Minimum wage and spill over effects economics essay



The minimum wage puts a good sense of equality back into employee's relationship with the employer. Wages are considered to be a fair reflection of a worker's efforts, but in the past wages seemed to be a point of exploitation- what an employer would possibly get away with. In more simple terms, this puts a pressure to keep low-paid wages low. This downward pressure is partially removed with the help of minimum wage (BBC News, 2005). In practice, minimum wage regulations are a common mode of government intervention in the labour market. This can be contributed to the public's huge support for the policy and the government's great efforts to avoid being labelled as "anti-labour", which can be politically costly. The minimum wage has become a "symbol of decency and fairness" (Tony Blair as guoted by BBC News 2005) and multilateral institutions such as International Labour Organisation (ILO) have also supported the minimum wage policy as a tool to address income inequality and to improve workers' living standards. The distributional consequences of minimum wage have been pointed in the literature (Stigler, 1946), but the effect of minimum wages on the shape of the wage distribution received relatively less empirical attention than the effect on employment, which is the subject of extensive empirical investigation in many countries (Stewart, 2009). The continuous debate on minimum wage is whether this increase had effect on wages beyond the rises required to bring those previously below the new minimum up to it and how extensive such "spill-over" effects are (Stewart, 2009).

2. 0 Types of Spillovers

There are different types of spill-over that could occur namely wage, technology and productivity. A wage spill-over occurs if the high wages paid by a multinational resulted in higher wages for workers of competing local firms (Spero and Hart, 2010). A technological spill-over occurs if a technology employed by the Multi- National Corporation (MNC) is adopted by the local firm. Whereas, a productivity spill-over may occur when the presence of a multinational not only raises the productivity of employees associated with that firm but also raises productivity of local firms (Spero and Hart, 2010). The evidence on spill-over is mixed and wage spill-over occur in many countries but, the spill-over is highest in developing countries that had invested domestically in improving the skill levels of the employees. Categorically speaking, wage spill-over tends to be greater for skilled than for unskilled workers (Spero and Hart, 2010). But, why do spill-over really occurs and why this spill-over is important?

2. 1 Why Spill-over occurs?

Spill-over effects on the wage distribution can occur for different reasons such as the increase in the minimum wage. This increase in minimum wage will increase the price of low skilled labour and the demand for skilled labour would subsequently increase. This would eventually lead to a rise in wage rates (Stewart, 2009). Alternatively, it could lead to a rise in wages for specific employees above the minimum in order to preserve wage differentials. Wage differentials are significant for employees and productivity of employees may be affected. Martins (2004) in a matched employer-employee panel data during 1991-99 considered difference-in-

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differences (DID) method and found negligible wage differentials. The increase in minimum wages could also increase the reservation wages of employees searching for work in selected sectors. This would further increase the wages which the employers need to pay for recruitment. From the employer's perspective, firms could be led to reorganise the use of their workforce to realign the marginal products of their minimum wage workers with the new minimum wage. This could affect the marginal products of other workers (Stewart, 2009). In a laboratory experiment, the minimum wages have an important effect on subjects' reservation wages (Falk et al., 2006). Falk et al. (2006) in their article suggest that the minimum wage affects subjects' fairness perceptions and speculate that any observed spill-over effects could be left over. Flinn (2006) in their research provide evidence that minimum wages could also affect workers' reservation wages in search and matching models with wage bargaining.

2. 2 Significance of the spill-over

Spill-over is important in the evaluation of the impact on the wage distribution because wages are an important constituent for welfare and incomes. This spill-over could also be vital in the investigation of the wage inequality and the evolution of wage inequality over time (Stewart, 2009). The spill-over cannot be neglected as this may result in a misleading estimation of the effect of increase in the minimum wage (Stewart, 2004).

2. 3 Evidence of spill-over

Many researchers have addressed the issue of minimum wage spill-over effects. From Gramlich (1976) onwards, some have adopted the direct approach while others have taken the indirect approach. The majority of this https://assignbuster.com/minimum-wage-and-spill-over-effects-economics-essay/

evidence has been for the United States as Lee (1999) examined the cross-state variation in the relative level of the US federal minimum wage and found evidence of spill-over effects on specific percentiles of the wage distribution. The infamous book by Card and Krueger (1995) also found evidence of spill-over, but their findings are limited. Whereas, DiNardo et al. (1996) come up with results using an indirect approach that seem to be consistent with spill-over above the minimum. But, Neumark et al. (2004) examine effects on the individual wage changes and conclude the evidence of significant spill-over effects. The above research had been taken mainly in United States and now we will look for evidence in the Europe, especially countries like Portugal and the UK.

As compared to United States, there has been little work in testing for spillover effects of the minimum wage in the United Kingdom. Dickens and
Manning (2004) provide evidence available on such effects for the
introduction of National Minimum Wage in 1999 and find no evidence of spillover effects. Dickens and Manning (2004) provide evidence in the form of
percentile plots, but are unable in providing a test. Dickens and Manning
(2004) apply a Lee type model of spill-over effects to the cross-percentile
variation in data for the care homes sector. So, not surprisingly UK is
referred to as the exception which may hold invalid. Butcher (2005) and Low
Pay Commission (2009) analyze percentage changes in hourly pay
percentiles for longer time spans. LPC (2009) provide evidence of spill-over
in the period 1998-2004. No standard errors were presented, but inspection
of the figure in the Low Pay Commission report in the light of standard errors
calculated for this report suggests that the spillover they estimate for the

period 1998-2004 are probably significant up to about the 12th percentile, while those for 2004-2008 are probably insignificant at all percentiles above the National Minimum Wage (cited in Stewart, 2009).

2. 4 Critical Analysis of Spill-over

The conclusions from empirical studies on wage spillovers from Foreign Direct Investment are mixed. Some studies suggest that wages in domestic firms are improved by the presence of FDI (Lipsey and Sjoholm, 2001; Driffield and Girma, 2003). Other researchers find negative effects of foreign presence on wage levels of domestic firms (Barry, Gorg and Strobl, 2005). Finally, some studies find that FDI has no significant impact on domestic firms' wages (Aitken, Harrison and Lipsey, 1996). The existing literature has several shortcomings, which explains the failure to detect significant wage spillover effects on domestic firms. Most research has examined the horizontal wage spillovers, relating the wage level of a domestic firm to the presence of foreign firm. It can be the case that the foreign firms pay higher wages than domestic firms, even after controlling for size and other characteristics (Girma et al, 2001; Lipsey and Sjoholm, 2001).

3. 0 Literature Review

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The aim of the minimum wage increases is perhaps to change the distribution of the wage and it is well established in the literature that minimum wage compresses the wage distribution but, there is no consensus on the direction or size of the effect on employment (Lemos et al., 2004). Card and Krueger (1994) have looked at the effect of minimum wage on employment through a case study of food industry in Pennsylvania and New Jersey. They are unable to come up with evidence that the increase in https://assignbuster.com/minimum-wage-and-spill-over-effects-economics-

minimum wage reduced employment at food restaurants. This is coherent with recent studies that are based on comparisons of time-series of affected / unaffected markets but, it is opposite to the textbook model of the minimum wage (Card and Krueger, 1994). Neumark and Wascher (2002) in their later article present evidence on the effects of minimum wages on family incomes. Their results indicate that minimum wage increases the probability of the poor families escaping poverty and the probability of previously non-poor family fell into poverty. The approximated rise in the flow into poverty is higher. They also found that minimum wages have a boosting effect on the incomes of poor families. The different trade-offs created by the minimum wage increases reflect income redistribution among low-income families than income redistribution from upper to low-income families (Neumark and Wascher, 2002). Portugal and Cardoso (2006) in their article discuss the changes in the legislation in Portugal during 1980s which provided good conditions for the examination of employment effects of minimum wage, as the minimum wage increased sharply for selected employees. Portugal and Cardoso (2006) count on an employer-employee panel data set for modelling gross worker flows in new, continuing and firms that were going out of business (Portugal and Cardoso, 2006). They have used a count regression model. Employment patterns for teenager which is the affected group are compared to that of the other group such as the aged employees. The effect of the increased minimum wage has been the cutting down of separations from the employer that during the period of analysis counter balances for the reduction of accessions to new firms (Portugal and Cardoso, 2006). Statistically, the dispersion of wage distribution is claimed to be much lower in Europe than in the United States (Bertola, Blau and Kahn https://assignbuster.com/minimum-wage-and-spill-over-effects-economicsessay/

2001). "Wage compression" in economic terms means the difference in wages across employees or firms in Europe that does not reflect the (wider) difference in productivity (Mourre, 2009). This mismatch may be understood in a way by comparing the level of relative wage and relative productivity. Looking at wage moderation in the Euro Zone seems to have a crucial element of macroeconomic stability in recent years and this partially explains the resilience of employment in the face of the economic recession (Mourre, 2009). According to Mourre (2009), there is still long way to go towards achieving Lisbon employment targets in Europe. Consideration should also then be given to the microeconomic structure of wages which could affect the macroeconomic performances.

Stewart (2004) approximates employment effects in UK with the introduction of National Minimum Wage in 1999. Difference-in-differences (DID) approach is used and the estimator is based on position in the wage distribution. An adjusted estimator is also used for the response to the change in the employment pattern. No critical employment effects are found for any of the estimators (Stewart, 2004). Stewart (2009) in a report explores whether the increase in the National Minimum Wage (NMW) have effects on wages beyond the increases required to bring those previously below the new minimum up to it, and if so how extensive such "spill-over" effects are. Spill-over effects can be predicted for many reasons in a labour market (Stewart, 2009). Stewart's report used 3 approaches in testing for spill-over effects. The first includes an inspection of individual wage changes and the second includes a comparison of wage quantiles. The final approach uses a comparison of estimated wage distribution functions (Stewart, 2009). The

tests in each approach are applied to the introduction of MinimumWage in 1999 using data from the Annual Survey of Hours and Earnings (ASHE). The definition of the hypothetical wage distribution is of great importance. The tests were conducted under different assumptions about this counterfactual distribution (Stewart, 2009). Since the concept of minimum wage spill-over effects is based on a comparison with a counterfactual position, the approximation of the spill-over effects of the Minimum Wage were found to depend significantly on the assumptions made for the counterfactual (Stewart, 2009).

Dickens and Manning (2004) found that UK National Minimum Wage (NMW) had a lesser impact on UK wage inequality because it was laid at a moderate level and evidence suggests the presence of negligible spill-over effects. These negligible spill-over effects account for the small numbers of workers that were affected. The data collected relates to care homes where the National Minimum Wage affected nearly half of the employees. They found no evidence of large spill-over effects (Dickens and Manning, 2004). Martins (2004) evaluate the impact of Foreign Direct Investment on the Portuguese labour market. The data set used is an employer-employee panel data that covers the period 1991-99. When considering difference-in-differences (DID) method, the wage differentials are found to be negligible. With the Ordinary Least Squares (OLS) method, the multinational premium falls significantly when different characteristics of employees were added. The spill-over effects found are significantly positive.

3. 1 Neoclassical Theory of Minimum Wage Effects

In Neoclassical theory, minimum wages are considered just like any other price floor. The firms reduce the quantity of labour demanded provided the wage will exceed the market-clearing wage. The magnitude of this reduction will depend upon the wage increase and the wage elasticity of labour demand (Leonard, 2000). Some employees receive the higher wage and are better off as compared to other employees. Whereas, the other employees wage is worth less than the new minimum, will work for lesser hours or may be laid off in the future. If the quantity of labour refers to employment, then the wage gains of those who keep their jobs must be traded off against the wage losses of those who lose their jobs (Leonard, 2000).

3. 2 Current Controversy of Minimum Wage

The current minimum wage controversy derives from literature in empirical labour economics, arguing among different claims that increases in minimum wage does not lead to unfavourable employment results for low-wage workers as summarized in the famous book "Myth and Measurement: The New Economics of the Minimum Wage" by Card and Krueger. The current controversy arises because "the new economics of the minimum wage" is at odds with neoclassical price theory, which predicts disemployment and with the aid of econometric research continuously finds evidence of disemployment effects (Leonard, 2000). The findings of Card and Krueger (1995) are at odds when compared to most of the labour economists in United States believe (Whaples 1996). Both, Card and Krueger understand as they comprehend of their project as a negation of neoclassical price theory's

expectations and of the econometric proof provided in its support (Card and Krueger, 1995, 396-97).

3. 3 Origins of Wage Compression

Economic theory offers two explanations for the origins of wage compression. The first describes wage compression as being caused by the labour market institutions e. g minimum wages affecting the lower end of wage distributions, trade-unions, etc. Koeniger et al. (2005) explore the significance of labour market institutions such as unions, the regulations of firing and minimum wages for the evolution of wage inequality across countries. Their approximates for more than 10 OECD (Organisation for Economic Co-operation and Development) countries suggest that labour market institutions can account for a large part of the change in wage inequality across countries (Mourre, 2009). But, the other explanation identifies the cause for wage compression. Booth and Zoega (2002) provide foundations for wage compression by modelling wage-setting in a competitive labour market. In their model, wage compression arises quite naturally in market economies and does not depend on the existence of institutional structures such as minimum wages and unions. Shimer (2004) also comes to the conclusion of wage dispersion in equilibrium, when all employees and firms are uniform. When firms are composed of diverse elements, the more productive firms will pay higher wages and employees would for obvious reasons switch employers when they see a more productive opportunity. Large empirical evidence supports the determination of wages, suggesting firms pay different wages to similar employees allowing wages to deviate from productivity. Krueger and Summers (1988) show the

evidence of few United States industries paying wages up to 20% above and below the average wage. In the Euro zone, Genre, Momferatou and Mourre (2005) show that the characteristics of employees fail to explain wage differentials across industries. This could happen only if the employers are pursuing different wage policies. The other scenario may be that high-wage firms attract more skilled workers.

4. 0 Methodology

4. 1 Data

Quadros de Pessoal (QP) is a longitudinal data set that matches firms with employees in Portuguese economy. The data is collected annually by Ministry of Employment and Social Security (Ministerio do Emprego e Seguranca Social in Lisbon) that is based on an inquiry to which each institution with wage-earners by the law must respond. The collected data covers employees working in March every year. Workers on short leave e. g holidays, medical, etc are included but long leave (e. g military service) workers are not reported. The database reports main salary and salaries which are split into the components like salary2, salary3, salary4 and salary5. These components include overtime work, regularly and irregularly paid subsidies, etc. The amount an employee works overtime is also reported. The analysis is focused on the wages of fulltime employees. The observed data includes variables like gender, age, experience, education, tenure with the firm, sales, job level, admission date, earnings, etc. However, there are problems faced by panel data sets like as oversampling or undersampling of specific groups, other sampling issues and panel attrition.