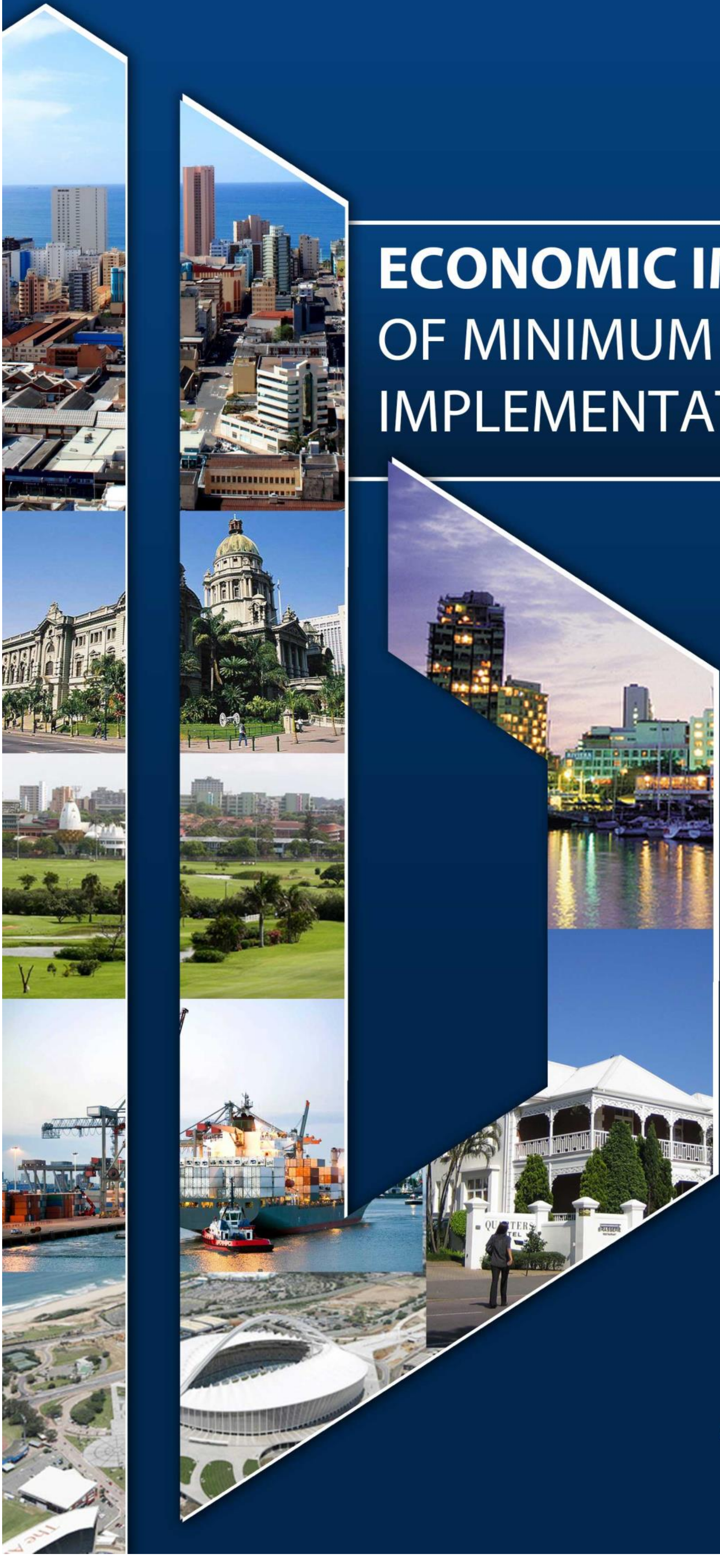


# ECONOMIC IMPLICATIONS OF MINIMUM WAGE IMPLEMENTATION

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# ECONOMIC IMPLICATIONS OF MINIMUM WAGE IMPLEMENTATION

At present there is no coherent national minimum wage policy in South Africa. The general consensus in many quarters is that the apartheid wage structure has not been fundamentally altered, as many black South African workers in the private sector continue to live in poverty. Coleman (2013) suggests that in 2011, nearly half of South Africa's workers earned less than R 3033 per month, while he goes on to estimate that the minimum living level (MLL) is roughly R 4000. It is evident that many minimum wages currently prescribed by sectoral determinations and bargaining council agreements fall well below the MLL threshold. This begs an important question: Will the implementation of a national minimum wage policy reduce poverty and improve the standard of living for South Africans?

## What is a 'minimum wage'?

A 'minimum wage' may be defined as the smallest hourly wage rate that an employee may be paid as mandated by the law. Periodic adjustments in this minimum wage rate may be required to control the effects of inflation and a host of other factors[1]. A traditional minimum wage has three characteristics, namely: the minimum wage must be adequate to satisfy the purchase of vital necessities (such as food, clothing, housing, education and recreation); the minimum wage represents the lowest legal level of remuneration; and finally, a failure to abide by the mandated minimum wage is punishable by the force of the law.

In considering the determination of a minimum wage, several other important criteria are usually considered. These include:

- The ability of the employer to pay the mandated wage rate (this is particularly important for SMMEs);
- Regional differences in the cost of living;
- The prevailing labour market situation, i.e. the interaction of the supply and demand of labour in a relatively competitive labour market;
- The productivity of the individual worker in relation to other workers conducting comparable work in other institutions or industries; and

[1] Sulaiman (2012)

- The relative 'power' afforded to labour unions (this is dependent on the negotiation skills of the party; the personality and societal culture of the negotiators; and the culture of collective bargaining).

**Why mandate a minimum wage?**

The general consensus is that the purpose of implementing a minimum wage is to afford wage-earners the requisite social protection in terms of the minimum permissible levels of wages. A fixing of the minimum wage also provides workers a reasonable income to meet their basic needs, as well as prevent the exploitation of ill-informed workers.

The increased attention garnered by minimum wages in recent times is attributable to COSATU's repeated calls to implement a national minimum wage. COSATU's calls are supported by their research into the apparent successes of Brazil's consolidation of a national minimum wage (an increase in the national minimum wage of 81% in real terms between 2003 and 2010, or roughly R3000 per month). Coleman (2013) highlights several Brazilian achievements, including:

- The creation of 17 million new jobs between 2002 and 2011.
- A decrease in unemployment from 11, 5% in 2003 to 6, 1% in 2010.
- A dramatic boosting of the proportion of formal employment in the economy. Between 2004 and 2008, formal jobs outpaced informal jobs by 3:1.
- A marked reduction in the number of Brazilians living in poverty (a decrease from 61, 4 million in 2003 to 41, 5 million in 2008).
- Significant strides in improved labour inspection which has assisted labour compliance[2].
- Increased disposable incomes have driven domestic demand and promoted the creation of formal employment opportunities (the contribution of domestic demand to Brazilian GDP increased from -0.5% in 2003, to 9% in 2010)[3]. This finding is particularly interesting as it indicates that a minimum wage regime need not necessarily inhibit economic growth, if the accompanying policy actions are appropriate and complement the minimum wage legislation.

[2] COSATU argues that this achievement is evidence that the implementation of a minimum wage regime does not increase unemployment and black market exploitation of workers.

[3] COSATU claims that net external demand has been minimal or negative in terms of GDP growth.

**What is COSATU calling for?**

i. A coherent national wages and incomes policy, which is to be combined with an appropriate macroeconomic and industrial policy, and not the policy outlined in the National Development Plan. The wages and incomes policy must be complemented by a developmental state, as part of a comprehensive strategy[4].

ii. A national minimum wage will be one cornerstone of this national policy and will aim to protect low-wage workers.

iii. Legislated comprehensive sectoral bargaining will improve on the minimum wage threshold.

**What is the proposed minimum wage threshold?**

According to a Mail and Guardian report in September 2012, the Labour Research Service proposed a living wage level of R 4 105, while UNISA suggested R 4 000 per month for a family of five. By contrast, the average minimum wage earned by those workers who fall under sectoral determinations is R 2115 per month (based on 2011 figures).

**Expected outcomes from the implementation of a minimum wage policy**

A popular article cited in several studies of the relationship between minimum wages and employment is that of Stigler (1946). Stigler finds that the implementation of a minimum wage policy or a hike or increase in minimum wages has a significant and negative effect on aggregate employment (Stigler, 1946:361).

Economic theory informs us, that in a competitive labour market, equilibrium wages are set where workers earn their own marginal product. In this labour market, a minimum wage acts as an artificial price floor, which will have the effect of increasing the earnings of low-wage workers, and as a result, firms will choose not to employ as many workers at the new increased wage rate (as this would imply that firms would pay workers more than their marginal product). When met with an

[4] COSATU argues that if the minimum wage policy in Brazil was not coupled with an increase in domestic productive capacity, it would not have driven the creation of large scale formal employment opportunities.

increase in the minimum wage, these low-wage workers will have to increase their productivity to match the new increased wage, or they will be retrenched.

More recently, Brenner (2004) has posited two overall effects of the imposition of a national minimum wage policy:

i. In the private sector, firms which are covered by the mandated minimum wage policy, in experiencing a higher wage floor, will be likely to scale-back their use of low-wage labour through three channels: workplace re-organisation; a substitution of new machinery or equipment; or the replacement of low-wage workers with higher skilled (and already higher paid) workers. The most extreme response to the implementation of a national minimum wage policy could entail the re-location of the firm out of the region or country in order to avoid the living wage mandate.

ii. In the public sector, a minimum wage regime would impose new costs on municipal contractors, and much of this cost will be transferred back to municipalities in the form of increased contract costs. This imposition of greater costs on contractors may risk a reduction in the provision of existing city services- this has the potential to create a need for additional rates and levies.

**How do we expect firms to adjust to a national minimum wage policy?**

There are three basic ways in which firms will adjust their behaviour when faced with a minimum wage mandate. The first and most common strategy is for the business to increase the price of their goods and services in order to reflect higher production costs. However, it is likely that the level of competitiveness of the market and price sensitivity (i.e. elasticity of demand) of consumers may prevent this.

Traditionally, it could be expected that a positive correlation exists between the implementation of minimum wage policy and worker productivity. For firms, the implementation of a minimum wage policy is likely to increase the firm's overall efficiency as the threat of increased operational costs will encourage the firm to become more attentive to cost-saving measures and changes in work organisation. Thus, a second strategy to cope with a minimum wage policy is improvement in worker productivity coupled with a redistribution of firm resources. Common areas of cost-saving for firms include water, energy and waste efficiency interventions.

The knee-jerk reaction of the private sector to the implementation of a minimum wage, especially among SMMEs, is to retrench staff. Thus, the third strategy of firms is to reduce the size of its labour force. However, it is unlikely that South Africa's relatively rigid labour legislation will allow for this. Rather, it is more likely that South African firms will choose to enact some permutation of adjustments (be it price, productivity or distribution of resources) prior to the consideration of retrenchments. Firm relocations are not a popular choice as the modest magnitude of minimum wage cost increases often discredits the feasibility of this option.

**International empirical evidence of effects of minimum wage policies on employment**

In a bid to gain a better understanding of the true effects of a minimum wage on employment, an analysis of the international empirical literature was conducted. This evidence is presented below:

| **Study** | **Finding** |
|---|---|
| Brander (2013) | From a review of Canada's empirical literature, Brander found that minimum wages had a **slightly negative effect** on Canadian employment levels. |
| Brenner and Luce (2003) | Under the Boston Minimum Wage Ordinance, Brenner and Luce found that **employment increased**, in covered firms, by over 15% of pre-living wage levels. They also found that employment grew faster for those firms which were forced to increase wages to comply with the living wage law than for those who do not. |
| Campoleti et al (2006) | After controlling for differences in skills between workers and the duration of work in Canada, Campoleti et al found that for youth, a 10% increase in the minimum wage rate caused a **decrease in employment** of 2,65%. |
| Card (1992) | In a study of the Californian retail sector, Card found **no employment decrease** following an increase in the state minimum wage. |
| Card and Kreuger (1993) | In a study of the New Jersey fast food industry, Card and Kreuger found that following the 1992 increase in minimum wages, **employment increased** (occurred during a recessionary period). |

| Study | Finding |
|---|---|
| Douty (1960) | Following an increase of $0, 25 in American minimum wages in 1956, Douty found that **employment decreased** and firms with the largest number of low-wage workers saw the largest negative employment effects. |
| Fajana (1983) | Fajana found that there was a relatively strong and **negative relationship** between employment and wage changes in the Nigerian industrial sector- a 100% increase in average wages will lead to a 23% fall in employment. It was concluded that an **increase in federal minimum wages caused unemployment**. |
| Flinn (2006) | Flinn found that high minimum wages have had no impact on the employment rate, and thus minimum wages considerably higher than current levels could lead to **general welfare improvements.** |
| Fortin and Lacroix (1997) | Fortin and Lacroix found that young men and women were **less likely to find employment after a minimum wage increase**, suggesting that the length of time young people spend unemployed is increased by the minimum wage. |
| Howes (2002) | In San Francisco, Howes found that the living wage law **decreased turnover** for homecare workers by 20%. |
| Katz and Kreuger (1992) | In a study of the Texas fast food industry, Katz and Kreuger found a **slight positive correlation** between minimum wages and employment. The proportion of full-time workers increased, while the number of part-time workers fell. |
| Machin and Manning (1994) | In a study of the wage councils' mandated minimums, Machin and Manning found a **positive correlation** between employment and wages in many of the wage councils in Britain. |
| McKee and West (1984) | McKee and West found that an increase in the minimum wage caused a shift away from part-time workers and towards a smaller number of full-time workers. |

| Study | Finding |
|---|---|
| Reich et al (2003) | Reich et al found that total **employment increased** by 15%, in covered firms, following living wage implementation. |
| Stewart (2003) | In a study of the impact of the implementation of the 1999 minimum wage in the UK, Stewart found **no adverse effect on employment** of the probability of subsequent employment among those wages which would have had to be raised to comply with the minimum wage standard. |
| Stigler (1946) | Stigler finds that the implementation of a minimum wage policy or a hike or increase in minimum wages has a **significant and negative effect on aggregate employment.** It was also found that a minimum wage mandate pushes workers into the informal sector, where their work is unregulated and their wages are potentially very low[5]. |

The international empirical evidence does not provide a clear indication of the employment outcomes of a minimum wage regime. Of the 16 studies investigated, six of them find negative effects from the implementation of a minimum wage policy, another six find the minimum wage policy to have positive effects on employment, and the remaining four studies find a neutral outcome for employment. One must be cautious in directly comparing these studies as they are formulated utilising different methodologies and assumptions. One must also exercise caution in considering the findings of these studies due to the countries in which the studies take place, such as the American and Canadian cases where the portion of the labour force which is targeted by the minimum wage policy is occupied in the vast majority by part-time, young workers with few dependents in their respective households.

[5] Many economists believe that minimum wages distort the labour market by causing a shift in the rate of part-time to full-time work. Full-time workers tend to earn higher wages than part-time workers and they are usually much more productive. An increase in the minimum wage would reduce employment among part-time workers more than full-time workers.

**South African empirical evidence of minimum wages on employment**

The South African empirical evidence is presented below:

| Study | Finding |
|---|---|
| Conradie (2004) | In a study of 190 grape farmers, Conradie found that a wage increase of 10% resulted in a 3-6% **decrease in employment levels**. |
| Murray and Van Walbeeck (2007) | In a survey of sugarcane farmers, Murray and Van Walbeeck find no large dis-employment effects as a result of the agricultural sectoral determination.<br>The authors do suggest that the installation of the sectoral determination **decreased the average number of hours worked,** and that there was a move from labour to capital-intensive farming methods where applicable. |
| Pressly (2014) | Pressly found that in the agricultural sector, following the implementation of an agricultural sectoral determination, **jobs in that sector decreased** from 2, 1 million to 770 000. |

The South African empirical literature on the topic of minimum wage policy is relatively scant. All three of these studies investigated here occurred in the agricultural sector. Two of the studies found that a wage increase, in the form of a sectoral determination, resulted in a decrease in employment levels. Although Murray and Van Walbeeck's study, found no significant dis-employment effects from the implementation of an agricultural sectoral determination, the study did find a decrease in the average number of hours worked and a move from labour to capital-intensive farming methods.

In a bid to gain greater clarity in the macroeconomic effects of a minimum wage policy in an economy with a similar structure to South Africa, the Thai case was investigated. In 2012, the Thai government implemented a Bt300 daily minimum wage (which is expected to affect some 14, 6 million workers in formal employment). The Thai Development Research Institute (TDRI) found that small and medium-sized businesses will be the most likely to be affected by a minimum wage policy. In order for manufacturers to cope with the implementation of a minimum wage policy, the TDRI found that workers would have to increase their productivity by 8%. It is expected that to facilitate this increase in productivity, businesses will have to initiate in-house training programmes. A Bank of Thailand (BoT) study found that this increase in wages to the minimum wage threshold would slow the growth of national GDP by 1,7 percentage points, and employment would decrease by 5,5%

(between 600 000 and 700 000 workers). The minimum wage is also likely to increase the rate of inflation by 1 percentage point, while consumption demand from the private sector would decrease by 1,7%. Thus, the BoT study concluded that the minimum wage policy posed an inflationary risk.

## Crucial factors which determine the success of a minimum wage policy

Johnson (1969:602) warns that a minimum wage mandate which is applied universally across all sectors of the economy will have an unambiguously negative effect on employment. Rather, he suggests that a minimum wage applied to a specific sector can provide an outcome where workers benefit. The outcomes of the South African agricultural sectoral determination, explored earlier, do not yield positive employment outcomes. However, this finding may be isolated to that sector. The Chamber concedes that sectoral determinations may be the means to satisfy the demands of workers without constraining the operations of businesses. To this end, the Chamber proposes three factors which are crucial to the implementation of successful sectoral determinations:

i. Effective penalties for firms which explicitly violate the mandate

ii. Appropriate procedures and compensation for workers whose rights have been violated

iii. Suitable resourcing (financial, staffing, facilities) of the enforcement authority

Most importantly, it is imperative that social partners are actively involved in both the design and operation of the sectoral determination policy and the operation of the relevant enforcement regimes. This collaboration between social partners will foster an environment of compliance and reduce the likelihood of perverse behaviour on the part of businesses and labour organisations.

## Conclusion

The purpose of this paper was to understand the economics and dynamics of a national minimum wage policy. The paper explored the motivation for the implementation of such a policy and explored the empirical literature to gauge the effectiveness of this type of policy. The international empirical literature highlighted that the outcomes of a national minimum wage policy on employment levels is highly dependent on the econometric methodology selected and the characteristics of the local labour market. The South African literature was confined to the agricultural sector and provided an argument against a minimum wage as it has the propensity to increase unemployment, and in some cases decrease the number of hours worked per individual. The Thai case was explored and it was evident that a national minimum wage policy poses a significant inflationary risk for the macroeconomy. This risk, coupled with decreased consumption demand from the private sector does not deliver a convincing case for a national minimum wage regime. The Chamber however acknowledges the propensity of appropriate sectoral determinations to yield positive employment outcomes, and provides recommendations to achieve this.

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