ABSTRACT

The level and distribution of tax burdens constitute main tax policy considerations. In Taxing Wages (tw), an authoritative OECD publication, average and marginal tax wedges on labour income are compared. Tax models calibrated according to the legislation of each individual OECD Member State are at the core of the Taxing Wages methodology. However, another key element deserves attention as well: the selected national wage levels.

In this article we focus on the relevance of wage distributions when calculating tax burdens on labour income, by means of a limited, illustrated description of available data sources. First up are national Belgian wage distribution data, then we explore the European Structure of Earnings Survey 2010. The recently published sses2010 survey offers a surprisingly rich and wide range of internationally comparable wage statistics.

We point at the non-negligible difference between the average and the median wage. In line with this, we also claim that “67 % of the average wage” is not the most adequate indicator to capture “low wages”. The consequence is that the main indicators that are currently used in discussions on how taxes affect the labour market, may not be the right ones. In line with Eurostat’s innovation, we advocate a switch to “67 % of the median wage” to analyse tax burdens on low wages. Of course, one should not switch course overnight, but ultimately median wages should become the new anchor when discussing labour tax policy.

Moreover, more attention to complementary indicators, such as age, gender and occupation could enrich the analysis.

Keywords: Tax wedge; Wage Level and Structure; Wage Differentials by Gender, Sector and Occupation, Labour Tax Policy

JEL Classification Code: H23, H24, J31

(*) This text is largely inspired upon a discussion paper about a similar topic presented at the May 2013 Meeting of the Working Party 2 on Tax Policy Analysis and Tax Statistics of the Committee on Fiscal Affairs, OECD, Paris.

(**) Advisor Research and Documentation Department, Federal Ministry of Finance, Belgium (Adviseur Studie- en Documentatiiedienst, FOD Financiën).
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# Introduction

The level and structure of the tax burden differ from country to country and over time, as indicated by aggregate measures such as the tax-to-gdp ratio and macro-economic (backward looking) indicators such as the implicit tax rate on labour, capital and consumption. However, to study the distribution of the tax burden, disaggregated and micro-economic data are needed. In *Taxing Wages* (tw) the OECD focuses on the taxation on labour in member countries by applying a stylised (forward looking) micro-economic approach to assess the evolution of the taxation of wage income.

The OECD *Taxing Wages* (1) publication currently presents a set of average and marginal tax burden indicators for eight household types which vary by income level and household composition. At present it is assumed that the annual income from employment is equal to a given ratio of the average full-time adult gross wage earnings in a specific set of industries for each OECD economy. Tax models calibrated according to the legislation of each individual OECD Member State are at the core of the Taxing Wages methodology.

However, another determinant deserves attention as well: the selected national wage levels. In contrast to the micro-economic approach applied to calculate the tax burden, Taxing Wages actually still refers to aggregated data to select the relevant national wage level. The headline “Average Wage” (aw) in the OECD Taxing Wages publications mostly stems from aggregated administrative data. While aggregated administrative data are appropriate when constructing a comprehensive overview of the structure of the workforce, or when calculating the overall wage sum, this statistic offers little detail about the distribution of wages. The OECD publications mostly focus on respectively 67 %, 100 % and 167 % of this Average Wage without verifying how many (or how few) people actually earn such levels of income.

In this article we focus on the relevance of wage distributions when calculating tax burdens on labour income. We do not seek to provide an in-depth analysis of the actual wage distributions, but we offer a limited, illustrated description of available data sources. First up are national Belgian wage distribution data. Subsequently we explore the European Structure of Earnings Survey 2010, for the recently published ses2010 survey offers a wide range of internationally comparable wage statistics.

Finally, some tentative conclusions are drawn, which might initiate further discussion on both the marketing of the tw results as on the adequacy of the tw tool in guiding labour market policies.

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1. OECD (2013)
Distribution of Belgian wages, national sources and SES

Different sources of data regarding wage levels and wage distributions coexist. They each have their pros and cons. As for other member countries, the headline “Average Wage” (aw) for Belgium referred to in the OECD Taxing Wages publications is based on aggregated administrative data.

On the other hand, the four-yearly European Structure of Earnings Survey (SES) provides comparable in-depth information at EU-level on the link between the level of earnings and the individual characteristics of employees (sex, age, occupation, educational level) and their employer (economic activity, size of enterprise, etc.). The underlying data stem from a structured sample, and thus not from exhaustive administrative sources. Unfortunately, the process of validation and analysis takes time. The latest SES results, published and annotated by Eurostat at the end of 2012/beginning of 2013, refer to (October) 2010.

Although EU-regulation only imposes a four-year-frequency, Belgium strives for a repetition of the SES-exercise on a yearly basis. At present, the Belgian SES inspired series cover all years in the time frame from 1999 till 2011. They mostly relate to monthly wages for full time employees.

2.1 Evolution of regional differences

A first way to subdivide the workforce, is a geographical breakdown. Figure 1 compares the provincial wage level differences of 2000, 2005 and 2011. In Belgium, the wage level is actually the highest in the capital region (Brussels) and surrounding provinces. This is obviously related to the geographical spread and structure of the economic activity, since many headquarters and central offices are located in the capital region. They daily attract commuters from all over the country. Notice that the province of employment is shown, not the province of residence. This graph also illustrates that the evolution in time is quite distinct. While in Brussels the relative wage level increased by 5 percentage points since the turn of the century, it decreased by almost as much in the provinces of Antwerp, Namur and Luxemburg. Overall, the provincial heterogeneity (as measured by the standard deviation) increased in the last decade.
2.2 Distribution by gender and age

Figure 2 indicates that seniority still is a customary wage determinant in Belgium. As a result, the average wage level increases almost linearly with the age of the employees. This rule applies in particular to male employees.

The graph also illustrates the persistent lower average wage for full time employed women compared to their male counterparts. As in many other countries, in Belgium the gender gap can only to some extent be explained by objective elements such as the sector of activity. The middle horizontal line represents the national average monthly wage ($aw$) for 2011. While male age groups start to exceed this level in the midst of their career (age 35-39), the female age groups only cross the $aw$ threshold at the age of 50. The lower horizontal line represents 2/3 of the national average wage. The age groups ‘younger than 25’ are the only groups that do not (or hardly ever) have their average wage cross the 67% $aw$ threshold. The upper horizontal line at the top represents 167% of the overall average. This level is clearly beyond reach for all age groups.

We remark that there exists not only a pay gap between men and women, but also between full time and part time employees. In this context the Belgian Institute for the Equality of Women and Men observes a tendency over the years: “the gap between full-time and part-time workers widens, while the gender gap decreases among part-time workers, as well as among full-time workers. This can be interpreted as a gradual elimination of the gender gap in Belgium, while the gap between better paid jobs and less paid jobs, with less favourable working conditions, is growing.”

In line with Taxing Wages, and because of concerns about data comparability, we confine the analysis to full time employees wages in the remainder of this article.

2.3 Distribution by age and occupation

Figure 3 divides the Belgian workforce into two broad categories of occupation: manual versus non manual (or intellectual) labour. The wage development of manual employees is remarkably flat. The youngest manual workers earn on average about 65% of the overall national average. Initially the manual earnings increase up to the 85% level (for age group 35-39), but subsequently they remain fairly constant, and eventually they even slightly regress at ages 60 and older.

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The wage level of non-manual workers on the other hand evolves more rapidly and in a more significant manner. It starts at rather low levels for the youngest of age groups, on average, non-manual youngsters earn even less than their manual counterparts. But afterwards the wage level increases steadily. On average, the non-manual employees earn the national average as from the age of 30, and 133 % of this wage level from the age of 50 onwards. Although elder non-manual workers come close to reaching the 167 % threshold, they don’t actually cross this level either.

2.4 Deciles (3) and gender

Figure 4 distinguishes the decile (4) wage levels for both Belgium’s male and female employees. The skewness of the income distribution is obvious: most employees earn far less than the overall average (represented by the middle horizontal line). A substantial part of the workforce (especially women) earn less than 67 % of the average wage. More than 60 % of the male, and no less than 70 % of the female workers, earn less than the national average. On the other hand, far less than 10 % earn 167 % or more of the overall average.

Consequently, the median value differs substantially from the average value. The median wage of female employees even comes closer to the 67 % aw level than to the 100 % aw level.

Figure 5 measures the skewness of the distribution by comparing the interdecile ratios for both men and women for 2011. The female distribution appears to be skewer at the bottom, while the male skewness is relatively more concentrated at the top of the income distribution. The first interdecile ratio \( \frac{p_{50}}{p_{10}} \) is higher for women (1.41) then for men (1.36), while the opposite is true for the second interdecile ratio \( \frac{p_{90}}{p_{50}} \): 1.79 for men and 1.72 for women. The product of both interdecile ratios \( \frac{p_{90}}{p_{10}} \) is however almost similar for both sexes. In 2011 the \( p_{90} \) wage level was equal to about 2.43 times \( p_{10} \). Although the results of the annual surveys differ slightly from year to year, there is no clear trend to be identified over the 1999-2011 period.

Figure 6 and Figure 7 illustrate the skewness of the earnings distribution in an alternative way. In the first graph the frequencies per income bracket of 250 Euros are plotted for both women (curve with dots) and men (curve with triangles).

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3 A decile is any of the nine values that divide the sorted data into ten equal parts, so that each part represents \( \frac{1}{10} \) of the sample or population. Deciles are also called 10-quantiles, the 100-quantiles are called percentiles. Quantiles are points taken at regular intervals from the cumulative distribution function of a random variable. Dividing ordered data into 10 essentially equal-sized data subsets is the motivation for 10-quantiles; the quantiles are the data values marking the boundaries between consecutive subsets. Put another way, the \( k^{th} \) 10-quantile for a random variable is the value \( x \) such that the probability that the random variable will be less than \( x \) is at least \( (k-1)/10 \) and the probability that the random variable will be more than \( x \) is at least \( (k/10) \). (Based on Wikipedia)

4 \( P_{50} = D_5 = \text{Median}; P_{10} = D_1 = \text{first decile}; P_{90} = D_9 = \text{last decile}. \)
The top down vertical lines distinguish the traditional \( \tau \text{-}w \)-thresholds of 100 \( \% w \), 67 \( \% w \) and 167 \( \% w \) for both genders, while the shorter vertical lines locate the medians (\( p_{50} \)).

The structure of the second graph is similar, it shows the cumulative distribution per bracket of 250 euros. The shape of the income distribution is comparable for both genders, it is characterised by a short fat left tail and a long thin right tail, although for women the mode is clearly more situated towards the lower end of the scale than for men. The positive or right-tailed skewness of the distribution is confirmed by the location of the main characteristic values: mode < mean < average.

### 2.5 Average and marginal tax burden

Figure 8 plots the Taxing Wages 2011 headline tax burden indicators for Belgium. The upper curve relates to the tax wedge between total labour costs paid by the employer and the corresponding net take-home pay for single workers without children. Similarly, the lower curve represents the corresponding personal average tax rate, defined as income tax plus employee social security contributions as a percentage of gross wage earnings. The horizontal axis conveys multiples of the average wage. The top down vertical lines indicate the traditional \( \tau \text{-}w \)-thresholds (67 \( \% \), 100 \( \% \) and 167 \( \% \)), while the shorter vertical lines locate the position of the median wage earner (\( p_{50} \)) and the corresponding lower (67 \( \% \) of \( p_{50} \)) and higher thresholds (167 \( \% \) of \( p_{50} \)).

Given the upward slope of both tax burden curves, the headline tax burden results would (slightly) decrease in all six cases, should the main reference indicator switch from average to median wage. This would most probably not only be the case in Belgium, but in many other countries as well.

Figure 9 focuses on the marginal tax wedge and the marginal personal tax rate. The construction of this graph is similar to the previous one. Here, the replacement of the average wage by the median wage would clearly have more impact, potentially it could even entail a reshuffle of the international rankings. Given the shape of the Belgian marginal tax burden curves, the impact would be marginal (or even non-existent) at the higher end, but would be substantial in the mid-range and especially at the lower end.
3 SES 2010

The results of the European Structure of Earnings Survey 2010 (ses2010) have only recently been released (5). The main focus is on enterprises, with minimum 10 employees, that are active in all economic sectors but agriculture, forestry, fishing, public administration and defence, private households and extra-territorial organisations (in short: NACE-sectors B-s excluding O, or B-S_XO). All persons employed at the observation unit and holding an employment contract (indefinite or not) are covered, except e.g. family workers, home workers, occasional workers, persons entirely remunerated by means of fees or commissions, board of director members, directors/managers paid by way of profit share or by fee, and self-employed persons.

The ses2010 survey provides a rich source of comparable wage level information, not only for the 27 EU-countries (6) but also for the European Free Trade Association countries Iceland (ic), Norway (no) and Switzerland (ch) and the Candidate Countries Croatia (hr), the Former Yugoslav Republic of Macedonia (mk) and Turkey (tr). In this section, and in line with the Taxing Wages publication, we will focus, whenever possible, on the annual earnings of employees active in the “business economy” (sectors B-N).

3.1 Widely diverging national wage levels

The wage levels differ widely among European countries, see Figure 10. According to ses2010, the top national average (Switzerland, ch) is more than 12 times higher than the lowest national average (Bulgaria, bg). The span is considerably reduced when correcting for the diverging price levels, but the country ranking remains broadly intact. Still, even expressed in Purchasing Power Standards (pps), the Swiss wage level is about 4 times higher than the Bulgarian one (bg) or the Romanian one (ro). Belgium (be) is situated at the right-hand side in both rankings, just as most of its neighbours and the Nordic countries.

3.2 Wage differences according to occupation

Figure 11 compares the wage levels of manual (oc7-9) and non-manual (oc1-5) employees. The average wage level of both groups is expressed as a percentage of the overall national average for the sectors B-N. The countries are ranked by increasing ratio for non-manual workers. In the countries on the left-hand side the average non-manual employee earns only a few percentage points

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5 Eurostat (2012)
6 EU composition of 2010. For abbreviations: see annex.
more than the \( MW \), while on the right-hand side this difference amounts to more than 20 percentage points. In this article we do not further investigate the underlying causes of the diverging ratios, e.g. a small ratio for non-manual workers can indicate a small wage dispersion, but it can also relate to a small number for one of both categories of workers.

Figure 12 focuses on the top earners, in particular: employed “Managers” (oc1), “Professionals” (oc2) and “Technicians and associate professionals” (oc3). Their respective average wages are expressed in percentage of the overall national average. The countries are ranked in increasing order according to the wage ratio of managers. In all countries managers earn at least 150 \% of the national average, but in some countries, like Italy (it) and Portugal (pt) they triple the national average. The other top earners must be satisfied with far less. Only in Hungary (hu) “professionals” double the average level, while “technicians and associate professionals” are relatively best remunerated in Germany (de, 141 \% of the national average).

Figure 13 explores the impact of the three top income groups on the national average wage level. It takes not only the wage levels into account but the corresponding workforce numbers as well. The left hand side of the graph indicates that the national average would drop the most in the UK, France (fr) and Poland (pl) if the managers were to be excluded (tx1). Eliminating the managers would induce a reduction of the national average of more than 10 percentage points in these three countries. On the other hand, the decline would be limited to only 3 to 4 percentage points in Spain (es) and Italy (it). Although the wage level of managers is usually high, the relative small number of top earners in both countries smoothens the impact of this group on the overall national mean.

In contrast, excluding both the top category (oc1) as well as the professionals (oc2) would provoke a much more drastic cut in the national average in most countries. As illustrated by the tx1-2 bars in Figure 13, this operation would generally result in a drop of the national average by 10 to 20 percentage points. Again, the United Kingdom would be among the most affected countries, the UK national wage level would drop by more than a quarter.

Further excluding the “technicians and associate professionals” (oc3), on top of the managers and professionals, would push the national average below 85 \% of the actual level in all countries but Iceland (is) and Italy (it), as indicated by the tx1-3 bars in Figure 13.
Figure 14 illustrates how elements of the wage distribution could be integrated into the Taxing Wages analysis. The Belgian wage distribution is taken as an example. Figure 14 not only locates the relative positions of the wage levels of several occupational groups (x-axis) but allows tracing the corresponding personal tax rate and tax wedge as well (y-axis). As is shown in the graph, the average Belgian manager \( (oc1) \) bears a tax burden that exceeds the burden of “people earning 167 % of the average”, while the opposite is true for the average Belgian professional \( (oc2) \). Belgian “technicians and associate professionals” \( (oc3) \) pay only as much as the average non-manual employee. On the other hand, on average, the tax burden of manual workers appears to differ only slightly from the median \(^7\), while it turns out to clearly exceed the tax burden of “employees earning 67 % of the average”.

### 3.3 Deciles and low wages

On its website, Eurostat publishes only a limited number of SES2010 decile data. Eurostat refers to sectors B-S excluding o (shortened as B-S_XO), which includes industry, construction and services (except public administration, defence, compulsory social security). The sector coverage is thus somewhat wider than the business economy (sectors B-N). Moreover, only the median \((p50)\), the first \((p10)\) and the last decile \((p90)\) are listed. In Figure 15, \( p10, p50 \) and \( p90 \) are expressed in percentage points of the corresponding national average wage in order to facilitate international comparison; the countries are ranked according to the ratio of median to average \((p50/a)\). The median turns out to be inferior to the mean in all countries, which indicates a general right-tailed skewness of the earnings distribution. On the other hand, the interdecile distances \((p90\) compared to \(p10\)) give an impression of the diverging dispersion of the earnings distributions, as illustrated by the difference in height of the third and first bar for each country. While the spread is quite large in most countries, it is relatively narrow in some, in particularly in the Nordic states.

Apart from the three deciles just mentioned, Eurostat publishes an additional distributional indicator: the proportion of low wage earners. But unlike OECD and most other institutions, Eurostat defines low wages with respect to the median, not to the average. Thus here the proportion of low wage earners reflects the share of the workforce earning at most \(2/3\) of the median. According to this indicator, the number of low wage earners is small (less than 10 % of the workforce) in Turkey (TR), Belgium (BE), France (FR) and the Nordic countries, while the number is particularly important in some of the new EU member states, see Figure 16.

Figure 17 focuses on the low wage earners in just two countries: Belgium and the United Kingdom. It not only compares the magnitude of the low wage workforce in both Belgium and the UK, but it also gives full detail of its

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\(^7\) Median based on national source (linked to SES2010)
structure according to the sector of economic activity. Overall, the structure is fairly similar on both sides of the Channel, despite the fact that the share of UK’s low wage workforce is three times higher. It is however striking that in the UK no less than 70% of the staff of sector 1 (Accommodation and food service activities) earns hourly earnings lower than 2/3 of the national median. Low hourly earnings are also common in sector 6 (Wholesale and retail trade; repair of motor vehicles and motorcycles), sector 8 (Administrative and support service activities) and sector 12 (Arts, entertainment and recreation).

### 3.4 Alternative breakdowns and presentations

Above data are alternately expressed in deciles, sectors and occupations but the wealth of SIES2010 permits alternative analyses. We briefly explore and illustrate a handful of possibilities.

Figure 18 combines proportions of the labour force of the Euro Area (EA17) according to occupation (bars, left-hand axis) with the corresponding average annual earnings (short horizontal indicator, right-hand axis). On top of that, the spread over the economic sectors (NACE B-N) is illustrated per type of occupation. The top and the bottom of the vertical lines respectively locate the maximum (Max $aw/NACE$) and minimum sector average (Min $aw/NACE$). All earning levels are expressed in percentage points of the overall Euro Area average. E.g. in the Euro Area, 5% of the workforce is classified in the managers category (OC1), their earnings are not only characterized by the high average wage level, but also by a wide diversity among economic sectors.

Figure 19 has a similar structure. The bars represent the proportions of the Euro Area workforce according to sector (left-hand scale); the short horizontal lines show the corresponding average earnings (right-hand scale). The spread over occupations is illustrated by the vertical lines. Apart from the breakdown per sector, the aggregate characteristics of sectors B-S excluding 0 (in short: B-S_0) are given as well. They differ only marginally from their B-N counterparts, at least in the Euro Area.

Figure 20 divides the workforce according to the type of employment contract, it distinguishes apprentices and trainees (Appr), fixed terms (Fix) and indefinite duration (Indef). The countries are ranked according to the relative size of fixed term wages. In most countries, but not all, employees with fixed term contracts appear to earn substantially less than employees with indefinite contracts. Apprentices and trainees usually earn only a fraction ($\frac{1}{3}$ to $\frac{2}{3}$) of the average wage.
The remaining graphs reveal remarkable country specific differences with respect to other wage determinants. Only a selected number of countries are represented for the sake of presentation. Figure 21 shows that in most countries salary tends to increase with age, but only up to a certain level. In some countries the eldest employees earn the most, in others the top is reached earlier in the career. This may be linked to the diverging importance of seniority as a wage determinant. In line with this, the impact of the length of service within the enterprise on the wage level also differs substantially among countries, as illustrated in Figure 22. In Turkey (TR), in particular, the length of service within the enterprise apparently dominates to a large extent the wage determination.

Figure 23 confirms that the level of education matters everywhere. “Second stage of tertiary education leading to an advanced research qualification” (level 6), pays the most, followed by “First stage of tertiary education, programmes that are theoretically based/research preparatory or giving access to professions with high skills requirements” (level 5A) and “First stage of tertiary education, programmes which are practically oriented and occupationally specific” (level 5B). Remark however that the dispersion in e.g. Sweden (SE) is rather moderate, compared to the Benelux countries or to Southern European countries, such as Portugal (PT).

Finally, the size of the enterprise, as measured by the number of staff employed, may also matter. However, if not for the smallest enterprises, in general size does not have a predominant impact, see Figure 24. On the contrary, Figure 25 indicates that, at least in the selected countries, there is no clear relation between size and the managers’ pay.
Conclusions – issues for discussion

A few conclusions and issues for discussion can be drawn from the descriptive analysis.

- The arithmetic average wage is an imperfect indicator given the diversity and skewness of the earnings distribution, in a skew distribution the average is severely distorted by outlier data, as illustrated above. The median better characterises the bulk of the wage distribution, it clearly is a more appropriate indication of central tendency than the arithmetic mean.

- Gradually new data become available, which may lead to reconsidering the headline wage reference in tax policy discussions and publications such as Taxing Wages. A double switch becomes an option: not only could the central role of arithmetic averages be replaced by medians, apart from that the sector scope could be extended, from the “business economy” (sectors b-n) to sectors b-s or sectors b-s excluding o. The ultimate goal, an “all sector median” comes into reach.

- A shift away from the pivotal role of the average is particularly relevant when analysing the left tail of the wage distribution. In this context, the attention Eurostat already pays to medians could serve as a model for other institutions. Anyway, “two thirds of the median” better fits the description of “low wages” than “two thirds of the average”. As illustrated above, the “fitness for use” of 67 % of the average wage is questionable, in a skew distribution it rather represents the mode of the wages than the low wages.

- The continued use of the “average production worker”, the original wage reference in Taxing Wages, had many disadvantages, in particular the shrinking representativeness of the production sector led to problems. But at least, this reference had a “face”, a familiar identity. This is less the case for the actual reference, the average wage. Most people may doubt to which neighbour or colleague this label applies the best. By subdividing the workforce (according to sector, occupation or age, …) Taxing Wages could present its results in a way that is easier understood by politicians and the general public. The media may find it more attractive to report on the tax burden of e.g. the average manager rather than having their readers hear about some person earning x.y times the national average wage.

Besides, enhanced interest in the many faces of inequality in tax policy publications such as Taxing Wages would align well with recent research trends.
It would particularly align well with the current OECD wide reflexion on “New Approaches to Economic Challenges” (NAEC). As announced in a NAEC-paper “an important aim of this work is to mainstream inequality into OECD analytical work” (8).

Of course one should not switch course overnight. Changing the benchmark has a cost, e.g. times series will be interrupted, or should be revised. But on the other hand there may well be an (urgent?) need for publications such as OECD’s Taxing Wages to follow Eurostat’s innovation and to complement the existing list of tax policy indicators by shifting the focus gradually from average to median wages. We believe that the relevance of e.g. the Taxing Wages tool can be heightened by focusing more clearly on the “core” of the various segments of the labour force. Given the skewness of the wage distribution, this involves inevitably shifting the focus to median wages as soon as feasible. In this context the countries for which median data is already sufficiently robust and timely available should take the lead. We are fairly confident that the other OECD members will follow suit.

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8 OECD (2013b), p 15
5 References

EUROSTAT (2012), In 2010, 17 % of employees in the EU were low-wage earners, Statistics in Focus 48 /2012


OECF (2013b), New Approaches to Economic Challenges, ctpa/cfa/wp2(2013)10


Figure 1: Provincial wage level; in % Belgian average

Province of employment

Source: ADSEI, Statistics Belgium

Figure 2: Monthly wages in Euros, Belgium 2011, Age distribution

Source: ADSEI, Statistics Belgium
Figure 3: Monthly wages in Euros, Belgium 2011, Age and occupation

Source: ADSEI, Statistics Belgium

Figure 4: Monthly wages in Euros, Belgium 2011, Deciles

Source: ADSEI, Statistics Belgium
Figure 5: Monthly wages, Belgium 2011, Interdecile ratios

Source: ADSEI, Statistics Belgium

Figure 6: Monthly wages, Belgium 2011, Distribution per 250 Euro

Source: ADSEI, Statistics Belgium
Median wages: the new labour tax policy anchor?

Figure 7: Monthly wages, Belgium 2011, Cumulative distribution per 250 Euro

Source: ADSEI, Statistics Belgium

Figure 8: Average tax burden, Belgium 2011

Source: TW, ADSEI, Statistics Belgium
Figure 9: Marginal tax burden, Belgium 2011

Source: TW, ADSEI, Statistics Belgium

Figure 10: Annual earnings, Euro and PPS, (B-N, >10empl, SES2010)

Source: Eurostat, SES2010
Median wages: the new labour tax policy anchor?

Figure 11: Annual earnings, Manual and Non-Manual workers in % of Mean (B-N, >10empl, SES2010)

Source: Eurostat, SES2010

Figure 12: Annual earnings, Managers and Professionals in % of Mean (B-N, >10empl, SES2010)

Source: Eurostat, SES2010
Figure 13: Annual earnings, Excluding Managers and Professionals in % of Mean, (B-N, >10empl, SES2010)

Source: Eurostat, SES2010

Figure 14: Average tax burden, Belgium 2011

Source: TW, SES2010
Figure 15: Annual earnings; P10, Median and P90 in % of Mean, (B-S_XO, >10emp, SES2010)

Source: Eurostat, SES2010

Figure 16: Annual earnings; proportion low wages earners (<\frac{3}{5}P50), (B-S_XO, >10emp, SES2010)

Source: Eurostat, SES2010
Figure 17: Hourly earnings; proportion low wages earners (<\frac{2}{3}P50), (B-S_XO,>10emp, SES2010)

Source: Eurostat, SES2010

Figure 18: EA17 Annual earnings according to occupation and sector (B-N_AW=100%, >10empl, SES2010)

Source: Eurostat, SES2010
Median wages: the new labour tax policy anchor?
Figure 21: Annual earnings; by age-group in % of Mean, (B-N, >10emp, SES2010)

Source: Eurostat, SES2010

Figure 22: Annual earnings; by length of service, in % of Mean, (B-N, >10emp, SES2010)

Source: Eurostat, SES2010
Figure 23: Annual earnings; by education, in % of Mean, (B-N, >10emp, SES2010)

Source: Eurostat, SES2010

Figure 24: Annual earnings, Employment contract, in % of Mean, (B-N, >10empl, SES2010)

Source: Eurostat, SES2010
Figure 25: Annual earnings Managers; by size class, in % of Mean, (B-S_XO, >10emp, SES2010)

Source: Eurostat, SES2010
7 Classifications and abbreviations

7.1 Occupations

OC1-5: Non manual workers; OC1: Managers; OC2: Professionals; OC3: Technicians and associate professionals; OC4: Clerical support workers; OC5: Service and sales workers; OC6: Skilled agricultural, forestry and fishery workers; OC7-9: Manual workers; OC7: Craft and related trades workers; OC8: Plant and machine operators, and assemblers; OC9: Elementary occupations; OC0: Armed forces occupations

7.2 Economic activity (NACE)

B-S: Industry, construction and services (except activities of households as employers and extra-territorial organisations and bodies); B-S_XO: Industry, construction and services (except public administration, defense, compulsory social security); B-N: Business economy; B-F: Industry and construction; B-E: Industry (except construction); B: Mining and quarrying; C: Manufacturing; D: Electricity, gas, steam and air conditioning supply; E: Water supply; sewerage, waste management and remediation activities; F: Construction; G-S: Services (except activities of households as employers and extra-territorial organisations and bodies); G-S_X_O: Services (except public administration, defence, compulsory social security, activities of households as employers and extra-territorial organisations and bodies); G-J: Wholesale and retail trade; transport; accommodation and food service activities; information and communication; G: Wholesale and retail trade; repair of motor vehicles and motorcycles; H: Transportation and storage; I: Accommodation and food service activities; J: Information and communication; K-N: Financial and insurance activities; real estate activities; professional, scientific and technical activities; administrative and support service activities; K: Financial and insurance activities; L: Real estate activities; M: Professional, scientific and technical activities; N: Administrative and support service activities; O-S: Public administration and defence; compulsory social security; education; human health and social work activities; arts, entertainment and recreation; other service activities; O: Public administration and defence; compulsory social security; P-S: Education; human health and social work activities; arts, entertainment and recreation; other service activities; P: Education; Q: Human health and social work activities; R: Arts, entertainment and recreation; S: Other service activities:
7.3 Geographical area

EU27: European Union (27 countries); EU25: European Union (25 countries); EU15: European Union (15 countries); EA17: Euro area (17 countries); EA13: Euro area (13 countries); BE: Belgium; BG: Bulgaria; CZ: Czech Republic; DK: Denmark; DE: Germany (until 1990 former territory of the FRG); EE: Estonia; IE: Ireland; ES: Spain; FR: France; IT: Italy; CY: Cyprus; LV: Latvia; LT: Lithuania; LU: Luxembourg; HU: Hungary; MT: Malta; NL: Netherlands; AT: Austria; PL: Poland; PT: Portugal; RO: Romania; SI: Slovenia; SK: Slovakia; FI: Finland; SE: Sweden; UK: United Kingdom; IS: Iceland; NO: Norway; CH: Switzerland; HR: Croatia; MK: Former Yugoslav Republic of Macedonia, the; TR: Turkey

7.4 International Standard Classification of Education 1997 (ISCED)

ED0-2: Less than primary, primary and lower secondary (levels 0-2); ED0: Less than primary; ED1: Primary; ED2: Lower secondary; ED3_4: Upper secondary and post-secondary non-tertiary (levels 3 and 4); ED3: Upper secondary; ED4: Post-secondary non-tertiary; ED5-8: Short-cycle tertiary, bachelor or equivalent, master or equivalent and doctoral or equivalent (levels 5-8); ED5: Short-cycle tertiary; ED6: Bachelor or equivalent; ED7: Master or equivalent; ED8: Doctoral or equivalent; ED9: Not elsewhere classified; ED5A: First stage of tertiary education, programmes that are theoretically based/research preparatory or giving access to professions with high skills requirements; ED5B: First stage of tertiary education, programmes which are practically oriented and occupationaly specific

7.5 Employment contract

APPR: Apprentice-trainee; FIX: Fixed term (except apprentice and trainee); INDEF: Indefinite duration; TOTAL: Permanent and temporary jobs - Total; UNK: Unknown

7.6 Currency

EUR: Euro (from 1.1.1999)/ECU (up to 31.12.1998); PPS: Purchasing Power Standard