OECD Centre for Opportunity and Equality

Evidence-based, policy-oriented research on inequalities

How income dynamics can help to better understand inequality in OECD countries

Tokyo, 18 December 2017

Céline Thévenot OECD

Inequality – in the heart of international policy discourse and policy debate

- "Inequality can no longer be treated as an afterthought. We need to focus the debate on how the benefits of growth are distributed" (A. Gurría, OECD)
- "This is the first time that the World Bank Group has set a **target for income inequality**" (Jim Yong Kim, World Bank)
- "Reducing excessive inequality is not just morally and politically correct, but it is good economics" (C. Lagarde, IMF)







PART 1 - Income inequality in Japan and OECD countries (30 min)

Report In It Together and recent OECD work

PART 2 - Income mobility in OECD countries (60 min)

First results of the forthcoming report

PART 1 TRENDS, DRIVERS AND REMEDIES TO INCREASING INCOME INEQUALITY IN JAPAN AND IN THE OECD AREA



Large country differences in levels of *income* inequality





Note: the Gini coefficient ranges from 0 (perfect equality) to 1 (perfect inequality). Income refers to cash disposable income adjusted for household size. Data refer to 2015 or latest year available. http://oe.cd/cope

Rather than continuous long-term trends, OECD/COPE "episodes" of inequality increases

1980年代中盤から拡大している。これは、大半のOECD 加盟国と同様の傾向である。日本では

Long-term trends in inequality of disposable income (Gini coefficient)



Source: OECD (2016), "Income inequality remains high in the face of weak recovery", <u>http://www.oecd.org/social/OECD2016-Income-Inequality-Update.pdf</u> OECD Income Distribution Database, <u>www.oecd.org/social/income-distribution-database.htm</u>. Note: Income refers to disposable income adjusted for household size.



Trends in real household incomes at the bottom, the middle and the top, 1985 = 1



総じて、1985年以降、日本では、家計収入の平均はほとんど増加しておらず(毎年約0.3%増加)、さらに下位10%の貧困層では家計収入が毎年約0.5%減少している。格差は2006-2009年の金融危機の間にも引き続き拡大し、人口の上位10%富裕層の所得は横ばいだったものの、可処分所得は合計で5%減少した。





相対的貧困率(所得が国民の「中央値」の半分に満たな い人の割合)は、日本では人口の約16%である* (これ はOECD 平均の11%を上回るもの)





Old age poverty is a concern in Japan





Source: OECD pension models in OECD Pensions at a Glance. See [Figure 5.19].

Japanese women have the highest level of life expectancy Gender gap in life expectancy at 65, years



Source: United Nations (2015). See [Figure 3.2].





- Sharp division of labour, with women doing more than three quarters of the unpaid work and caregiving and men working very long office hours.
- Japan ranks among the **lowest in the OECD for women in management positions** and for the share of women on boards of directors, and Japan also fares badly in the number of women in leadership in public life .
- Women's career interruptions can contribute to gender gaps in pension entitlements and consequently affect older women's likelihood of living in poverty.



Notes: Gender gap in median earnings for full-time employees. The gender gap is defined as the difference between male and female median monthly earnings divided by male median monthly earnings for full-time employees. See [Figure 1.3]





労働年齢人口の間で 所得格差が拡大して いることは、彼らの 中で非正規労働者の 割合が増加している ことに関係している 非正規労働者の割 合は、1990年以降倍 増しており、2012年 には約34%にまで達 した。

Source: OECD, Econ, omic Survey Japan, 2017 Ministry of Health, Labor and Welfare.





Percentage change in employment shares by task category, 1995/98-latest available year



Source: OECD (2015), "In It Together", http://www.oecd.org/social/in-it-together-why-less-inequality-benefits-all-9789264235120en.htm Note: Abstract occupations (ISCO88: 12-34); Routine (ISCO88: 41-42, 52, 71-74, 81-82 and 93); Non-routine manual (ISCO88: 51 83 and 91). The overall sample restricted to workers aged 15-64, excluding employers as well as students working part-time.







1. In June 2015, excluding overtime payments and bonuses. Source: Ministry of Health, Labor, and Welfare "Basic Survey on Wage Structure 2015".

Several measures of job quality suggest that OECD/COPE non-standard workers are worse off

- hourly wages are lower;
- job insecurity is higher;
- they provide less training.
- and report a higher level of job strain
- they do not necessarily improve labour market prospects, e.g. by a higher probability to move to a more stable job

時間給で見ると、非典型労働者 (自営業者、臨時フルタイム労 働者、パートタイム労働者)は 典型労働者よりも低く支払われ ている。有期契約労働者は典型 労働者より1時間につき30%給 料が低く、パートだと46%低い (図3参照)。非典型労働者に OJTを提供している企業は、 わずか28%である。非典型労働 に頼っている家計の貧困率は20 **%**でOECD 平均22%に近く、典 型労働の4倍(OECD 平均:5 倍)となっている。 http://oe.cd/cope







1. Average labour income at a firm at the 90th percentile compared to one at the 50th percentile. *Source: OECD Economic Outlook,* No. 99.



Percent of workforce in job-related education and training by level of proficiency in literacy



Source: OECD (2013), OECD Skills Outlook 2013: First Results from the Survey of Adult Skills, OECD Publishing.





Inequality of market and disposable income, working-age population



Trends in market income inequality **reduction**, working age population

45% 40% 35% 30% 25% 20% 15% 10% 5% 0% 1985 1990 1995 2000 2005 2010 2015

しかし、日本政府は再 分配を強化するために 多くのことを実行した 。多くの他の国々と比 べ日本は、過去何年か で税と給付をとおした 格差削減は拡大した(図2参照)。この再分 配拡大には、例えば失 業者や子供のいる家庭 に対する公的現金給付 がより手厚くなったこ とが関係している。

Designing policy packages to tackle high OECD/COPE inequality and promote social cohesion

Promote employment and good-quality jobs

Foster women's participation in economic life

Strengthen quality education and skills development

4

Improve the design of **tax and benefit** systems for a more efficient **redistribution**











English Français Español Italiano Deutsch



S>OECD



What's your share of the pie?

When you think about your household's income, do you feel rich, poor, or just average? Most of us have no idea - or the wrong idea – of how we compare with the rest of the population. But here, in 10 clicks, you can find out how many households are better or worse off than yours, and see how your ideal world compares.

OECD

Get Started 🚺 Tell us about you 2 Tell us about your ideal world In reality... Click here to learn more about the methodology used to build this tool. BETTER POLICIES FOR BETTER LIVES



OECD



OECD

PART 2 HOW INCOME DYNAMICS CAN HELP TO BETTER UNDERSTAND INEQUALITY













What kind of mobility are we talking about?









Part 1 Why do we care about income mobility?



"If income mobility were very high, the degree of inequality in any given year would be unimportant, because the distribution of lifetime income would be very even"

Paul Krugman 1992











Part 2 Results





Average income inequality and inequality of averaged incomes (4 years)



Data refer to the working-age population (18-65). Data refer to 2011-2014 for all countries except Switzerland (2009-2012), Japan, Germany, the United Kingdom and Ireland (2010-2013) Turkey (2008-2011) and Chile (2006-2009). For the United States, as data is collected on a biannual basis, the result is based on the average between results for a 3 year- and a 5 year-panels. Source: Cross-National Equivalent File (CNEF), Ohio State University, European Survey on incomes and living conditions (EU-SILC), Eurostat, National Statistics on Incomes and Living conditions (SRCV) for France, Income and Living Conditions Survey , Panel Casen Survey, Chan et al. (2017) for China. OECD Secretariat calculation.



Cross-sectional inequality and short-term income mobility (4 years)

(Mobility defined as the difference between cross-sectional inequality and longitudinal inequality)



Average cross-sectional inequality (Gini coefficient)

Data refer to the working-age population (18-65). Data refer to 2011-2014 for all countries except Switzerland (2009-2012), Japan, Germany, the United Kingdom and Ireland (2010-2013) Turkey (2008-2011) and Chile (2006-2009). For the United States, as data is collected on a biannual basis, the result is based on the average between results for a 3 year- and a 5 year-panels. Source: Cross-National Equivalent File (CNEF), Ohio State University, European Survey on incomes and living conditions (EU-SILC), Eurostat, National Statistics on Incomes and Living conditions (SRCV) for France, Income and Living Conditions Survey, Panel Casen Survey, Chan et al. (2017) for China. OECD Secretariat calculation.





Share of income change by magnitude early 2010s, OECD average



Share of the population experiencing a gain/loss >20% early 2010s, OECD average



Notes: Working-age population. Equivalised household incomes, in real terms. The boundaries between the lower, lower middle, middle, upper middle and upper income groups are defined as 0.5, 0.75,2 and 3 times the median income of the working age population. OECD average covers the 27 countries in Panel C. The Gini index of mobility is defined in Box 1: a value of 1 corresponds to a situation with no re-ranking, and a value of 0 corresponds to the case of independence of incomes ranking between the two income distributions. Data refer to 2009-2013 averages for all countries, except the United States (2008-2012) and Korea (2003-2007).

Source: OECD Secretariat calculations from Eurostat, EU-SILC Survey, and CNEF for Australia, Germany, Switzerland and the United States





- People remaining **persistently** at the bottom of the distribution
- People moving upward + people moving downward





Sticky floors at the bottom



Glass floors at the top







Persistence in the bottom and top income quintiles (4 years)



- ▲ Group 2- Sticky floor at the bottom, relatively mobile at the top
- Group 3 Sticky floor at the bottom, glass ceiling at the top
- Group 4 Mobile at the bottom and at the top
- Group 5- No sticky floor at the bottom, but a glass floor at the top
- Group 6 Medium level of sticky floors and glass floors





Describing income changes in a nutshell



Absolute income mobility

Lots of income changes at both ends of the distribution

Positional income mobility

Stronger persistence at both ends of the income distribution

Share of large income changes over 4 years



Share of people staying in the same income quintile over 4 years



Initial income quintile





Part 3 Long term trends



Mobility (short-term income mobility) in the late in the late 1990s and early 2010s



Source: Data for the late 1990s refer to the European Community Household Panel (ECHP) for all countries except Germany, and the United Kingdom (Crossnational equivalent file). Cross-National Equivalent File (CNEF), Ohio State University, European Survey on incomes and living conditions (EU-SILC), Eurostat, Statistics on Incomes and Living conditions (SRCV), Income and Living Conditions Survey. OECD Secretariat calculations. See Annex 2.1 for details on the data sources.





Part 4 The structure of income changes





- Individual income changes occur via different channels :
 - Aggregated channels (country-specific)
 - trickle-down of overall economic growth,
 - returns of experience and investment in education,
 - Individual channels (individual-specific)
 - returns of unobserved individual characteristics or
 - unpredictable income changes
- These channels further vary depending on institutions and policies and contribute to inequality .







Based on Gangl (2005)

The individual income trajectory over time is decomposed into:

- a slope common to all individuals
- an individual slope
- individual residuals

 $y_{it} = u_i + v_{it} = u_i + b year + g \hat{a}ge_i + b_i year + e_{it}$



Gangl, M. (2005). Income inequality, permanent incomes, and income dynamics: Comparing Europe to the United States. Work and Occupations, 32(2), 140-162



Decomposing inequality based on the structure of income changes



	Inequality proxy	Permanent inequality proxy	Type 1 - Dynamic components common to all individuals in a given country		Type 2 - Individual-specific dynamic components	
		Variance of permanent incomes	Real income growth effect	Life-cycle effect	Variance of individual trends	Variance of unpredictable income shocks
Australia	0 359	0.245	0.007	0.075	0.0002	0.094
Austria	0.435	0.203	0.007	0.28	0.0002	0.146
Relaium	0.48	0.198	0.004	0.165	0.0009	0.05
Switzerland	0.253	0.191	0.009	-0.003	0.0007	0.059
Czech Rep	0.235	0.188	0.007	0.117	0.0003	0.034
Germany	0.319	0.100	0.005	0.077	0.0004	0.057
Denmark	0.267	0.20	0.000	0.097	0.0002	0.048
Spain	0.518	0.417	-0.034	-0.025	0.0022	0.040
Estonia	0.475	0.356	0.032	0.023	0.0017	0.11
Esionia	0.24	0.197	0.002	0.099	0.0021	0.034
France	0.24	0.177	0.000	0.157	0.0024	0.044
United Kingdom	0.259	0.207	0.004	0.137	0.0004	0.046
Graece	0.538	0.262	0.012	0.048	0.0008	0.074
Gleece Hungan	0.323	0.303	-0.078	-0.044	0.0120	0.104
Iroland	0.200	0.217	-0.001	0.08	0.0003	0.007
	0.30	0.207	-0.04	0.103	0.0024	0.072
Iteluna	0.232	0.164	-0.008	0.093	0.0012	0.065
lanan	0.436	0.373	-0.018	0.074	0.0003	0.005
Japan	0.37	0.25	0.008	0.051	0.0004	0.121
Kuleu	0.464	0.323	0.046	0.051	0.0003	0.135
Loxembourg	0.285	0.241	0.004	0.155	0.0004	0.046
Laivia	0.309	0.415	0.008	0.015	0.0006	0.096
Nemenanas	0.2/7	0.220	-0.009	0.156	0.0004	0.046
Norway	0.410	0.274	0.027	0.125	0.0026	0.120
Polana	0.341	0.272	0.027	0.135	0.0015	0.067
Portugal	0.464	0.377	-0.039	0.059	0.0022	0.085
Slovakia	0.304	0.237	0.029	0.161	0.0018	0.067
Siovenia	0.228	0.197	-0.014	0.093	0.0005	0.03
Sweden	0.328	0.237	0.024	0.055	0.0018	0.079
IUrkey	0.581	0.487	0.042	0.189	0.0025	0.093
United States	0.591	0.569	0.001	0.0758	0.0010	0.163
OECD	0.358	0.275	0.002	0.168	0.002	0.08





Data refer to the working-age population (18-65). Data refer to 2011-2014 for all countries except Switzerland (2009-2012), Japan, Germany, the United Kingdom and Ireland (2010-2013) Turkey (2008-2011) and Chile (2006-2009). For the United States, as data is collected on a biannual basis, the result is based on the average between results for a 3 year- and a 5 year-panels. Source: Cross-National Equivalent File (CNEF), Ohio State University, European Survey on incomes and living conditions (EU-SILC), Eurostat, National Statistics on Incomes and Living conditions (SRCV) for France, Income and Living Conditions Survey, Panel Casen Survey, Chan et al. (2017) for China. OECD Secretariat calculation (Competition Competition) (Competition) (Competition)





Part 6 The role of labour market events

Labour market drivers of (downward) DECD/COPE mobility (provisionnal)



Risk of experiencing an income decrease of 20% or more for individuals moving from employment to non-employment compared to individuals remaining in employment



Getting a job is not always driving income increases (provisionnal)



Odds of experiencing an income decrease of 20% or more for individuals going from employment to unemployment or inactivity compared to individuals remaining in employment, average 2007-2012



* Japan : data from 2008 to 2012





Chance of exiting poverty

when taking up a non-standard employment compared to individuals who take up a standard employment



Note: Poverty is defined as having a equivalised household disposable income inferior to 50% of the median household equivalised disposable income. Data refer to 2007 – 2012.

Source: OECD Secretariat calculations based on Eurostat, EU-SILC survey.



Time profile of median relative equivalised income by employment status







Conclusion Main messages Policy discussion

Income dynamics and mobility over the life CECD/COPE course : Key findings



- Looking at longer-term incomes reduces inequality levels but does not change <u>rank order</u> of countries with regard to inequality.
- There is less mobility today than in the 1990s.
- For relative mobility, there are <u>sticky floors</u> at the bottom and <u>glass floors</u> at the top. Income persistence is stronger at the bottom (60%) and the top of the income distribution (70%).
- Structure of income changes differ across countries and along the income distribution. There is more heterogeneity in individual trajectories and <u>more</u> <u>uncertainty for incomes at the bottom</u> of the income distribution.





Education

Labour markets

Tax and transfers

Housing and urban planning





- Invest in (affordable) early **high-quality education and care** and support to parenting skills
- Promote equal opportunities at school by supporting **disadvantaged schools**
- Address and reduce inequalities in **extra-curricular activities**
- Encourage more equal access to higher education, especially to top schools

Examples:

- Estonia requires schools to implement appropriate measures for students with unsatisfactory year-end marks. Hot school lunches, study books and learning materials provided for free to students in basic education since 2006.
- France has the programme "Cordées de la réussite" which includes mentoring from University to high-school students in disadvantaged areas to promote university enrolment



- Grant **young people** the right start in the labour market by providing second chance learning, pre-apprenticeships and improving non-cognitive skills
- Address other **occupational barriers** for youth (networking, unpaid internships, access to some occupations)
- Ensure access to lifelong learning for the low-skilled
- Find the right balance between labour market flexibility and career mobility

Current challenges for Japan:

- ✓ Addressing the large labour market dualism
- ✓ Improving access to **training**, especially for the low-skilled/non-regular workers
- Promoting public policies that encourage gender equality in work, to help women build strong careers and take on leadership roles in society ; Supporting women in accessing management positions and boards of directors
- Developping work-life balance measures, for example by introducing a binding ceiling for overtime work

Improving equality of opportunity OECD/COPE through taxation and social protection

- Review forms of wealth taxes such as inheritance taxes
- Encourage low-income households increase their savings
- Consider tax credits for low-income households
- Reform social protection to adapt to changing labour markets and more job mobility

Current challenges for Japan:

• Social insurance coverage for non-regular workers is limited

Examples

- The United States has the Earned Income Tax Credit (EITC) has been credited with reductions in poverty and is also related to better health of children in recipient families through three channels: family income, maternal employment, and health insurance coverage patterns.
- France introduces a compte personnel d'activité in 2017 (Individual training account) which regroups the individual learning account, and gives entitlements for training.



Improving urban planning



- Reduce **residential segregation** to reduce socio-economic segregation in schools
- Improve access to **affordable housing** through targeted housing allowances and inclusionary zoning in residential areas
- Deliver **effective transport networks** in different areas (infrastructure, public transport through targeted subsidies

Examples:

- Netherlands : system of double waiting lists
- United States: "Moving to opportunity" experiment housing vouchers





Education

- early investment, (care, parenting, non-cognitive skills)
- equal opportunities at school (invest in teachers, present early school leaving, early screaming, extra-curricular activities)
- higher education (access to universities, promote disadvantaged)
- ensure equal access to lifelong learning

Labour markets

- address inequalities in networking, unpaid internships
- adapt to changing labour markets (make transitions pay, consider reforms of individualisation of rights to UB or training, activation measures)

Tax and transfers

- assess the effectiveness of systems in a dynamic rather than static approach
- consider reforms of wealth taxation

Housing and urban planning

reduce segregation



Celine.thevenot@oecd.com

<u>www.oecd.org/social/inequality-and-poverty.htm</u> Includes: "COMPARE YOUR INCOME" WEB TOOL →





