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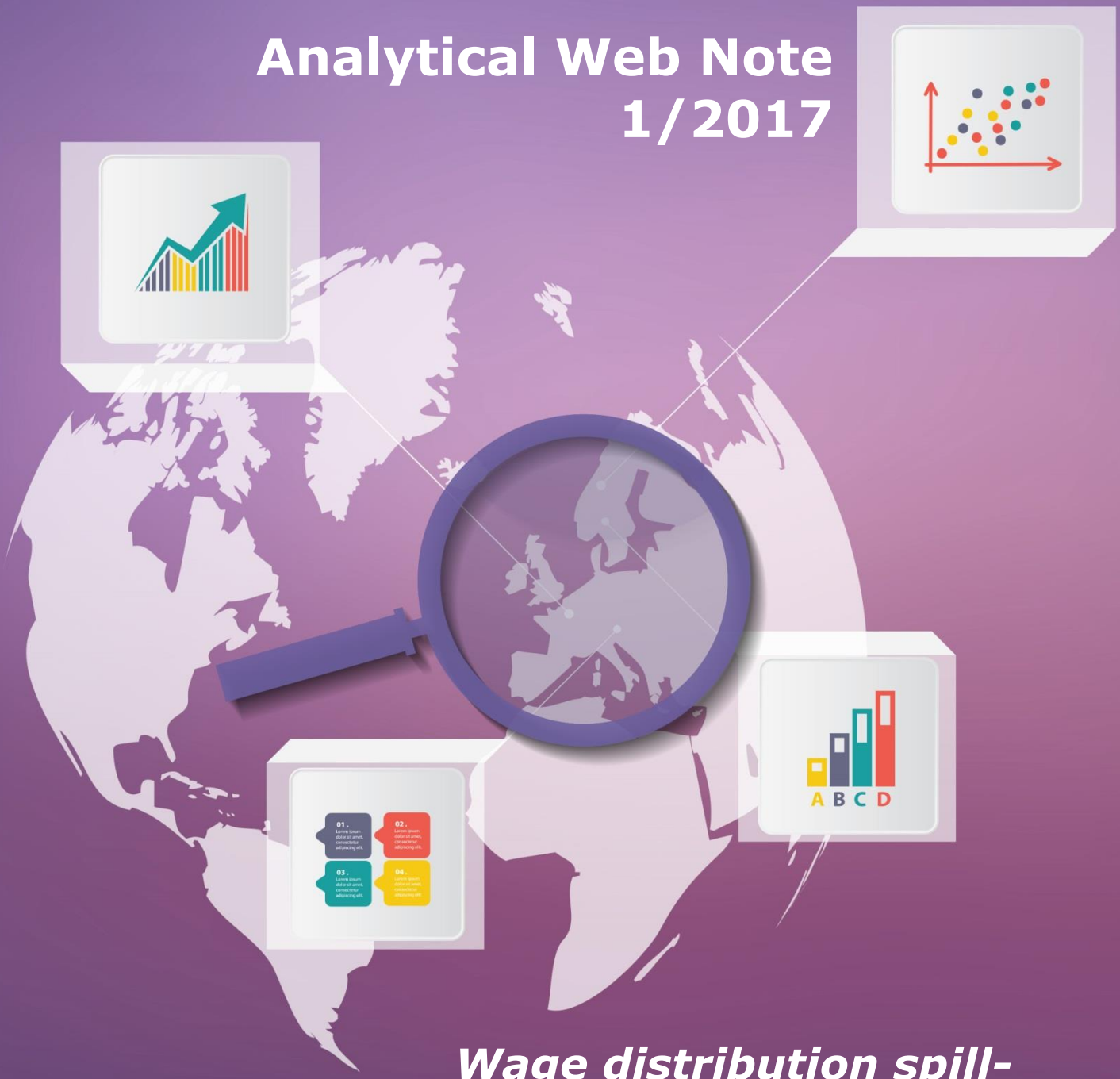

Wage distribution spill-overs from minimum wage increases in France

Employment, Social Affairs and Inclusion

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1. Introduction

This note analyses the impact of an increase in the minimum wage in France on the overall wage distribution for the period 2007 to 2012. The findings suggest that minimum wage increases have spill-over effects on the wage distribution and may increase wages up to the eighth decile, with the highest impact on the lowest decile and decreasing over the wage distribution.

Increases in the minimum wage may have an impact on the wage distribution for a number of reasons. First, an increase in the minimum wage may lead to dismissals of those earning the minimum wage before and hence has a negative impact on employment. This may change the composition and size of the labour force and hence the wage distribution. Second, for those remaining employed, an increase in the minimum wage will increase the earned income shifting the wage distribution curve to the right. This increase may lead employers to pay higher wages also for those with earnings close to the minimum wage as employers may want to keep broadly unchanged wage differentials to preserve effort and retain the most productive workers in the firm (Grossman 1983). Third, minimum wages affect individuals' fairness perception, which may also explain observed spill-overs (Falk et al. 2006). Finally, the increase in the minimum wage makes workers skilled enough to earn just above the minimum wage more attractive for employers, resulting in higher wages for workers above the minimum wage.[1] As result, even in the absence of employment effects, minimum wage increases are expected to have an impact on the overall wage distribution. Based on an extensive literature review, Belman and Wolfson (2014) conclude that the majority of studies suggest that an increase in the minimum wage does not only affect the wages of the individuals covered by the new minimum wage, but also wages in the rest of the wage distribution (e.g. Dickens et al. 1999; Lee 1999; Teulings 2003; Neumark, et al. 2004; Autor et al. 2010; Aeberhardt et al. 2012; Rani and Ranjbar 2015). However, there is still uncertainty on the magnitude of the spill-overs and how far they extend up the wage distribution.

Some authors have focused on how minimum wages affect the wages of those at the lower end of the wage distribution. For example, Di Nardo et al. (1996) and Lee (1999) find for the US evidence of a negative correlation between real minimum wages and wage inequality, which suggest there may be a significant spill-over effect of an increase in the minimum wage on wages in the lower tail of the distribution. These findings are confirmed for the UK, where Dolton et al. (2012) find that an increase in the proportion paid at or below the minimum wage is associated with reduced lower-tail inequality and that this effect becomes more pronounced when the minimum wage further increases.

Others have analysed the impact on the entire distribution by regressing minimum wage changes on wages at different points of the wage distribution. While most of these studies indicate that there is an impact of minimum wages on the lower tail of the wage distribution, there is uncertainty on how far the effect extends across the wage distribution. For example, Dickens et al. (1999) find a significant impact of the

[1] The increase in the minimum wage may induce employers to replace low with relatively more experienced and productive workers.

minimum wage up to the fourth decile in the UK. In France, Aeberhardt et al. (2012) evaluate the impact of the minimum wage on the earnings distribution using an unconditional quantile regression. They show that there are small, but statistically significant effects on the wage distribution up to the seventh decile. In contrast, there are also studies that find little or no evidence of spill-over effects (Dickens et al. 2012; Dickens and Manning 2004). For example, Dickens et al. (2012) find only evidence of a significant spill-over effect for the 5th and 10th decile of the wage distribution based on UK data for the period 1998 to 2010. However, when using a lagged term for the minimum wage the spill-over effect extends up to the 25th percentile, which may suggest that it takes some time before the impact of an increase in the minimum wage is felt at higher levels of the wage distribution.

This note complements the analysis of Aeberhardt et al. (2012), who analysed the impact of the minimum wage on the wage distribution of full-time male and female employees between 2003 and 2005 in France. Our analysis is based on EU-SILC micro-data for the period 2008 to 2013, which contains information on wages for the period 2007 to 2012. The EU-SILC data is a unique source that contains detailed information on socio-demographic characteristics of individuals and the households in which they live. EU-SILC data are complemented with information on the national statutory minimum wages, average wages and consumer prices in France obtained from national statistics.

2. Minimum wage setting in France

The minimum wage ("salaire minimum inter-professionel de croissance" -SMIC), which was introduced in 1969, applies to all French employees. It is set as the hourly gross minimum wage at the national level and updated at least once per year according to a rule established by law (L3231-4/5, *Code du Trava*il). There is an annual revision and in addition, the minimum wage can also be revised in the course of the year in case the consumer price index increases more than 2% as compared to the last revision. In case of an intermediate update of the minimum wage, the minimum wage is increased by the gap between the change in consumer prices since the last revision and 2%. For instance, in 2008, 2011 and 2012 the SMIC was adjusted in the course of the year.

Until 2010, the annual update of the minimum wage took place in July, but from 2010 onwards the annual update has taken place in December of the preceding year. To ensure that minimum wage keeps pace with the real increase in the average wage, the minimum wage is then increased by at least half of the increase for blue and the white collar real wages (L3231-8, *Code du Travail*). There is also the possibility of topping up these increases by government decision after consultations with experts and social partners, which is the so-called "coup de pouce". In symbols, the hourly minimum wage can be written as:

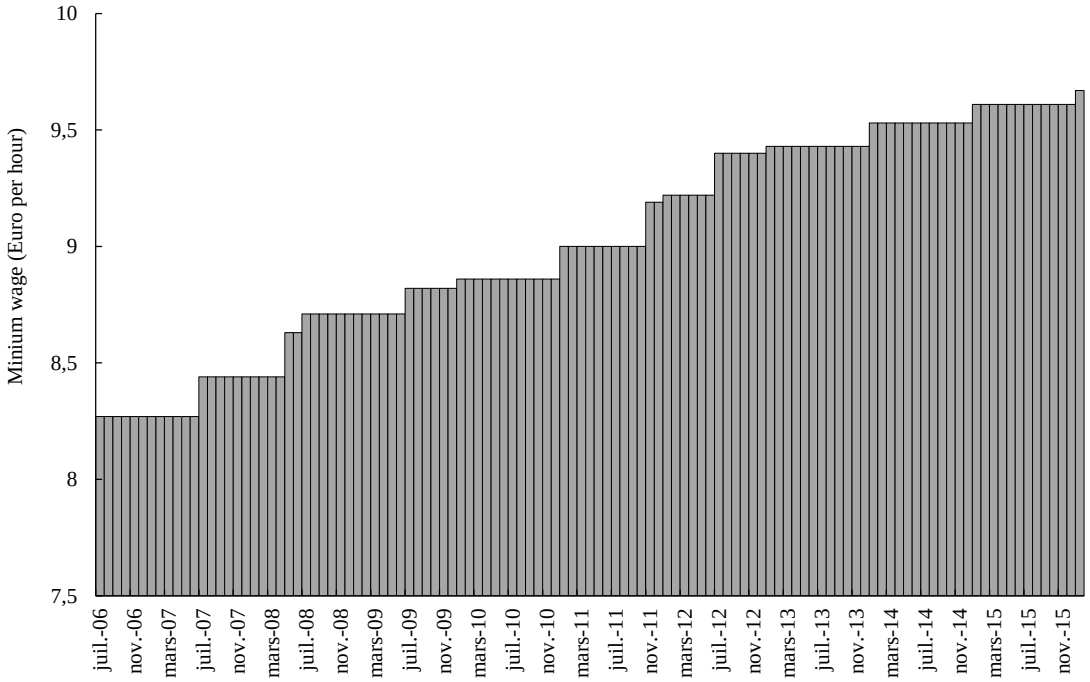
$$SMIC_t = SMIC_{t-1} * \left(DCPI_t + \frac{1}{2} PP_t + CP_t \right) \quad (1)$$

where the SMIC in year t is based on SMIC in the year $t-1$ and the evolution of the consumer price index ($DCPI_t$) (for those at the bottom 20% of the income distribution) plus half of the increase in the purchasing power of the wages for white and blue collar workers (PP_t) and a optional "coup de pouce" (CP_t). This increase can possibly be topped up by government decision after consultations with experts and social partners ("coup de pouce").

Between July 2006 and November 2015, the minimum wage was increased 13 times resulting in a cumulated change comparable to the increase of wages of blue and

white collars workers (Figure 1). However, the dynamics of the minimum wages varies over time reflecting the indexation mechanism, the discretionary changes and the potential feedbacks between changes in the minimum wage and changes in the blue and white collar workers' wage. For example, minimum wage increases have been relatively mild during quarters of low inflation, but lagged revisions were observed in period of declining consumers' price inflation (Rapport du Group d'Experts du SMIC 2015). While this may have supported income and consumption of the lowest income groups, the weaker dynamics of the producer prices may have led to an increase in the real wage which is relevant for hiring decisions. [2]

Figure 1: Evolution of the gross hourly minimum wage in France



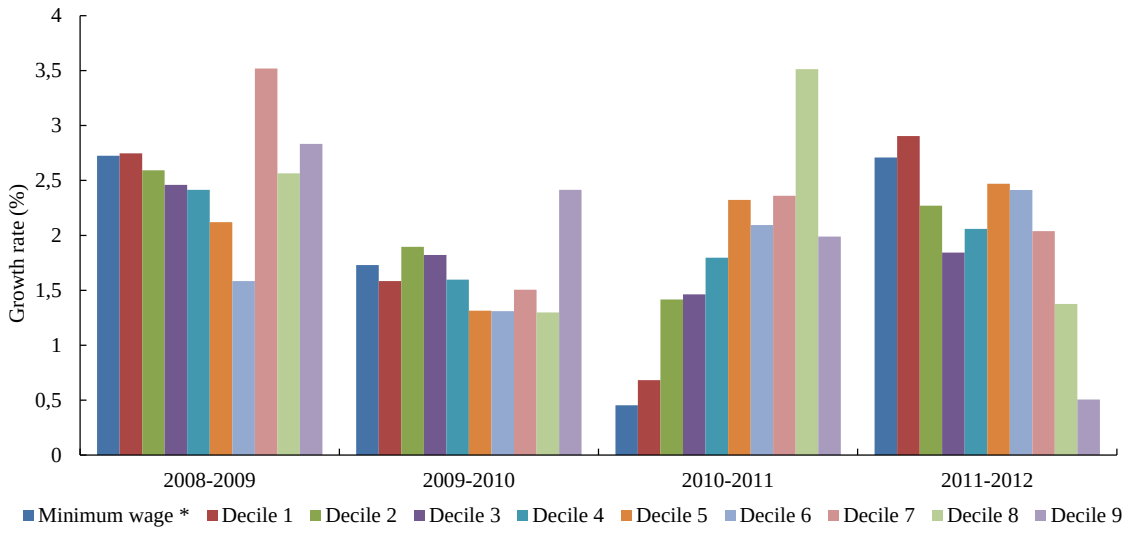
Source: http://www.insee.fr/fr/themes/tableau.asp?ref_id=natnon04145

Figure 2 shows the growth of nominal wages for each decile of the wage distribution. Two major observations stand out. First, minimum wages and wages in higher deciles were increasing during the 2008-2012 period. Second, in years that follow large increases in the minimum wage - e.g. in 2008-2009 and 2011-2012 - the increase of wages for the lowest deciles was larger than for the higher deciles. This evidence is suggestive that spill-over effects of minimum wage increases may be at play. However, wage growth for different income decile may be affected by various factors; for example, for 2008-2009 wages for the 7th to 9th decile have grown faster than what expected in case spill-over effects had been present due to factors different from increases in the minimum wage.

[2] For a panel of EU countries it is shown that *the pass-through of minimum wage changes on prices is limited, implying that minimum wage is effective in protecting low-wage earners' purchasing powers, European Commission, Labour market and wage developments in Europe 2016*.

The next section will explore the wage effects of minimum wage increases with the help of statistical multivariate techniques controlling for factors (job characteristics, such as age, sex, level of education) that may explain wage growth beyond the effects of minimum wage changes.

Figure 2: Nominal wage growth at each decile of the wage distribution



* Growth rate of the minimum wage lagged by one year

Source: Commission calculations based on EU-SILC

3. Analysis

3.1 Methodology and variables included

The spill-over effects of an increase in the minimum wage on wages in the rest of the wage distribution are quantified on the basis of a quantile regression. In case of a quantile regression, the distribution of the response variable, which is in this case the wage distribution, is split in groups with an equal number of observations. For example, in this analysis the wage distribution is split in ten groups, referred to as deciles. For each quantile, the methodology allows to estimate the linear relationship between the minimum wage and the conditional mean of the wage in the corresponding quantile. Hence, a quantile regression is equivalent to estimating the impact of the minimum wage at different points of the wage distribution and allows for a varying (i.e. non-linear) relationship between the minimum wage and wages across the wage distribution.[3] This is in contrast with the method of ordinary least squares (OLS) which only considers the linear relationship between the minimum wage and the conditional mean of the entire wage distribution. Compared to OLS, quantile estimates of the response measurements are robust to specific outliers.

More specifically, we estimate the following wage equation in a quantile regression framework:

[3] Our findings for a conditional quantile regression are valid also for unconditional quantile regression using the methodology proposed by Firpo et al. (2009). Results are available upon request from the authors.

$$Quant_{\theta}(ln\,(wage)_{it}|X_{it}) = \beta_0^{\theta} + \beta_1^{\theta}(ln(Minwage)_{t-1}) + \beta_2^{\theta}X_{it}$$

where the dependent variable is the natural logarithm of the hourly wage in time period t $(ln\,(wage)_{it})$, the main variable of interest is the natural logarithm of the minimum wage in time period *t-1* $(ln(Minwage)_{t-1})$ and X_{it} stands for individual and job characteristics, including age, age squared, gender, educational level, occupation, sector, firm size, temporary and part-time contract. Table 1 presents an overview of the variables included in the regression. In addition to the baseline model, the note presents a number of robustness analyses using the panel dimension of the EU-SILC data for the period 2009-2012.

Table 1: Variables included in the regression

Variable	Description
Wage	Natural logarithm of the hourly wage in t
Minwage	Natural logarithm of the minimum wage in t-1
Age	Age of the employee (in years)
Age squared	Age of the employee squared
Gender	Dummy variable that takes a value of one if the employee is a woman and zero if the employee is a man
Education	Categorical variable distinguishing between low education (ISCED level 0-2), medium education (ISCED level 3-4) and high education (ISCED level 5-6).
Occupation	Categorical variable distinguishing between high skilled occupations (ISCO level 1-3), medium skilled occupations (ISCO level 4-8) and low skilled occupations (ISCO level 9), following a classification proposed by ILO (2007).
Sector	Categorical variable distinguishing between Agriculture (includes Agriculture, Forestry and Fishing; notably Nace Rev. 2 A), Manufacturing (includes Mining and Quarrying; Manufacturing; Electricity, Gas, and Water Supply; notably Nace Rev. 2 B-E), Construction (notably Nace Rev. 2 F), Low-productivity Services (incl. Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles; Transportation and Storage, Accommodation and Food Service Activities, notably NACE rev. 2 codes G-I), High-productivity Services (incl. Information and Communication; Financial and Insurance Activities; Real Estate Activities; Professional, Scientific and Technical Activities; Administrative and Support Service Activities, notably NACE rev. 2 codes J-N) and Other Services (including public administration and defence, education, health, the socio-cultural sector, personal services such as hairdressers, activities of households as employers, and activities of extraterritorial organizations, NACE rev. 2 codes O-U).
Firm size	Categorical variable distinguishing between small (units of) firms (less than 11 employees); medium (units of) firms (11-49 employees) and large (units of) firms (more than 49 employees).
Temporary	Dummy variable that takes a value of one if the employee is working on a temporary contract and zero if the employee is working on a permanent contract
Part-time	Dummy variable that takes a value of one if the employee is working part-time and zero if the employee is working full-time

Data on hourly wages, individual characteristics and job characteristics are obtained from the 2008 to 2013 waves of the harmonised survey of European Statistics on Income and Living Conditions (EU-SILC). The sample used in the analysis consists of

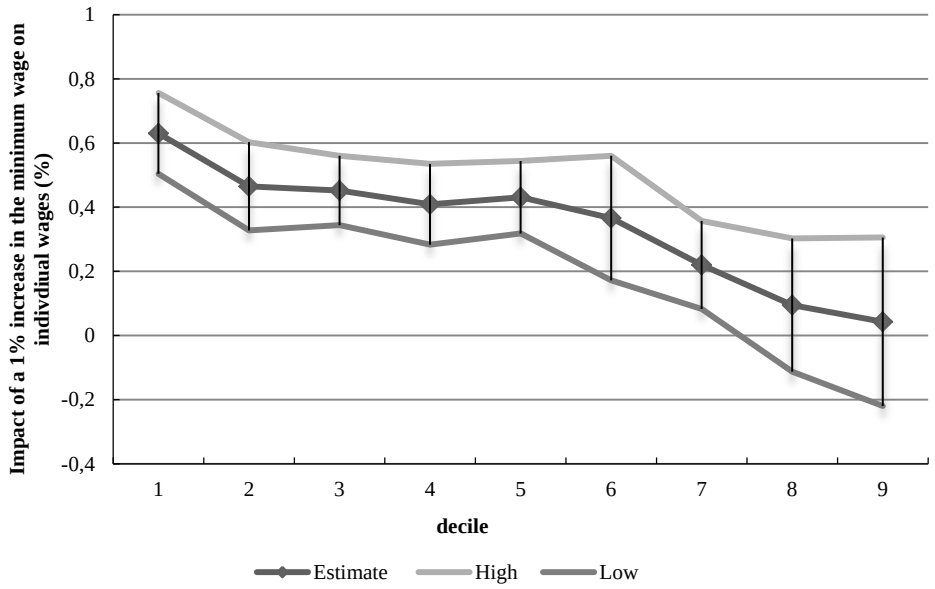
employees, including both full-time and part-time employees. The wage data in each wave refer to the reference period, which is the previous calendar year.[4]
The EU-SILC data is complemented with information on national statutory minimum wages[5], wages and consumer prices obtained from INSEE.

3.2 Results

3.2.1 Baseline model

The impact of the minimum wage along the entire wage distribution is assessed by mean of a quantile regression. A quantile regression allows estimating the marginal effect of the minimum wage on wages by decile of the wage distribution. The marginal effect of the minimum wage on wages, as represented by β_1^θ should be interpreted in the following way: a one percent increase in the minimum wage will lead to an increase in wages in decile θ by β_1^θ percent. Figure 3 presents the marginal effects of the minimum wage for the different deciles of the wage distribution together with the 95% confidence interval. Table 2 presents the regression results for all variables included in the quantile regression.

Figure 3: Impact of the minimum wage on the different deciles



Source: Commission calculations based on EU-SILC

[4] The hourly wage is calculated based on the gross yearly earnings of an individual (variable py010g), using information on the months worked (part-time and full-time) during the income reference period (sum of variables pl073 and pl074 for the 2009 to 2013 waves and pl070 for the 2008 wave) and the number of hours that the individual usually works in regular week (sum of the variable pl060 and pl100). The number of hours that an individual usually works is capped at the number of hours in a regular working week (35 hours). There are two shortcomings to this method. First, the hours usually worked per week refer to current hours while the reported income refers to the latest calendar year. These reference periods do not fully correspond, which may lead to under- or overestimation of full-time equivalent earnings for individuals that recently switched between full time and part time or have irregular working patterns. Second, the number of hours usually worked per week is capped at the number of hours in a regular working week. This allows reducing the potential bias as a result of unpaid overtime, but may lead to an overestimation of the hourly wage in case of systematic paid overtime.
[5] http://www.insee.fr/fr/themes/tableau.asp?ref_id=natnon04145

The results suggest that the minimum wage has an impact on the wage distribution only up to the eighth decile, i.e. it does not affect wages of the highest 20% income groups significantly. A one percent increase in the minimum wages increases wages in the lowest decile of the distribution by about 0.6%. However, this effect declines over the income distribution to 0.47% for the second decile and slightly above 0.4% for the following three deciles. Then it decreases rapidly to disappear in the eighth and ninth decile.

Table 2: Quantile regression estimates for deciles

		1st decile	2nd decile	3rd decile	4th decile
Minwage		0.616***	0.465***	0.452***	0.409***
		(0.0822)	(0.0763)	(0.0562)	(0.0677)
Age		0.0189***	0.0181***	0.0175***	0.0161***
		(0.00167)	(0.000951)	(0.00116)	(0.00147)
Age squared		-0.000163***	-0.000136***	-0.000118***	-9.37e-05***
		(1.87e-05)	(1.14e-05)	(1.34e-05)	(1.78e-05)
Female		0.616***	0.465***	0.452***	0.409***
		(0.0822)	(0.0763)	(0.0562)	(0.0677)
Education	**Medium**	0.0493***	0.0548***	0.0544***	0.0566***
		(0.00401)	(0.00496)	(0.00609)	(0.00481)
	High	0.134***	0.166***	0.179***	0.192***
		(0.00588)	(0.00567)	(0.00795)	(0.00744)
Occupation	**Low-skilled**	-0.219***	-0.270***	-0.296***	-0.319***
		(0.00849)	(0.00569)	(0.00711)	(0.00554)
	Medium-skilled	-0.161***	-0.206***	-0.225***	-0.240***
		(0.00431)	(0.00448)	(0.00498)	(0.00363)
Sector	**Manufacturing**	0.0962***	0.0856***	0.0831***	0.0987***
		(0.0174)	(0.0158)	(0.0127)	(0.0182)
	Construction	0.0984***	0.0876***	0.0894***	0.106***
		(0.0157)	(0.0175)	(0.0125)	(0.0188)
	Low prod. services	0.0632***	0.0485***	0.0514***	0.0624***
		(0.0169)	(0.0160)	(0.0136)	(0.0148)
	High prod. services	0.0858***	0.0887***	0.102***	0.117***
		(0.0155)	(0.0186)	(0.0126)	(0.0172)
	Other services	0.0527***	0.0363**	0.0262**	0.0268*
		(0.0180)	(0.0171)	(0.0126)	(0.0162)
Firm size	**Medium**	0.0308***	0.0350***	0.0376***	0.0389***
		(0.00537)	(0.00530)	(0.00501)	(0.00396)
	Large	0.0991***	0.104***	0.108***	0.115***
		(0.00440)	(0.00407)	(0.00421)	(0.00323)
Temporary		-0.126***	-0.132***	-0.117***	-0.107***
		(0.00517)	(0.00734)	(0.00429)	(0.00673)

Part-time		-0.0627***	-0.0516***	-0.0410***	-0.0326***
		(0.00772)	(0.00536)	(0.00571)	(0.00545)
Constant		0.528***	0.963***	1.060***	1.224***
		(0.178)	(0.148)	(0.132)	(0.147)

Table 2: Quantile regression estimates for deciles (continued)

		5th decile	6th decile	7th decile	8th decile	9th decile
Minwage		0.431***	0.366***	0.220**	0.0948	0.0428
		(0.0576)	(0.0991)	(0.070)	(0.106)	(0.134)
Age		0.0140***	0.0113***	0.00922***	0.00648***	0.000401
		(0.00114)	(0.000911)	(0.00177)	(0.00176)	(0.00327)
Age squared		-6.40e-05***	-2.50e-05**	4.97e-06	4.47e-05**	0.000118***
		(1.26e-05)	(1.09e-05)	(2.01e-05)	(2.06e-05)	(3.75e-05)
Female		-0.118***	-0.139***	-0.155***	-0.176***	-0.204***
		(0.00457)	(0.00334)	(0.00446)	(0.00443)	(0.00756)
Education	**Medium**	0.0533***	0.0573***	0.0566***	0.0521***	0.0377***
		(0.00432)	(0.00559)	(0.00761)	(0.00913)	(0.0101)
	High	0.206***	0.220***	0.237***	0.256***	0.283***
		(0.00445)	(0.00760)	(0.00791)	(0.0115)	(0.0178)
Occupation	**Low-skilled**	-0.340***	-0.355***	-0.367***	-0.386***	-0.411***
		(0.00767)	(0.00548)	(0.0105)	(0.00923)	(0.0158)
	Medium-skilled	-0.259***	-0.274***	-0.288***	-0.316***	-0.357***
		(0.00542)	(0.00522)	(0.00426)	(0.00656)	(0.00936)
Sector	**Manufacturing**	0.0951***	0.104***	0.0979***	0.106***	0.0873**
		(0.0122)	(0.0177)	(0.0152)	(0.0260)	(0.0349)
	Construction	0.101***	0.0975***	0.0880***	0.0980***	0.0826**
		(0.0138)	(0.0157)	(0.0140)	(0.0310)	(0.0349)
	Low prod. services	0.0545***	0.0592***	0.0577***	0.0653**	0.0623*
		(0.0153)	(0.0155)	(0.0156)	(0.0264)	(0.0348)
	High prod. services	0.119***	0.142***	0.135***	0.128***	0.109***
		(0.0134)	(0.0170)	(0.0131)	(0.0230)	(0.0349)
	Other services	0.00560	0.00334	-0.0111	-0.0199	-0.0554
		(0.0138)	(0.0171)	(0.0130)	(0.0267)	(0.0340)
Firm size	**Medium**	0.0376***	0.0362***	0.0295***	0.0284***	0.00885
		(0.00392)	(0.00446)	(0.00739)	(0.00686)	(0.0128)
	Large	0.114***	0.111***	0.110***	0.114***	0.0963***
		(0.00331)	(0.00626)	(0.00817)	(0.00811)	(0.0122)
Temporary		-0.0995***	-0.0830***	-0.0765***	-0.0307***	0.0277
		(0.00672)	(0.00604)	(0.00871)	(0.00973)	(0.0224)

Parttime	-0.0191***	-0.00438	0.00527	0.0297***	0.0841***
	(0.00550)	(0.00439)	(0.00581)	(0.00895)	(0.0156)
Constant	1.295***	1.546***	1.994***	2.422***	3.063***
	(0.127)	(0.220)	(0.241)	(0.240)	(0.289)

The results for the control variables are in line with our expectations. Older individuals earn higher wage, but there is a non-linear effect; the effect of age on wages is greater for the lower than for the higher part of the distribution, suggesting that employment tenure matters more for low than for high wage levels. Wages for women are lower than for men and this effect becomes more important across the wage distribution (i.e. the gender difference becomes larger for higher wage levels). Being educated increases wages and the increase is higher for high educated individuals as compared to medium educated individuals. Individuals employed in low-skilled or medium-skilled occupations earn less than those employed in high-skilled occupations and the impact of occupation becomes more important for those in higher deciles of the wage distribution. In addition, the sector in which individuals are employed will also affect wages; wages in manufacturing, construction, low productivity services, high productivity services and other services are expected to be higher than in the reference sector (agriculture). Furthermore, employees working on a temporary contract are expected to have lower wages than employees working on permanent contract, but the effect is lower for those in the higher deciles of the wage distribution. Finally, being in part-time employment reduces wages as compared to full-time employment.

There is a major shortcoming to this estimation. Due to the fact that the minimum wage is the same for all employees and only varies over time, it is not possible to disentangle the effect of an increase in the minimum wage from another wage or cyclical trends. As result, it is possible that our variable of interest (wages along the entire wage distribution) picks up some of these trends in addition to the impact of the minimum wage. Moreover, according to the minimum wage setting rule the minimum wage is adjusted on the basis of past developments in the average wage (i.e. the minimum wage is a predetermined variable). Thus, despite entering the equation with a lag, the minimum wage could still be endogenous and the estimated coefficient biased.[6] As a robustness check, the problem of potential endogeneity is addressed by normalising the minimum wage by the average wage (lagged) which is assumed to capture general changes in productivity in the economy, while not being directly affected by changes in the minimum wage (see Manning, 2016). In addition, to control for time-invariant heterogeneity, we will also estimate the impact of the minimum wage on wages across the wage distribution using the panel dimension of the EU SILC data.

3.2.2 Robustness checks

First, the effect of the minimum wage on wages is estimated by normalising the minimum wage with the average wage. The average wage is assumed to capture changes in productivity in the economy, while not being directly affected by changes in the minimum wage. The estimated regression is:

[6] Note that lagging the minimum wage is also appropriate given that since 2010 the minimum wage is revised in December of the preceding year.

$$Quant_{\theta}(ln\,(wage)_{it}|X_{it}) = \beta_0^{\theta} + \beta_1^{\theta}(l\,n(Minwage)_{t-1} - ln(AW)_{t-1}) + \beta_2^{\theta}X_{it} \quad (3)$$

where the dependent variable and X_{it} are defined as in equation (2) and the main variable of interested is the natural logarithm of the minimum wage normalised by the mean log hourly wage. The results are reported in column (a) of Table 3.

Second, the effect of the minimum wage on wages is estimated using the panel dimension of the EU SILC data for wages in the period 2009-2012. The panel dimension allows controlling for individual fixed effects. The estimated regression is:

$$\ln(Wage)_{it} = \alpha_0 + \alpha_1 \ln(Minwage)_{t-1} + \sum_{k=1}^{K} \alpha_{3k} QE_k + \sum_{k=1}^{K} \alpha_{4k}(\ln(Minwage)_{it-1} * QE_k) + \mu_i + \varepsilon_{it} \quad (4)$$

where the dependent variable is the natural logarithm of the hourly wage in time period t $(ln\,(wage)_{it})$, $ln(Minwage)_{t-1}$is the natural logarithm of the minimum wage in time period *t-1*, QE_k are dummy variables for each decile *k* and μ_i is the individual fixed effect. The main variables of coefficients of interest are the coefficient on the minimum wage variable and the coefficients on the interaction terms between the minimum wage and the decile dummies. In case the coefficients are significant, the combined effect of the coefficients on the minimum wage variable and the interaction term is equivalent to the impact per decile as provided by the coefficients of the quantile regression. The results are reported in column (b) of Table 3. In an additional robustness check we estimate the same regression but using the minimum wage normalised by the average wages as described higher. The results are reported in column (c) of Table 3.

Table 3: Regression coefficients for the robustness checks

	(a) Model A including the normalized minimum wage	(b) Model B using the panel dimension and minimum wage	(c) Model C using the panel dimension and normalised minimum wage
Minimum wage	-	0.372 (0.257)	-1.300** (0.559)
1st decile	0.673*** (0.193)	0.810*** (0.278)	2.715*** (0.609)
2nd decile	0.521*** (0.146)	0.730*** (0.270)	2.459*** (0.577)
3rd decile	0.370** (0.172)	0.583** (0.264)	2.176*** (0.581)
4th decile	0.347** (0.150)	0.429* (0.259)	1.890*** (0.574)
5th decile	0.325** (0.131)	0.396 (0.261)	1.608*** (0.567)
6th decile	0.224 (0.191)	0.497* (0.262)	1.715*** (0.579)
7th decile	-0.004 (0.240)	0.451* (0.265)	1.615*** (0.581)
8th decile	0.106 (0.295)	0.233 (0.262)	0.861 (0.596)
9th decile	0.017 (0.278)	0.003 (0.276)	0.659 (0.591)

Overall, the results of the robustness checks are in line with the results of the baseline model: an increase in the minimum wage increases wages across the wage

distribution with largest effect in the lowest decile. The impact decreases over the subsequent deciles.[7]

4. Conclusion

This note analyses the impact of the minimum wage on the wage distribution in France for the period 2007-2012 based on the EU-SILC data. The effect of the minimum wage on the wage distribution is estimated by a quantile regression.

The results indicate that the minimum wage has an impact on the wage distribution up to the eighth decile. A 1.0% increase in the minimum wages increases wages in the lowest decile of the distribution by about 0.6%. However, this effect declines over the income distribution, leading to a reduction of wage dispersion across individuals.

[7] Note that comparing the magnitude of the effect across the different model specifications is difficult due to differences in the specification of the main variable of interest ($(ln(Minwage)_{t-1}$) in model B and ($ln(Minwage)_{t-1} - ln(AW)_{t-1}$) in model A and C).

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