2014. Data for all other countries refer to 2013. Source: OECD Family Database, Indicator PF3.1: www.oecd.org/social/family/database.htm.

44. As a result, the coverage rate of childcare services for children under three years of age increased sharply, and now around one third of children of this age group are enrolled in formal care which is ten times higher than in the early 2000s. The net costs of childcare are comparatively low in Korea for low-income households (Figure 12). However, lower-income households use childcare services less often than households with higher incomes: for example, about 1/3 of households with incomes equal to at most 40% of the average income in 2015 use a group childcare service, with the mother often (51% of the time) being the primary caregiver of children; conversely, 51% of families with incomes at least equal to the average income use a childcare service (2015 Childcare Survey, Ministry of Health and Welfare).

Figure 12. Out of pocket costs of childcare for low earner families

Net childcare costs for couple and single parent families, 2015.



*Note*: 'Low' earnings level is 20th percentile of gender-specific full-time earnings distribution. Two earners are assumed for couples, male and female. In all cases, family has two children aged 3 and 2 using full-time centrebased care. Fees and, in some cases, public support measures do also vary across regions or municipalities in some countries. For Canada, fees and regulations as applying in Ontario is taken into account. *Source*: Browne and Neumann (2017), OECD Tax Wedge and Effective Tax Rates on Labour – Child Care Costs in 2015.

#### Box 4.2. Leave and childcare policies in Korea since 2001

#### Leave policies

The rights to maternity leave and parental leave have been extended to secure the situation of women and children at the time of childbirth and to increase the involvement of fathers in childrearing. In 2001, the period granted for maternity leave was expanded from sixty to ninety days, and the payment started to be ensured by the Employment Insurance for 30 days. In 2006, a further extension of payment was introduced with the payment by the insurance system for all the 90 days applying to employees in small and medium enterprises. In parallel, since 2008, male employees whose spouses give birth can request 3 days of paid paternity leave – and 2 days of unpaid leave since 2012.

In addition to maternity and paternity leave entitlements, employees are eligible for one year of parental leave to take care of their children up to the age of 8 or in the second year of elementary school. Leave is an individual entitlement, so both parents can take a full year successively. However, the employer can refuse to grant leave if the applicant's spouse is already on leave and if both parents take leave at the same time, only one parent receives the Parental leave benefit by the Employment Insurance.

Payment levels were increased gradually since benefits were introduced in 2001, and in 2011, the flat rate payment was changed to earning related payment - 40% of the employee's ordinary wage with a ceiling of KRW two million per month. In addition, a "Daddy's month" was introduced in October 2014, expanded to 3 months in 2016, to encourage fathers take a higher share of parental leave. In the case that a parent (usually the mother) takes parental leave first and then the other parent (usually the father) takes parental leave, the allowance for the first three months for the second parent is paid at 100% of the ordinary wage up to a ceiling at KRW 1500000 per month. The share of male employees taking parental leave has increased rapidly from 3.3% in 2013 to 13.4% of those taking parental leave in 2017. It remains below the share of men among the users of leave in countries where such a fatherquota exist (OECD, 2016<sub>[15]</sub>).

#### Childcare policies

Services are mostly provided by the private sector: in 2015, 75% of the total numbers of children under age 5 were enrolled in private childcare centres which accounted for 85.2% of the total number of childcare facilities. Kindergartens welcome children from age 3, but only 21% or preschool children are cared in these facilities, while 46% of children of the same age group are enrolled in childcare centres. For this reason, efforts are being made to harmonise the educational and care content of childcare centres and kindergartens with the adoption of a common curriculum - Nuri curriculum - for preschool children age 3-5 at the national level from 2012 onwards, while budget allocation for childcare services and kindergartens were combined. Raising quality of childcare services remains a challenge, and could be achieved by upgrading accreditation standards in early childhood education and care and make them mandatory, and by raising qualification standard for teachers (OECD,  $2018_{[2]}$ ).

Furthermore, additional subsidies to private childcare centres were introduced in 2012 to improve the quality of services they provide, and centres are required to comply with almost the same regulations as public childcare centres to receive the subsidy. In 2015, only around 4% of the total number of private childcare centres received the benefit.

At-home child-minding services are also offered, particularly when parents are faced with unpredictable and ad-hoc demands caused by children's illness or parents' working overtime, short-time personal childcare is a good option. Full-time service is provided to children between 3 months and 2 years old and part-time service with a minimum of 2 hours a day is provided to children up to 12 years old. In 2017, there are 221 government-subsidized centres nationwide in charge of managing this program. The centres recruit and train caregivers, and dispatch the trained caregivers to families registered for the service. The fee for the service and quota of service hours are set by government and, parents can receive an allowance to help pay the fee depending on household income.

Access to childcare services is targeted primarily at poor families (with an income of 50% or less of median income, according to the National Basic Living Security Act), children of single-parent families supported by the Single-Parent Family Support Act, and children with disabilities. Families where both parents are looking for work also have priority access, as do families with three children, two of whom are under 5 years of age.

Other reforms have sought to reduce childcare costs. First, the Childcare subsidy, which initially supported very low-income households, was expanded to cover middle class households in the late 2000s and finally provided to all households in 2013. From 1992 to 2003, the childcare subsidy was only provided to households who were living with income around the absolute poverty. However, since 2004, the amount of the subsidy and household's income level to which is eligible for the subsidy started to increase. In 2011, 70% of households with children aged 0-5 could receive the full childcare subsidy and in 2012, the income criteria were abolished for households with children aged 0 to 2 and aged 5. In the following year, the income criteria were abolished for households with children between 3 and 4. Consequently, from 2013 childcare subsidy became a universal childcare assistance program regardless of income level. However, priority is given to families in which mothers are employed.

In addition, households with children under 6 years of age who do not use childcare facilities or kindergartens are entitled to a home-care allowance which was introduced in July 2009 to treat fairly all children, regardless of the childcare solution that is used. At introduction, the benefit was limited only to very low-income households with children not yet 2 years of age. However, eligibility was widened to 2-year-olds in 2011, and in 2013 the income-test was removed and coverage extended to 3-5 year-olds. Today, all parents of children under age six are entitled to the home care allowance as long as they do not use childcare services, kindergarten or the all-day childminding service.

- The adequate provision of social services is essential to ensure equal opportunity for all. Family services often help children in low-income and/or single-parenting families, and children who have experienced domestic and/or sexual abuse. Over the past decades, the government has advanced services to support and protect vulnerable children including "Dream Start", "Child Development Account", and child abuse protection programmes.
  - The Dream Start programme started in 2006 is aimed at pregnant women and children less than 12 years of age, but gives priority access to abused children. Children from low-income families, single-parent families and those who are raised by their grandparents also have priority access. A comprehensive service including physical

- and mental health programmes, cognitive and language development programmes, emotional and behavioural development programmes, is provided based on a case appraisal of the needs of each child. In general, a team of 5-9 members takes care of about 300 recipients of dream start services.
- The Child Development Account started in 2007 and is a programme to help accumulate funds towards the financial independence (at age 18) of vulnerable children, such as children who reside in child welfare institutions, foster children, orphans, and children in low-income families (Nam and Han 2010). When a child, his/her parents and/or individual sponsor save a certain amount in the child development account, the government saves the same amount to the child's account up to a threshold of KRW 40000 (USD 37) per month until the child turns 18. Local governments manage Child Development Accounts.
- In 2000, the Korean government established the National Child Protection Agency (NCPA) to provide social services for abused children and advocate their rights (Ju and Lee, 2010<sub>[16]</sub>). Local governments and local child protection agencies investigate the child abuse cases and provide and/or link services, including medical assistance, counselling, and police services.

## 5. Changes in children's living standards between 2006 and 2012

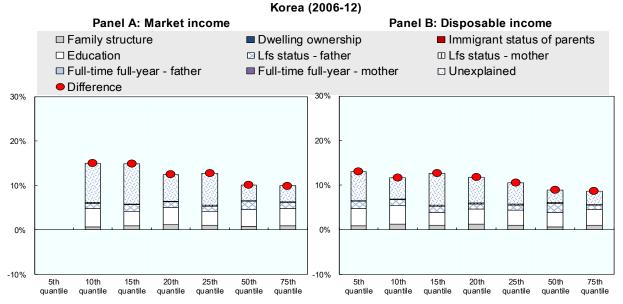
- 46. Households with children in Korea have experienced increase in both market and disposable income at all levels of the income distribution and for all family types (Figure 13 and 14). Interestingly, the relative increase in disposable income has been steeper for children in families with lower incomes (+15% for the 15th percentile for two parent families) than for those in families where income resources are closer to the poverty line (+10,4% for the 25th percentile).
- A large part the increase in the standard of living of low income families is due to changes in the composition of poor families:
  - The share of poor children with a father having tertiary education grew sharply from 15 % in 2006 to 35% in 2012, and this has contributed to a 3.5% rise in both market and disposable income of poor two-parent families because highly educated men usually work in more profitable jobs than the less qualified (Figure 13 Panel A). However, the returns of education decreased markedly for fathers with intermediate to high education, while the returns to low education increased very slightly (Panel B). Thus, it seems that the employment situation of fathers with higher education has worsened to such an extent that a growing number of them are falling into poverty.
  - Educational attainment of poor single parent increased as well, and 23% of poor children had a parent with a low level of education in 2012, while they were 40% six years before. This change has had a huge positive influence on children's standard of living: +8.5% of disposable income for half of children with a single parent (Figure 25).
  - Only 1 in 5 children in poor two-parent families have a non-working father which is relatively low compared to other countries, and this proportion decreased by 5 percentage points since 2006 which contributed to raise income slightly (Figure 13).
  - The family situation of poor children changed between the two dates. In two-parent families, the presence of other adults has become less frequent (from 22 to 13% of poor children). Poor children also more often live now in a family with two siblings (25% in 2012 compared to 17% in 2006), and children are older (46% were under 6 years of age in 2006 compared to 38% in 2012). These changes in family structure play out in various ways, which have a small impact on the standard of living (+1% on average for all poor children). Nonetheless, the standard of living for children in couples with two children has increased relative to that of larger or smaller families, suggesting that the economic situation of low-income families with two children has improved and that the enlargement of the family above two children for lowincome families is increasingly costly.
  - For children in single-parent families, the standard of living all other things being equal decreased in the presence of 1 or especially two additional children, while it slightly increased in the presence of 4 children. Nevertheless, once again all other things being equal, the standard of living of families where the youngest child is of school age has increased while this is not the case when the child is younger (Figure 14). Persistent difficulties in reconciling work with the presence of a young child may explain this.

Finally, it should be noted that no information on the occupational status of mothers is provided in the survey used to make this decomposition analysis, so that it is not possible to examine the contribution of mothers' employment to the standard of living of families and children.

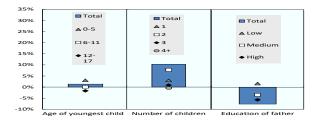
Figure 13. Changes in living standard of children in two parent families - Korea 2006-2012

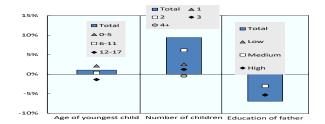
Market income Disposable income

Panel A: Contribution of changes in family and work characteristics



Panel B: Changes in the income returns of family characteristics





Note: Panel A Figures show the percentage change in the household income percentile of families with children, and reflects the contribution of changes in family and work characteristics to the evolution of income. The income is equivalised and corrected for the purchasing power parities. The red markers show total changes in respectively market and disposable income for each quantile of income, and is positive (resp. negative) when the equivalised income of a given quintile has increased (resp. decreased). This total change is then decomposed in different components showing how variations in family and work characteristics have influenced the evolution of income percentiles. Household income is equivalised using the square root scale. The term 'standard of living' refers to the equivalised disposable income.

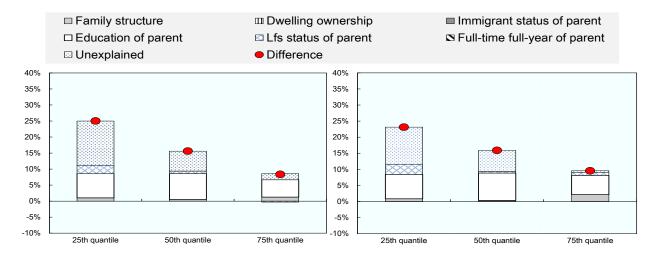
Panel B shows how changes in the effect of each family characteristic have affected the equivalised market or disoposable income for the 25th first percentile. A positive (negative) sign shows a gain (a loss) in income associated with the characteristic between 2007 and 2014. Only statistically significant changes are reported. Source: OECD Estimates based on data from the Luxembourg Income Survey.

Figure 14. Changes in living standard of children in single parent families – Korea 2006-2012

Percentage change in income of poor children

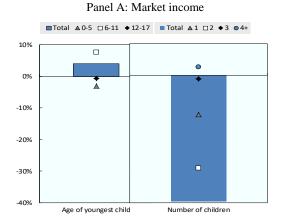
Market income Disposable income

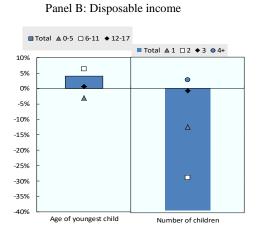
Panel A: Contribution of changes in family and work characteristics



Note: Poor children correspond to the 25% of children at the bottom of the income distribution.

Panel B: Changes in the income returns of family characteristics





## 6. Child well-being: How does Korea compare to other OECD countries

- 48. Compared to other OECD countries, Korea performs relatively well on many (though not all) measures of child well-being (Figure 15). For example, at home, children in Korea enjoy disposable incomes that are at least moderate by OECD standards and a risk of relative income poverty that is comparatively low (7.1%, compared to an OECD average of 13.4%). However, a relatively high share of 15-year-olds (10%) report failing to talk to their parents before or after school on the most recent day they attended school – perhaps a reflection of the long school days and working hours in Korea.
- 49. Korea often performs particularly well on measures of children's well-being in education and at school. For example, a comparatively high share of 15-year-olds say they feel like they 'belong' at school (80%, compared to an OECD average of 73%), and a relatively low share report being the victim of bullying at least a few times a month (12%, compared to an OECD average of 19%). Average scores on the OECD's PISA reading and mathematics tests are also high in comparison to many other OECD countries, and a very high share of 15-year-olds say they expect to complete a university degree (75%, versus an average of 44%). Moreover, despite the highly competitive education system, only a moderate share of 15-year-olds in Korea report feeling anxious about school tests even when well-prepared (55%, the same as the OECD average).
- 50. However, teenagers in Korea are less likely than their peers in most OECD countries to say they are very satisfied with their life as a whole, and are more likely to report being not satisfied. Only 19% of 15-year-olds in Korea report high levels of life satisfaction (compared to an OECD average of 34%), while 22% report low life satisfaction (versus an average of 12%).

Middle third Top third ■ Bottom third Average disposable household income for children Jobs and income family Children in relative income poverty Adolescents talking to their parents before or after school Parent-child relationships Infant mortality **Jealth and safety** Infant health Low-weight births Adolescents skipping either breakfast or dinner Child and adolescent health Adolescents regularly engaging in vigorous exercise Adolescents with a desk and a quiet place to study at home Educational resources at Adolescents with books for school work at home Education and school life Adolescents who feel anxious about school tests Educational attitudes and expectations Adolescents who expect to complete a university degree Adolescents who feel like they belong in school Quality of school life Adolescents who report being the victims of bullying Reading performance at age 15 (PISA) Educational performance Mathematics performance at age 15 (PISA) Adolescents reporting high life satisfaction Subjective well-being Adolescents reporting low life satisfaction Adolescent fertility Other adolescent outcomes

Figure 15. How Korea compares to other OECD countries on 18 key measures

Note: Placement in top/middle/bottom third of OECD countries with available data on each measure. 'Top third' (green circle) always represents good relative performance with respect to child well-being, and 'bottom third' (red square) poor relative performance. For measures where a larger value is generally 'better' (e.g. 'adolescents reporting high life satisfaction'), 'top third' means the country is in the top third when countries are ranked largest to smallest value down. For measures where a smaller value is better (e.g. 'adolescents reporting low life satisfaction'), 'top third' means the country is in the top third when ranked smallest to largest.

#### Source: OECD Child Well-Being Data Portal.

The Child Well-Being Data Portal (CWBDP) gathers data on child well-being and the settings in which children grow up. It provides information on children's home and family environment, their health and safety, their education and school life, their activities and their life satisfaction, and also links to information on public policies for children. Information covers children from 0 to 17 years of age, although some information is available only for specific ages. Where possible, information is provided for different age groups, from early childhood to adolescence. The data portal also provides a unique source of information on disparities in child well-being by gender, family status, household income level, and parental background

## References

Aboriginal Children in Care Working Group (2015), Aboriginal Children in Care: Report to Canada's Premiers, <a href="http://canadaspremiers.ca/wp-content/uploads/2015/07/aboriginal_children_in_care_report_july2015.pdf">http://canadaspremiers.ca/wp-content/uploads/2015/07/aboriginal_children_in_care_report_july2015.pdf</a> (accessed on 29 November 2017).	[22]
Choi, H. and Á. Choi (2015), "When one door closes: the impact of the hagwon curfew on the consumption of private tutoring in the Republic of Korea"", No. 34, Research Institute of Applied Economics, <a href="http://www.ub.edu/aqr/">http://www.ub.edu/aqr/</a> (accessed on 25 September 2018).	[10]
Employment and Social Development Canada (2017), 2016-2017 Departmental Results Report, <a href="https://www.canada.ca/en/employment-social-development/corporate/reports/departmental-results/2016-2017.html">https://www.canada.ca/en/employment-social-development/corporate/reports/departmental-results/2016-2017.html</a> (accessed on 29 November 2017).	[23]
Firpo, S., N. Fortin and T. Lemieux (2009), "Unconditional Quantile Regressions", <i>Econometrica</i> , Vol. 77/3, pp. 953-973, <a href="http://dx.doi.org/10.3982/ECTA6822">http://dx.doi.org/10.3982/ECTA6822</a> .	[18]
Fortin, N., T. Lemieux and S. Firpo (2011), "Decomposition Methods in Economics", in Ashenfelter, O. and D. Card (eds.), <i>Handbook of labor Economics</i> , 4A, <a href="https://economics.ubc.ca/files/2013/05/pdf">https://economics.ubc.ca/files/2013/05/pdf</a> paper_nicole-fortin-decomposition-methods.pdf (accessed on 10 April 2018).	[17]
Ju, S. and Y. Lee (2010), "Experiences of family maltreatment by Korean children in Korean National Protective Services", <i>Child Abuse &amp; Neglect</i> , Vol. 34/1, pp. 18-27, <a href="http://dx.doi.org/10.1016/j.chiabu.2009.09.009">http://dx.doi.org/10.1016/j.chiabu.2009.09.009</a> .	[16]
Lee, B. (2012), <i>Informal work in Korea: Non-regulation or Non-compliance?</i> , Korea Labour Institute, Seoul.	[12]
Lee, K. (2017), Korea's Population Strategy to overcome Lowest Fertility.	[14]
Lee, S. (2009), "Low Fertility and Policy Responses in Korea", <i>Japanese Journal of Population</i> , Vol. 7/1, pp. 57-70.	[13]
OECD (2018), <i>Education at a Glance 2018: OECD Indicators</i> , OECD Publishing, Paris, <a href="http://dx.doi.org/10.1787/eag-2018-en">http://dx.doi.org/10.1787/eag-2018-en</a> .	[4]
OECD (2018), <i>OECD Economic Surveys: Korea 2018</i> , OECD Publishing, Paris, <a href="http://dx.doi.org/10.1787/eco_surveys-kor-2018-en">http://dx.doi.org/10.1787/eco_surveys-kor-2018-en</a> .	[2]
OECD (2018), OECD Family Database, 2017, <a href="http://www.oecd.org/els/family/database.htm">http://www.oecd.org/els/family/database.htm</a> .	[1]
OECD (2018), <i>Towards Better Social and Employment Security in Korea</i> , Connecting People with Jobs, OECD Publishing, Paris, <a href="http://dx.doi.org/10.1787/9789264288256-en">http://dx.doi.org/10.1787/9789264288256-en</a> .	[7]
OECD (2017), Family Benefits in Korea from an International Perspective, OECD, Paris.	[9]
OECD (2017), <i>The Pursuit of Gender Equality: An Uphill Battle</i> , OECD Publications, Paris, <a href="http://dx.doi.org/10.1787/9789264281318-en.">http://dx.doi.org/10.1787/9789264281318-en.</a> .	[8]
OECD (2016), <i>Background brief on fathers' leave and its use</i> , OECD Publishing, <a href="http://www.oecd.org/els/family/Backgrounder-fathers-use-of-leave.pdf">http://www.oecd.org/els/family/Backgrounder-fathers-use-of-leave.pdf</a> (accessed on 16 October 2018).	[15]

OECD (2014), <i>OECD Economic Surveys: Korea 2014</i> , OECD Publishing, <a href="http://pac-files.oecd.org/acrobatebook/1014101e.pdf">http://pac-files.oecd.org/acrobatebook/1014101e.pdf</a> (accessed on 16 October 2018).	[11]
Park, H., J. Choi and H. Jo (2016), "Living Arrangements of Single Parents and Their Children in South Korea", <i>Marriage &amp; Family Review</i> , Vol. 52/1-2, pp. 89-105, <a href="http://dx.doi.org/10.1080/01494929.2015.1073653">http://dx.doi.org/10.1080/01494929.2015.1073653</a> .	[3]
Picot, G. and F. Hou (2014), <i>Immigration Low Income and Income Inequality in Canada: What's new in the 2000s?</i> , <a href="http://www.statcan.gc.ca/pub/11f0019m/11f0019m2014364-eng.pdf">http://www.statcan.gc.ca/pub/11f0019m/11f0019m2014364-eng.pdf</a> (accessed on 30 November 2017).	[20]
Statistics Canada (2017), "Aboriginal Peoples in Canada: Key results from the 2016 Census:", <i>The Daily (25 October 2017)</i> .	[21]
Statistics Canada (2017), "Census in Breif: Children with and Immigrant Background: bridging cultures", 2016 Census Analytical Products, <a href="http://www12.statcan.gc.ca/census-recensement/2016/as-sa/98-200-x/2016015/98-200-x2016015-eng.pdf">http://www12.statcan.gc.ca/census-recensement/2016/as-sa/98-200-x/2016015/98-200-x2016015-eng.pdf</a> (accessed on 30 November 2017).	[19]
Statistics Korea (2017), <i>The 2016 survey on private education expenditure (in Korean only)</i> , <a href="http://kostat.go.kr/portal/korea/kor_nw/2/1/index.board?bmode=read&amp;aSeq=359420">http://kostat.go.kr/portal/korea/kor_nw/2/1/index.board?bmode=read&amp;aSeq=359420</a> (accessed on 19 December 2017).	[5]
KIHASA (ed.) (2017), Child Poverty in Korea: Recent trends and Multidimensional Approach.	[6]

## Annex A. Methodology for the decomposition analysis of changes in children's income

- 51. The empirical analysis looks at factors explaining changes in children's family income within country across time from the mid-2000s to 2012. It involves an analytical decomposition of the "contribution" of key socio-economic characteristics: such as family structures and housing status, parental labour market situations relative to changes in child poverty rates. It also looks at changes in families' income which are not explained by changes in family and work characteristics but may due to changes in the association between these characteristics and the place of children in the income distribution. These latter changes may reflect the evolution of the institutional contexts where children live and grow up. In simple terms, the decomposition helps to measure the portion of changes in child poverty due to changes in the characteristics of child population and those due to changes in the association between these characteristics and poverty rates.
- 52. The decomposition is carried out for market incomes before taxes and transfers (they correspond to labour income in their vast majority, capital income being generally low for poor households), and for disposable income after social transfers. By comparing the changes in income before and after taxes and transfers, one can infer what role transfers have played in responding to changes in labour income and how this role has varied across the income distribution. It should be noted, however, that the market and disposable income distributions are considered separately, so that children in the 25th percentile of the market income distribution are not exactly the same as those in the 25th percentile based on disposable income. The decomposition is carried out for different quantiles of the income distribution, so that the factors influencing child poverty can be compared across the income distribution.
- Recentered Influence Function (RIF)-regressions are used to decompose the role of differences in family characteristics and other labour market covariates and the differences in the way these latter are values in the labour market and protected by the net transfers. The approach is similar to an Oaxaca-Blinder decomposition, but the decomposition applies here on distributional measures instead of focusing on means (Fortin, Lemieux and Firpo, 2011[17])(see Box A2.3 for more technical details). These regressions are applied here to model the income distribution below the poverty line, i.e. up to the 25<sup>th</sup> first quantile of equivalised income of households with children, and above the poverty line for the 50<sup>th</sup> and the 75<sup>th</sup> percentiles.

54. For each country, changes in income are decomposed in two broad components to disentangle the contribution of changes in children's family characteristics and the "unexplained" part of the variation in child poverty that is not due to the identified changes in population characteristics. This decomposition, in practice, is formulated from the viewpoint of mid 2000s families and obtained by estimating the following equation:

$$Z_{gi} = \alpha_{g0} + \sum_{k=1}^{K} X_{ik} \beta_{gk} + \varepsilon_{gi}$$
 (1)

where g is an indicator of time, and  $X_{ik}$  is a vector of control variables, including family demographics (age of parents, number of children, age of youngest child, education attainment of parents, household type, marital status and immigration status of parents, housing ownership), labour market statuses of parents, the intensity of work of parents (number of hours worked) the quality of jobs (occupation and industry for countries where this information is available).  $Z_{gi}$  is a recentered influence function on the quantile of interest of the distribution of disposable equivalised income. Following the standard Oaxaca-Blinder decomposition, the estimated gap over time  $\hat{\Delta}_0^{\mu} = \bar{Z}_t - \bar{Z}_{t-n}$  can be decomposed as:

$$\hat{\Delta}_{0}^{\mu} = \hat{\Delta}_{S}^{\mu} + \hat{\Delta}_{X}^{\mu} = \left[ \sum_{k=1}^{K} (\bar{X}_{tk} - \bar{X}_{t-nk}) \hat{\beta}_{tk} \right] + \left[ (\hat{\alpha}_{t0} - \hat{\alpha}_{t-n0}) + \sum_{k=1}^{K} \bar{X}_{tk} (\hat{\beta}_{tk} - \hat{\beta}_{t-nk}) \right]$$
(2)

where the first term of equation 1 predict income quantiles that would apply if, for instance, children were "transported" into families with mid-2000s characteristics, but retained the 2014 returns to those characteristics. The group differences in the predictors are weighted by the coefficients of families' characteristics in 2014 to determine the endowments effect, the so called explained component. In other words, this latter measures the expected change in 2013 income quantiles, if those families had mid-2000s predictor levels.

- 55. By contrast, the second term estimates the portion of the evolution of income that is due to changes in the association between poverty and household characteristics applied to 2012 predictor levels; and it measures the income difference resulting from variations in the "returns" that family and work characteristics from one period to the other, differences which are mainly due to changes in the distribution of market income and in the structure of social transfers.
- 56. In all, this decomposition helps explain the factors which influence in the standard of living children in relative poverty (or in other words wich influence the 'anchored' child poverty rate). An increase in the predicted income quantiles  $(\hat{\Delta}_0^{\mu} > 0)$  (respectively a decrease, with  $(\hat{\Delta}_0^{\mu} < 0)$ ) reflects a gain (resp. a decrease) in income at a given level of the income distribution, which can be interpreted either as a rise (resp. a decrease) in the standard of living or a decrease (resp. an increase) in anchored poverty.
- 57. Household (equivalised) income will increase or decrease, depending on the less/more favourable present family characteristics (as captured in the first term of equation 2) and on the evolution of the association between these characteristics and the position of children in household distribution. This second term of the equation will be positive if the "returns" to household characteristics improved as a consequence of better returns in the labour or capital market, or due to structural changes in transfers that overall make children better-off. It will be negative if the change in the effect of households characteristics is such that for children with same characteristics and same position in the income distribution, their income decreased.

#### Box A2.3. Decomposing changes (or differences) with Recentered Influence **Function regressions**

Decomposition analysis has become popular in labour economics especially with Oaxaca-Blinder decomposition of the gap that exists between the mean wage or income values of two group of population. The decomposition postulates linear relations between the outcome and its observable determinants, so that with conditional independent errors, the estimated gap can be decomposed in two parts: i) a so called explained component, which captures the role of differences in characteristics in explaining the gap in means; ii) and the unexplained part that is reflected in the differences in the regression coefficients obtained for the two groups of workers, and which relates to variations in how population' characteristics are rewarded or to the varying "income distribution" applying to different population

The decomposition holds here because the coefficients ( $\beta$ ) of the regression (Y= $\beta$ X) can be interpreted as the effect of the characteristic X on the conditional mean [E (Y  $|X\rangle = X\beta$ ; or the  $\beta$  can be interpreted as the effect of the change in the mean value of X on the unconditional mean value of Y. In other words, the law of Iterated expectations applies here, that is, E(Y) is simply a weighted average of averages, i.e. of the the  $E(Y|X = C_i)$ , where the weight pi is the probability that X takes on the value of Cj.

This latter property does not hold, however, when applying decomposition methods to distributional measures, such quantile regressions, which enables to examine the difference in each percentile of the distribution of income (Firpo and al., 2011). Regression coefficients then reflect the effect of characteristics on the conditional quantile but cannot be read as the unconditional effects, in which case the interpretation is limited (unless one estimates quantiles regressions for all quantiles). It turns then that one needs to know the entire conditional distribution of the outcome Y in each group g given X to compute the group-specific quantiles.

Estimating an entire conditional distribution function for each value of (Yg/X) is a difficult problem, however. A way to overcome this issue is to construct counterfactual distributions that integrate the conditional distribution of Y in a certain group given X over the distribution of X in the other group. Different approaches exist to estimate such counterfactual distributions but the simplest is to replace the distribution of population characteristics of a certain group by the distribution of X in the other group. This requires computing a reweighting factor which can be estimated using a simple logit or probit model for the probability of belonging to this latter group.

The decomposition for distributional measures then can be obtained by estimating counterfactual proportions with a linear model (or probit/logit model) for being below a given level of the dependent variable through counterfactual cumulative distributions which then can be inverted back to quantiles (Fortin, Lemieux and Firpo, 2011<sub>[17]</sub>) (Firpo, Fortin and Lemieux, 2009<sub>[18]</sub>). The inverting function is then defined as Recentered influence Function (RIF) for which the law of Iterated Expectations holds so that a full Oaxaca-Blinder decomposition of the RIF for the quantile of interest can be performed.