

# Jobs, Wages and Inequality: Work Package 1 -

Quality review of the OECD database on household incomes and poverty and the OECD earnings database

### Part II

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Directorate for Employment, Labour and Social Affairs

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## PART II. ASSESSING THE CROSS-COUNTRY COMPARABILITY OF THE OECD EARNINGS DISTRIBUTION DATABASE

#### 1. Introduction

- 1. The OECD database on the Distribution of Earnings of full-time dependent employees is the main source for OECD indicators on dispersion of earnings based on the ratio of 9<sup>th</sup>, 5<sup>th</sup> and 1<sup>st</sup> deciles limits of earnings, unadjusted gender wage gaps and incidence of low–pay. These measures are regularly published in Table J of the Statistical Annex of the yearly edition of the OECD Employment Outlook. The entire database is downloadable from the OECD data warehouse (OECD.Stat) at: http://stats.oecd.org/Index.aspx?DatasetCode=DEC\_I (from www.oecd.org/employment/database).
- 2. Section 2 provides a summary of the content of the OECD distribution of earnings database. A detailed description is provided in Annex 2.A1. Section 2 confronts cross-country estimates of earnings dispersion measures based on the OECD Distribution of earnings database with 2006 results from the European Structure of earnings Survey (EU-SES). Section 3 compares the effect of pay period on earnings dispersion, gender wage gaps and incidence of low-pay measures using a common source of data such as the 2006 EU-SES. Section 4 discusses some of the main areas for improving cross-country comparability of the OECD Distribution of Earnings database the comparability of the database on the basis of the findings in the previous two sections.

#### 2. OECD database on Earnings distribution: concepts, sources and coverage

- 3. The database covers 29 OECD member countries including Chile which is not yet included in the dissemination version of the database on OECD.Stat. Data are collected from National Statistical Offices (NSO) based on national sources considered to be the best for reflecting national circumstances regarding earnings dispersion and earnings inequality among full-time dependent employees. International data sources such as the European Survey on Income and Labour Conditions (EU-SILC) are used for 5 European countries Greece, Iceland, Poland, Portugal and Spain for which national data series are not available on a timely basis.
- 4. The concept of earnings that is retained in the database refers to gross earnings of full-time dependent employees in all sectors of the economy. Gross earnings are earnings received by employees before deductions of employee social security contributions and income tax. Gross earnings include basic pay, overtime pay and supplements for hours worked, regular bonuses, tips and commissions, and special one-off payments in the form of annual bonuses, 13<sup>th</sup> or 14<sup>th</sup> or 15<sup>th</sup> month salary, etc. By definition, paid absences are also included, such as annual paid leave and sickness absences that are compensated by employers. In practice, it is required that national reporting of gross earnings by earnings decile cut-offs include all payments in cash received by employees during the year of reference retained in the data

source<sup>1</sup>. This requirement aims at ensuring that cross-country comparisons are not impaired by differential treatment of pay components in data reporting.

- 5. Gross earnings are reported for full-time dependent employees in the main job. This can be a major limitation, in particular, in countries where the employment share of part-time working has markedly increased during the past two decades. In countries where part-time working is widespread, it is often a common way for women to participate in the labour market, often on a voluntary basis, as it enables to achieve the twin goals of balancing work and family life. On the other hand, the reason for limiting the OECD earnings data to gross earnings for full-time employees is because it is the main form of employment in the OECD area for the majority of employees, and results are not blurred by differences in the extent of part-time work across countries. In addition to its income generating capacity, full-time working hours are less volatile than part-time working hours. Generally, earnings of apprentices are excluded from the calculation, while earnings of salaried corporate executives are usually included.
- 6. Table 2.1, Panel A shows the diversity of earnings concepts reported in the earnings database. Monthly earnings are available for a majority of 13 countries. And, as long as the number of weekly paid hours worked are a constant fraction of monthly paid hours worked, it can be safely stated that weekly earnings are distributed similarly to monthly earnings. In total, 18 countries provide either weekly or monthly earnings. Hourly earnings are collected for 7 other countries, although monthly earnings are the basis for the calculation of hourly earnings in the case of 5 of these countries (Greece, Iceland, Poland, Portugal and Spain) using EU-SILC data on gross monthly earnings. Finally, annual earnings are available for 4 countries and are expressed either in full-year (Finland, Netherlands) or full-time and full-year equivalent (France) in the case of 3 countries. The length of the work year is accounted for, but also, in France, earnings paid to part-timers are converted to a full-time basis taking the pro-rata of hours worked in part-time jobs relative to full-time jobs. In all, gross monthly earnings are available for 23 out of 29 countries included in the database.

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<sup>1.</sup> While bonuses are included, stock options are excluded as they are usually not captured by data sources. The cash conversion of stock options occurs only at the time of selling the company stocks.

Table 2.1. OECD Distribution of earnings database: Summary of data content

Panel A. Concepts

Full-time employees (F)		Earnings concept				
, , ,		Gross (G)	Net (N)			
	Hourly (H)  Denmark (All employees), Greece, Iceland, New Zealand, Poland, Portugal, Spain					
Pay period	Weekly (W)					
	Monthly (M)	Belgium, Czech Rep. (full-year), Germany, Hungary, Israel, Itally, Japan, Korea, Norway, Slovak Rep., Sweden	Italy, Switzerland			
	Yearly (Y) Full-year (FY)	Austria, Finland, Netherlands	France			

Panel B.	Worker co		1		1	1		
	Earnings concept	Full-time employee s in the database - 000 - (latest year)	Share in all employee s (%)	Share in total employm ent (%)	First year available	Last year available	Data sources	Coverage/Exclusions
Australia	GWF	6824	70	61	1975	2010	August supplement to labour force survey. (LFS)	
Austria	GAFY	2059	53	50	2000	2010	Tax registers (TR)	All employees including civil servants. Apprentices are excluded.
Belgium	GMF	1368	36	31	1999	2010	Structure of Earnings Survey (SES)	Sectors other than teh business sector (NACE C-K) are excluded.
Canada	GWF	11940	76	70	1997	2011	Labour force survey (LFS)	
Czech Rep.	GMFY	3981	99	81	1996	2009	Establishment survey (Periodic Census of Employers)	Workers in enterprises of less than 25 employees in 1996 only.
Chile	GMF	3966	81	56	2000	2009	National Socio-Economic Characteristics Survey (Household Survey)	Except domestic services.
Denmark	GHO	2452	100	91	1996	2010	Tax registers (annual arnings) and Social security registers (annual hours)	Workers with wage rates lower than 80% of the minimum wage.
Estonia								
Finland	GAFY	1824	86	75	1977	2010	Income Distribution Survey (Household Survey)	
France	NAE	18491	81	72	1950	2008	Salary records of eterprises (DADS)	Agricultural and general government workers.
Germany	GMF	25077	73	65	1991	2010	German Socio-Economic Panel (GSOEP - Household Survey)	
Greece	GHF	2616	93	60	2004	2010	European Survey of Income and Living Conditions (EU-SILC - Household Survey)	
Hungary	GMF	1823	55	48	1986	2011	Survey of Individual Wages and Earnings (ES)	Data exclude enterprises with less than 9 employees.
Iceland	GHF	125	75	75	1994	2008	European Survey of Income and Living Conditions (EU-SILC - Household Survey)	
Ireland	GWF	1170	77	64	2001	2010	Survey of Income and Living Conditions (Household Survey)	
Israel	GMF	1925	75	66	2001	2011	Intergrated Household and Expenditure Survey (IIS - Household Survey)	No exclusions.
Italy	NMF	14725	86	64	1986	2010	Survey of Household Income and Wealth (SIWH - Household Survey)	No exclusions.
Japan	GMF	41890	72	72	1975	2011	Basic Survey on Wage Structure (Establishment survey)	Employees in establishments with less than 10 regular workers in non-farm business sector
Korea	GMF	19448	82	82	1975	2011	Survey of Labor Conditions by Employment Type (Establishment Survey). Former Wage Structure Survey.	Employees in establishments with less than 5 regular workers in non-farm business sector.
Luxembourg Mexico								
Netherlands	GAE	3892	 50	47	 1975	2005	Survey of earnings (Establishment Survey)	
New Zealand	GHF	1391	78	65	1984	2011	Household Economic Survey (Household Survey)	
Norway	GMF	1688	73	67	1997	2011	Establishment Survey	
Poland	GHF	10480	85	66	2005	2010	European Survey of Income and Living Conditions (EU-SILC - Household Survey)	
Portugal	GHF	3325	86	67	2004	2010	European Survey of Income and Living Conditions (EU-SILC - Household Survey)	
Slovenia								
Slovak Rep.	GMF	2226	96	96	2002	2010	Monthly Structure of Earnings Survey (Establishment Survey)	
Spain	GHF	12144	79	66	2004	2010	European Survey of Income and Living Conditions (EU-SILC - Household Survey)	
Sweden	GMF	2682	66	59	1975	2010	Household Income Survey (supplemented with tax registers)	Employees aged 20-64 without earnings from self-employment.
Switzerland	NMF	3096	85	72	1996	2010	Structure of earnings Survey (Establishment Survey)	
Turkey								
United Kingdom	GWF	18138	74	63	1970	2011	Annual Survey of Hours and Earnings (ASHE - Establishment Survey) - former	Persons aged less than 21 years.
Unites States	GWF	111712	80	80	1973	2011	New Earnings Survey. Current Populaton Survey (Labour Force Survey)	

Source: OECD Earnings Distribution database. See Annex Table 2.A.1 for a detailed description of earnings concept.

- 7. Panel B gives an indication of employee coverage in the database. Depending on data sources, the coverage of full-time employees can be either full or partial. The shares of full-time employees vary also greatly from country to country depending on the extent of part-time working among employees and self-employment.
- 8. Household income surveys and household labour force surveys are the sources of earnings data for 15 countries, while for 10 other countries data on earnings rely on establishment surveys. Data on the distribution of earnings are from Tax registers for Austria and Denmark and from administrative records DADS for France, a compulsory system of declaration of employee earnings by employers for social security and other purposes. The recording of earnings in establishment surveys, tax registers and administrative sources is considered to be more accurate than self-reported earnings by surveyed reference persons in household surveys. Furthermore, it should be noted that household surveys and tax registers collect data on earnings per worker, while establishment surveys include earnings related to jobs captured in their pay systems.
- 9. The coverage of workers is comprehensive in the case of household surveys, Tax registers (when they do not exclude workers) and administrative sources. By contrast, establishment surveys often have limited coverage of employees, as they do not cover employees working in small establishments with fewer employees (i.e. with less than 5 or 10 regular employees), and in certain sectors (farm and government sectors, private household services). However, in some countries, such as Czech Republic, the establishment survey sample is based on a census of employers that can be more comprehensive.
- 10. Panel B confirms that the coverage of employees by establishment surveys is generally lower than those by other sources. In the case of countries where the coverage is larger, this is mainly explained by establishment surveys covering jobs rather than earnings per worker. A worker may be working in two jobs at the same time (i.e. multiple jobholders) or during two distinct time periods.
- 11. More generally, the coverage of full-time employees in survey instruments is likely to represent only a smaller fraction of all dependent employees, in particular, in countries where part-time working is widespread (Netherlands). Moreover, the share of full-time employees in total employment tends to be lower in countries where self-employment is pervasive (e.g. Chile and Greece).

## 3. Comparison of earnings dispersion: OECD versus 2006 Eurostat Structure of Earnings Survey (EU-SES) results

#### 3.1 Comparison of percentile ratios

- 12. The OECD database contains data on weekly and monthly earnings for more than two-thirds of countries 23 countries from household surveys 15 countries. As pay periods vary for the remaining 6 countries for which data are currently available, it is not possible to compare real earnings deciles trends. Besides, the European Structure of Earnings Survey (EU-SES) retained for data comparison is conducted only every four years. The current assessment will, therefore, be limited to a common year  $2006^2$  and to earnings dispersion measures based on so-called percentile ratios: the ratio of  $9^{th}$  –to-  $1^{st}$ , the  $9^{th}$  to  $5^{th}$  and  $5^{th}$  to  $1^{st}$  deciles of gross earnings of full-time employees.
- 13. In practice, earnings from an employer survey such as the EU-SES are considered to be more accurate in the reporting of individual earnings for different pay periods. This enables to assess earnings

<sup>2.</sup> Data from the 2010 EU-SES have only begun to be disclosed on Eurostat's New Cronos data portal. The calculation of earnings deciles are performed using EU-SES microdata files.2010 public use EU-SES microdata files will become available only from Spring 2013 onward.

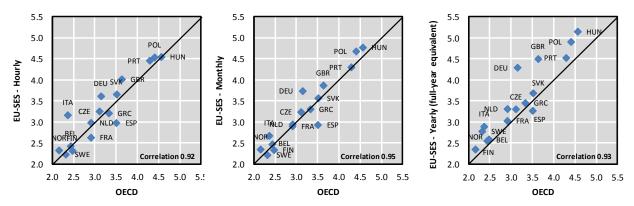
dispersion for different earnings concepts either limited to basic wage rates – hourly earnings -, or adding regular pay supplements such as overtime pay and hours supplements - monthly earnings –, or adding special payments paid in the year – yearly earnings.

14. Figure 2.1 displays a series of scatter plots for 3 measures of earnings dispersion based on data from the OECD database (OECD) compared with those from EUSES for 3 pays periods: hourly, monthly and yearly. Yearly earnings are for full-year equivalent workers to account for the length of the work year of employees with short-term contracts ending during the course of the year or those starting to work at a given date during the year<sup>3</sup>. It should be noted that the coverage of EU-SES is limited to establishments with 10 or more employees in the business sector (NACE Rev 1 C-K). The 45° line enables to quickly assess whether the OECD and EU-SES measures of dispersion are broadly in agreement. The points above (below) the 45° line indicate that EU-SES measures are higher (lower) than those of the OECD.

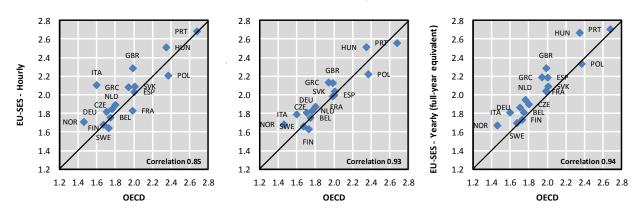
Figure 2.1. Earnings dispersion measures: comparison of OECD versus EU-SES data

Gross earnings of full-time employees

Panel A. Ratio of 9th-to-1st earnings decile limits

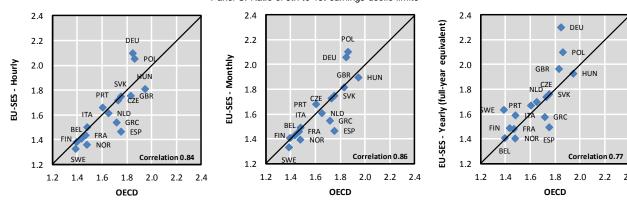


Panel B. Ratio of 9th-to-5th earnings decile limits



<sup>3.</sup> If the length of the work year is not adjusted, yearly earnings dispersion measures are likely to be overestimated.

Panel C. Ratio of 5th-to-1st earnings decile limits



Source: See Annex Table 2.A.2 for underlying data and data sources.

- 15. As indicated previously, the earnings dispersion measures in the OECD database are in many countries based on monthly earnings. It is, therefore, not surprising to find that they are closely associated with EU-SES monthly dispersion measures. The Neymann-Pearson correlation coefficients are close to or clearly above 0.9 in the case of all 3 dispersion measures.
- 16. The overall  $9^{th}$  to-  $1^{st}$  dispersion measure displays the highest correlation, with the exception of dispersion measures for Germany (wider dispersion in EU-SES ratio) and Spain (lower dispersion in EU-SES ratio). The OECD earnings dispersion ratio for Spain is based on hourly earnings from EUSILC including monthly and yearly earnings supplements, while EU-SES monthly earnings include only regular monthly supplements. Including supplements increases OECD  $9^{th}$  to  $1^{st}$  deciles ratio, while the non-inclusion of public sector wages seem to increase overall earnings dispersion in Germany.
- 17. The main source of deviation between the data sources in the overall dispersion measure for Germany and Spain originates from the bottom half of the earnings distribution. The comprehensive coverage of full-time employees in the OECD database stretches the 5<sup>th</sup> –to- 1<sup>st</sup> deciles ratio for Spain, while it compresses the bottom half of the earnings distribution for Germany. In the case of Poland, lower dispersion in the bottom half in the OECD database compensates larger dispersion in the top half of the distribution, which enables OECD overall earnings dispersion to be in the end in agreement with EU-SES levels of overall dispersion. Furthermore, it is noticeable that, except Germany, the OECD bottom half of the earnings distribution is generally larger or lower than those of EU-SES for pay periods that are not monthly earnings.
- 18. In sum, the coverage of industries and pay periods matter for earnings dispersion as they can disproportionately affect, in particular, the bottom half of earnings dispersion. Cross-country comparability of earnings dispersion measures is likely to improve through the collection of monthly earnings for a greater number of countries in the OECD database.
- 3.2 Different pay periods may affect earnings dispersion, gender pay gap and incidence of low-pay measures: a comparison using 2006 Eurostat Structure of Earnings Survey (EU-SES)
- 19. This section explores the degree to which different pay periods hourly, monthly and yearly of earnings affect overall earnings dispersion, gender pay gap and incidence of low pay measures<sup>4</sup>. This

<sup>4.</sup> Gender pay gaps quantify the gap between women and men earnings expressed as a percentage of earnings of men. They are unadjusted for differences in worker and job characteristics of men and women. The

assessment is performed using 2006 results from EU-SES, which enables to avoid the results to be affected by differences in employee coverage in data sources.

- 20. First, Figure 2.2 suggests that overall earnings dispersion measures are comparable whatever the earnings pay period. However, the association between hourly and yearly earnings indicates that yearly earnings dispersion are somewhat higher, as expected, than hourly earnings dispersion, apart for Italy, where the distribution of wage rates exhibits wider dispersion. Earnings supplements and the number of hours worked explain somewhat larger dispersion in yearly earnings than monthly earnings as expected.
- 21. Secondly, regarding gender pay gap and the incidence of low pay measures the correlation coefficients are largest between monthly and yearly earnings, which suggests that the number of hours worked matter in the stretching earnings distribution in particular for the bottom half of the earnings distribution. Gender pay gaps are broadly in agreement between monthly and yearly earnings, apart for Italy and Hungary where monthly gender pay gaps are the widest. Differences in monthly hours worked by men and women may explain those differences, while annual special payments seem to offset differences due the number of hours worked in the case of gender pay gaps based on yearly earnings. It is noticeable that, for Germany, hourly gender pay gap is 14 percentage points lower than the gender pay gaps for monthly and yearly earnings. These large differences are also visible for the incidence of low pay in Germany.

incidence of low paid employees represents the share of full-time employees earning less than two-third of median earnings of full-time employees.

Figure 2.2. Earnings dispersion measures, gender pay gap and incidence of low-pay vary by pay periods

Comparison based on gross earnings of full-time employees from EU-SES Panel A. Ratio of 9th-to-1st earnings decile limits 5.5 5.5 5.0 5.0 5.0 **Yearly (full-year equivalent) Yearly (full-year equivalent) Yearly (full-year equivalent) Yearly (full-year equivalent)** Yearly (full-year equivalent) 3.5 3.0 5.5 5.5 GBR DEU 4.0 3.5 GRC NLD 3.0 2.5 2.0 2.0 2.5 3.0 3.5 4.0 4.5 5.0 5.5 2.5 3.0 3.5 4.0 5.0 5.5 2.5 3.0 4.0 4.5 5.0 5.5 2.0 2.0 4.5 2.0 Monthly Monthly Hourly Panel B. Gender pay gap 24 24 24 Correlation 0.89 Correlation 0.69 Yearly (full-time equivalent) 20 DEU 16 NOR POL 8 4 DEU 0 0 0 16 0 16 20 24 0 4 8 0 8 12 20 8 12 12 16 20 Monthly Monthly Hourly Panel C. Incidence of low-pay 40 40 40 Correlation 0.88 ♦ NLD DEU 
GBR 34 **Landy (full-time equivalent)** 28 21 10 10 **Xearly (full-time eduivalent)**28
20
10
10 34 28 NLD Mourity 22 **DEU** 16 BEL 10 Correlation 0.81 4

Source: See Annex Table 2.A.3 for underlying data and data sources.

Monthly

10 16 22 28 34 40

22. Not surprisingly, gender pay gaps and incidence of low pay are the lowest for hourly earnings, which mainly reflect differences in hourly wage rates. This is clearly visible in Panel B and Panel C showing measures based on hourly earnings hovering below the 45° line. Earnings supplements received

Monthly

4 10 16 22 28 34 40

10 16 22

28

Hourly

4

by male employees and their number of hours, such as overtime hours or unsocial hours work, explain to a large extent that these measures are highest for yearly earnings rather than monthly or hourly earnings.

23. In sum, earnings dispersion measures for different pay periods are likely to be closely associated, while gender pay gaps and incidence of low pay measures may vary by pay periods. It occurs that measures based on hourly earnings diverge the most from those based on monthly and yearly earnings.

## 4. Concluding remarks for improving cross-country comparability of the OECD Earnings Distribution database

- 24. Employer surveys report employees' earnings from the payrolls, which are more accurate than self-reported earnings in household surveys. However, the coverage of dependent employees excludes small establishments and is often limited to the business sector. The exclusion of employees working in small establishments is likely to affect earnings dispersion measures, in particular, in the bottom half of the earnings distribution. Besides, employer surveys such as structure of earnings surveys are conducted regularly only in a small number of countries Belgium, Czech Republic, Hungary, Netherlands, Norway, Slovak Republic, Switzerland and United Kingdom.
- 25. The data analysis shows that, despite the variety of data sources and earnings concepts, earnings dispersion measures from the OECD earnings database are closely associated to monthly earnings dispersion measures from EU-SES in 2006. This is not entirely surprising given that data for 23 countries are either weekly or monthly earnings in the OECD database or derived from monthly earnings. Besides, data are based on household surveys in the case of 15 countries, which have a comprehensive coverage of all sectors of the economy and job types full-time and part-time employees and worker characteristics. Moreover, administrative sources are used in the case of four more countries, taking to 19 the number of countries with a comprehensive coverage of earnings.
- 26. For these reasons, earnings dispersion measures in the OECD database can be considered to be broadly comparable. Cross-country comparability can be enhanced further by collecting weekly or monthly earnings for those 11 OECD countries where this is not the case yet. Moreover, data are currently missing for Estonia, Luxembourg, Mexico, Slovenia and Turkey and can be completed, for the European countries among them using the results from EU-SES for the years 2006 and 2010 for which data are or will become available.
- 27. The data analysis suggests that it is also relevant to collect hourly earnings, which reflect the dispersion in wage rates. Hourly earnings are unaffected by the number of hours worked and have an impact on gender pay gaps and incidence of low pay measures, which can usefully complement data analysis based on monthly and yearly earnings. Furthermore, data on hourly earnings enable to expand the coverage of the database to capture part-time employee earnings and their impact on earnings distribution.
- 28. In the longer -un, the comprehensive coverage of workers in household surveys, including parttime employees and self-employment income, enables to bridge a link with data on income distribution, as wages are by far the main source of income for working age households.

#### **ANNEX 2.A1 ADDITIONAL TABLES**

Table 2.A.1. OECD Earnings distribution database: detailed description of earnings and data sources

Country	Defn	Earnings definition	Original source	Publication/data provider	Workers not covered	Note
Australia	GWF0	Gross weekly earnings in main job (all jobs prior to 1988) of full- time employees.	Household survey (annual supplement, usually in August, to monthly labour force survey).	Australian Bureau of Statistics, Weekly Earnings of Employees (Distribution).	No exclusions.	The data refer to the most recent pay period prior to the interview. Earnings deciles are OECD interpolations of the published data on the distribution of employees by earnings class.  Corporate execuitves' pay included. From 2002 onwards, full-time (part-time) is defined on the basis of hours worked, while interviewees self-reported their job status prior to this date.
Austria	GAF0	Yearly gross income (excluding casual payments) for full-year employees working full time/ Brutto- Jahreseinkommen (ohne Einmalzahlungen) der ganzjährig Beschäftigten, Vollzeit.	Statistics Austria, Wage Tax Statistics – Social statistical analysis. Excluding apprentices.	Statistics Austria.	All employees including civil servants. Apprentices are excluded.	
Belgium	GMF0	Gross monthly earnings of full-time employed wage earners in NACE sectors C-K.	Structure of earnings survey	Communiqué "Quel salaire pour quel travail", SPF Économie – Direction générale Statistique et Information économique.		Data contain only those premiums that are paid every pay period, like bonuses for night or weekend work (advantage in kind are excluded). NACE Rev. 1 sections C-O (-L) are covered.
Canada	GWF0	Gross weekly earnings distribution for full-time workers.	Labour Force Survey, Statistics Canada, V0902_06			
Chile	GMF0	Gross monthly earnings of full-time employees; full-time defined as employees working 30 or more actual hours per week on the main job.	National Socio-economic characterisation survey	Encuesta CASEN. OECD calculations based on the microdata.	Except domestic services.	
Czech Repul	GM Y0	Gross monthly earnings of full-time, full-year employees.	Enterprise survey (Periodic Census of Employers).	Czech Statistical Office.	Workers in enterprises of less than 25 employees in 1996 only.	
Denmark	GHO0	Gross hourly earnings of all workers.	Tax registers (annual earnings data) and social security data (hours worked).	The data were supplied by Charlotte Wind Von Bennigsen or Cathrine Nielsen (when Charlotte is away) from Statistics Denmark (by earnings class).	Workers with wage rates lower than 80% of the minimum wage.	Data are derived from annual wage-income (including all types of taxable wage-income) recorded in tax registers, divided by actual hours worked, as recorded in a supplementary pension scheme register.
Finland	GAY0	Gross annual earnings of full-time, full-year workers.	Household survey (Income Distribution Survey).	Statistics Finland.	No exclusions.	
France	NAE0	Net annual earnings of full-time, full-year workers.	Salary records of enterprises. (Déclarations Annuelles des Données Sociales).	Institut national de la statistique et des études économiques (INSEE), Séries longues sur les salaires.	Agricultural and general government workers.	Data are adjusted for annual hours worked to represent full-year equivalent earnings. Data for 1981, 1983 and 1990 are estimations by INSEE. Earnings are net of employee social security contributions but not of income tax.

Table 2.A.1. OECD Earnings distribution database: detailed description of earnings and data sources (cont.)

Country	Defn	Earnings definition	Original source	Publication/data provider	Workers not covered	Note
Germany	GMF0	Gross monthly earnings	Household survey	GSOEP provided by		Full-time employees based
,		of full-time workers.	(German Socio-	Deutsches Institut für		on the national definition.
			Economic Panel).	Wirtschaftsforschung		
Greece	GHF0	Gross hourly earnings of full-time employees.	on Income and Living	J		
TT	CMEO	Construction of the construction of	Conditions (EU SILC).	National Labour Contro	Dui- u. t 1004	Deta in de 1/12 ef e e
Hungary	GMF0	Gross monthly earnings of full-time employees in May of each year.	Enterprise survey (Survey of Individual Wages and Earnings).	National Labour Centre, Ministry of Labour.	Prior to 1994, workers in private enterprises of less than 20 employees were not included. Since 1994, the sample also covers enterprises with 10-20 employees. Data exclude enterprises with 5-9 employees.	Data include 1/12 of non- regular payments from previous year. Before 1992 the survey involved a different sampling method.
Iceland	GHF0	Gross hourly earnings of full-time employees.	European Union Survey on Income and Living Conditions (EU SILC).	Eurostat. OECD calculations based on the microdata.		
Ireland	GWF0	Gross weekly earnings of full-time employees.	Household survey (Living in Ireland Survey 2000), ESRI, for 2000 data. European Union Survey on Income and Living Conditions (EU SILC) 2003, Central Statistics Office Ireland, for 2003 and 2004 data.	Central Statistics Office Ireland.	?	
Israel	GMF0	Gross monthly earnings of full-time employees.	Integrated Household Survey, which combines sample from Labour Force survey with those of Household Expenditure Survey.	IHS survey microdata supplied by Israel CBS. OECD calculations based on the microdata.	No exclusions.	
Italy	NMF0	Net monthly earnings of full-time employees.	Household survey (Survey of Household Income and Wealth). SHIW-HA	Bank of Italy. OECD calculations based on the microdata.	No exclusions.	Wage and salaries net of social security contributions and income taxes.
Japan	GMF0	Scheduled gross monthly earnings of regular, full-time employees.	Entreprise Survey (Basic Survey on Wage Structure).	Planning Division, Statistics and Information Department, Minister's Secretariat, Ministry of Health, Labour and Welfare, Yearbook of Labour Statistics.	Employees in establishments with less than ten regular workers and all employees in the public sector, agriculture, forestry and fisheries, private household services and foreign embassies.	Earnings deciles are OECD interpolations of the published data on the distribution of employees by earnings class. The data exclude overtime earnings (except for 1975) and annual special cash earnings.
Korea	GMF0	Gross monthly cash earnings, including overtime and one twelfth of annual bonuses, of	Entreprise Survey (Wage Structure Survey).	Korean Ministry of Labour, Yearbook of Labour Statistics and data provided directly	Employees in establishments with less than five regular workers and all employees in	Earnings deciles are OECD interpolations of the published data (D10, D50 and D90) on the
Netherlands	GAE0	Gross annual earnings of full-time, full-year equivalent workers.	Enterprise survey (Survey of Earnings).	Sociaal-Economische Maandstatistiek, Dutch Central Bureau of Statistics.	No exclusions.	
New Zealand	GHF0	Gross hourly earnings of full-time employees.	Household survey (Household Economic	Estimates provided by the New Zealand	No exclusions.	For the years 1984 to 1996, series was estimated by
Norway	GMF0	Average monthly earnings for full-time equivalents	Enterprise surveys	http://statbank.ssb.no/stat istikkbanken/Default_FR. asp?PXSid=0&nvl=true &PLanguage=1 &tilside =selecttable/hovedtabell Hjem.asp&KortnavnWeb =lonnansatt	No exclusions.	The data are average earnings within each decile and not a decile cut-off. Full-time equivalents:

Table 2.A.1. OECD Earnings distribution database: detailed description of earnings and data sources

Country	Defin	Earnings definition	Original source	Publication/data provider	Workers not covered	Note
Poland	GHF0	Gross hourly earnings of full-time employees.	European Union Survey on Income and Living	Eurostat, OECD calculations based on the	No exclusion	
Portuga 1	GHF0		European Union Survey on Income and Living Conditions (EU SILC).		No exclusion	
Slovak Republic	GMF0	Median gross monthly earnings of full-time workers, reported in Euros	Monthly Structure of earnings Survey .			
Spain	GHF0	Gross hourly earnings of full-time employees.	European Union Survey on Income and Living Conditions (EU SILC).	Eurostat. OECD calculations based on the microdata.	No exclusion	
Sweden	GMF0	Growth monthly earnings for full-year, full-time employees	Household Incole Survey (HEK) conducted by Statistics Sweden combined with Tax registers.	http://www.scb.se/Pages/T able AndChart 28871. aspx		Amounts in SEK thousands, 2010 prices
Switzerland	NMF0	Net monthly earnings of full-time workers (Salaire mensuel net p our les personnes des secteurs privé et p ublic (Confédération) ensemble travaillant à temps complet.	Office federal de la statistique, Enquêre suisse sur la structure des salaires.	Rens eignements: Section des salaires et des conditions de travail, 032 713 64 29, lohn@bfs admin.ch. © OFS - Section des salaires et des conditions de travail		Salaire brut (non standardisé) moins les cotisations sociales obligatoires du salarié et la part de celles-ci allant audelà du tauxminimam : le salaire brut du mois d'octobre (y compris les prestations en nature, les versements réguliers de primes, de part ic pations auchiffre d'affaires et de commissions), les allocations pour le travail en équipe et le travail et démanche ou de nuir, 1/12 du 18 es salaire, 1/12 des paiements spéciaux annuels et la rétribution des heures supplémentaires.
United Kingdom (Great Britain)	GWF1	Gross weekly earnings of all full-time workers (i.e. on adult rates of play).	Annual Survey of Hours and Earnings (ASHE) for year 2006 a 2008 (2006 consistent with 2007). Data for 2011 are base on SOC_2000	Office for National Statistics		Employees on adult rates whose pay for the survey- pay period was not affected by absence. For publication purpose, from 1970 to 2011 the series GWF4, GWF4, GWF4, GWF1 have been
United Kingdom (Great Britain)	GWF0	Gross weekly earnings of all full-time workers (i.e. on adult rates of p ay).	Annual Survey of Hours and Earnings (ASHE) for year 2011 (2010 consistent with 2011). Data based on SOC 2010	Office for National Statistics		Employees on adult rates whose pay for the survey- pay period was not affected by absence.
United State	GWF0	Gross usual weekly earnings of full-time workers aged 16 and over.	Household survey (Current Population Survey). Unpublished BLS tabulations from the Current Population Survey and, for the published decide limits, BLS, Highlights of Women's Earnings, various additions.	U.S. Department of Labor, Bureau of Labor Statistics.	No exclusions.	Earnings deciles are OECD interpolations of the unpublished BLS tabulations of the distribution of employees by earnings class.
		Key to Definition				
Gross or n	et earnings	Period  A Annual	Type of workers  Y Full-time, full-year	Definition  0 Principal definition		
N Net		M Montily	E Full-time (full-year) equivalent	Alternative definition		
		W Weekly  D Daily	FA Full-time on adult rates pay (GBR) F All full-time P All part-time	2 Alernative definition 2		
		H Hourly	O Allemployees			

Table 2.A.2. Earnings dispersion measures in 2006: comparison of OECD versus EU-SES data Gross earnings of full-time employees

Panel A.	Ratio of 9th-to-1st earnings decile limits						
			EU-SES				
	OECD Defintion	OECD	Hourly	Monthly	Yearly (full- year equivalent)		
Belgium	GMF0	2.429	2.431	2.475	2.556		
Czech Republic	GMY0	3.105	3.258	3.242	3.309		
Germany	GMF0	3.143	3.616	3.740	4.298		
Spain	GHF0	3.500	2.982	2.935	3.273		
Finland	GAY0	2.470	2.321	2.339	2.592		
France	NAE0	2.905	2.634	2.904	3.030		
United Kingdom	GWF2	3.630	4.021	3.874	4.504		
Greece	GHF0	3.325	3.212	3.309	3.457		
Hungary	GMF0	4.557	4.552	4.775	5.153		
Italy	NMF0	2.358	3.168	2.677	2.894		
Netherlands	GAE0	2.906	2.987	2.949	3.314		
Norway	GMF0	2.153	2.330	2.353	2.353		
Poland	GHF0	4.400	4.542	4.685	4.910		
Portugal	GHF0	4.286	4.463	4.307	4.529		
Slovak Republic	GMF0	3.510	3.662	3.571	3.690		
Sweden	GMF0	2.312	2.232	2.219	2.782		

Panel B.	Ratio of 9th-to-5th earnings decile limits					
				EU-SES		
	OECD Defintion	OECD	Hourly	Monthly	Yearly (full- year equivalent)	
Belgium	GMF0	1.744	1.758	1.756	1.814	
Czech Republic	GMY0	1.798	1.895	1.875	1.901	
Germany	GMF0	1.703	1.821	1.812	1.866	
Spain	GHF0	2.000	2.033	2.001	2.188	
Finland	GAY0	1.725	1.645	1.634	1.734	
France	NAE0	1.983	1.832	1.987	2.043	
United Kingdom	GWF2	1.985	2.289	2.130	2.290	
Greece	GHF0	1.939	2.085	2.136	2.192	
Hungary	GMF0	2.344	2.513	2.516	2.671	
Italy	NMF0	1.596	2.108	1.793	1.812	
Netherlands	GAE0	1.762	1.849	1.832	1.949	
Norway	GMF0	1.459	1.711	1.685	1.674	
Poland	GHF0	2.366	2.210	2.225	2.336	
Portugal	GHF0	2.674	2.686	2.560	2.709	
Slovak Republic	GMF0	2.006	2.092	2.040	2.093	
Sweden	GMF0	1.670	1.681	1.663	1.700	

Panel C.	Ratio of 5th-to-1st earnings decile limits						
			EU-SES				
	OECD				Yearly (full-		
	Definition	OECD	Hourly	Monthly	year		
	Delimition				equivalent)		
Belgium	GMF0	1.392	1.383	1.410	1.409		
Czech Republic	GMY0	1.727	1.719	1.729	1.740		
Germany	GMF0	1.845	2.099	2.061	2.303		
Spain	GHF0	1.750	1.467	1.467	1.496		
Finland	GAY0	1.432	1.411	1.432	1.489		
France	NAE0	1.465	1.438	1.462	1.482		
United Kingdom	GWF2	1.829	1.756	1.818	1.967		
Greece	GHF0	1.715	1.541	1.549	1.578		
Hungary	GMF0	1.944	1.811	1.898	1.929		
Italy	NMF0	1.478	1.503	1.494	1.592		
Netherlands	GAE0	1.649	1.616	1.610	1.701		
Norway	GMF0	1.475	1.361	1.396	1.406		
Poland	GHF0	1.860	2.055	2.105	2.102		
Portugal	GHF0	1.603	1.661	1.682	1.672		
Slovak Republic	GMF0	1.750	1.750	1.751	1.763		
Sweden	GMF0	1.384	1.328	1.334	1.637		

Source: OECD Distribution of earnings database and Eurostat 2006 Structure of Earnings Survey (EU-SES)  ${\bf r}$ 

Table 2.A.3. Earnings dispersion measures, gender pay gap and incidence of low-pay vary by pay periods Comparison based gross earnings of full-time employees from 2006 EU-SES results

Panel A. Ratio of 9th-to-1st earnings decile limits

Panel B. Gender pay gap

	Hourly	Monthly	Yearly (full-year equivale nt)	OECD	Hourly	Monthly	Yearly (full-year equivale nt)
Belgium	2.431	2.475	2.556	Belgium	7	9	11
Czech Republic	3.258	3.242	3.309	Czech Rep	16	17	17
Germany	3.616	3.740	4.298	Germany	2	18	17
Spain	2.982	2.935	3.273	Spain	11	12	11
Finland	2.321	2.339	2.592	Finland	18	20	22
France	2.634	2.904	3.030	France	8	9	10
United Kingdom	4.021	3.874	4.504	United Kin	13	21	22
Greece	3.212	3.309	3.457	Greece	15	18	19
Hungary	4.552	4.775	5.153	Hungary	5	7	3
Italy	3.168	2.677	2.894	Italy	1	10	2
Netherlands	2.987	2.949	3.314	Netherland	12	16	18
Norway	2.330	2.353	2.353	Norway	8	10	12
Poland	4.542	4.685	4.910	Poland	6	11	12
Portugal	4.463	4.307	4.529	Portugal	11	13	14
Slovak Republic	3.662	3.571	3.690	Slovak Rep	18	19	19
Sweden	2.232	2.219	2.782	Sweden	10	12	15

Panel C. Incidence of low-pay

	Hourly	Monthly	Yearly (full-year equivale nt)
Belgium	6	14	14
Czech Republic	18	19	19
Germany	21	34	35
Spain	11	19	20
Finland	7	14	15
France	8	14	15
United Kingdom	27	34	35
Greece	13	17	18
Hungary	23	28	30
Italy	12	16	20
Netherlands	25	38	38
Norway	8	20	21
Poland	26	28	26
Portugal	17	19	19
Slovak Republic	19	21	21
Sweden	4	11	19

Source: Eurostat 2006 Structure of Earnings Survey (EU-SES) results.