



## Impact of minimum wage policies in Ecuador

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### Key messages

- Minimum wage increases have helped to effectively raise wages of low wage workers. These results may be linked to reduced inequality over the same period.
- Policy makers should be wary of the effects of the recent high-growth period and be aware that minimum wage increases could exacerbate unemployment effects during an economic downturn.
- Compliance with minimum wage policies may be a problem as wage increases are linked to decreased hours worked for women. Mechanisms to enforce fulfillment of both hours and wages may be called for in this case.

### Minimum wages in Ecuador

Since coming to power in 2007, the current Government of Ecuador has revised the structure of minimum wages on an annual basis aiming to improve wages for the lowest paid members of the population and reduce inequality.

Minimum wages in Ecuador vary according to industry and occupation, these are called “sectoral minimum wages”. These wages cannot be lower than the “basic unified minimum wage” (known by its Spanish acronym: SBU).

In some years, the increase in the SBU has been significantly higher than inflation and productivity growth. Meanwhile, the adjustments to sectoral minimum wages have varied greatly – with elections seeming to have a greater influence than the labor market.

Although the minimum wage applies to all private-sector wage workers making social security contributions, it is noticeable that the average wages for women and youth workers remain below those for men.



A team of local PEP researchers proposed to analyze the impact of the minimum wage policy in terms of its effects on wages, hours worked, and employment rates among low-wage workers in Ecuador.

In particular, the team aimed to explore how minimum wage policies affect the distribution of earnings, whether minimum wages have adverse effects on employment (especially among women and youth), and the impact on hours worked.

### Data and methodology

This study uses survey data from the National Survey on Employment, Unemployment, and Underemployment (ENEMDU) administered by the National Institute of Statistics (INEC) to analyze the January 2012 SBU increase. The team compares the periods of December 2011 (i.e. before the minimum wage increase) and December 2012 (a year after the increase) in terms of wages and hours worked for covered and affected workers, as well as for not-covered or not-affected workers (the control group). The research team uses a difference-in-differences estimation to analyze the panel data.

**Table 1: Impact of the increase in minimum wages in January 2012**

Group of workers	Labor market outcome			
	Real wages	Hours worked	Hours worked (30 -50h)	Employment
1. Covered and affected by the minimum wage	↑	↑	-	↑
2. Not covered by the minimum wage legislation: low wage workers	↑	↑	↑	↓
3. Not covered by the minimum wage legislation: high wage workers	↓	n.s.	n.s.	↓
4. Covered by the minimum wage, not affected: high wage workers	↓	n.s.	n.s.	↑
<b>Additional effects:</b>				
5. Women	↓	n.s.	↓	n.s.
6. Youth	n.s.	↑	n.s.	n.s.
7. Workers in small firms	↓	n.s.	n.s.	↑
8. Domestic workers	↓	n.s.	n.s.	n.s.
9. Agricultural workers	n.s.	n.s.	n.s.	↑
<b>Source: Own estimations</b>				
<b>Note: n.s.= not significant</b>				

## Key findings

The results indicate that the minimum wage increase has a significant and positive effect on the wages of covered and affected workers, with their wages increasing by 0.63% (to 0.96%) for each 1% of the wage gap.

However, the results also indicate negative income effects for high-wage workers (see Table 1, line 4). This result suggests a wage-compression effect in which businesses may have compensated for the increased wage of low-paid workers by freezing or even reducing the wages of high-paid workers.

This wage compression effect may be linked to the decrease in income inequality observed in Ecuador between 2007 and 2014.

The findings also indicate that those affected by the minimum wage increase generally worked significantly more hours relative to workers unaffected by the increase. However, for covered and affected full-time (30-50 hours per week) workers, the results indicate a very slight (almost zero) decrease in hours worked.

Women who benefitted from the wage increase, however, worked significantly fewer hours compared to those who were not affected by the increase. This finding suggests that businesses may have tried to compensate for the increased expenditure of a higher minimum wage by reducing the hours worked by female employees.

The results also suggest that low earners in the control group experience an increase in hours worked. Similarly, the youth has to work more hours after a minimum wage increase. This last impact on

the youth has also been found in other studies of minimum wage impacts.

While affected low-income workers are more likely to remain employed following the minimum wage increase, the probability of remaining employed for low-income workers not affected by the wage increase (e.g. self-employed workers) decreases. Low-income workers not affected by the policy do, however, appear to benefit from some positive spillover effects in terms of higher earnings - although these workers may have to work more hours.

The research team notes that their findings are based on data from a high growth period for the Ecuadorian economy. The team suggests that further research on the effects of the minimum wage policy during an economic downturn are necessary as the policy may exacerbate unemployment effects and reverse the progress made in reducing inequality.



## Implications for policy

The findings of this study have several implications for policy, most notably in terms of highlighting potential issues that should be addressed by policymakers.

The negative wage effects that reduce - but do not eliminate - the positive impacts of minimum wages on income of women, domestic workers, and small firm employees, as well as the reduced hours worked by affected women, may suggest that business owners may not be fully complying with the minimum wage policy. If this is indeed the case, mechanisms to better enforce both the hours and wage aspects of the policy should be implemented.

The positive wage and income effects of the policy coupled with the fact that income inequality has declined during both the years of the study (2011 and 2012) and more generally in the period 2007-2014 when the minimum wage increase policy has been in place, suggest support for such policy.

However, due to the study's data coming from an economic period of high growth, the study advise caution during the current commodity price bust, warning that minimum wage increases at this time could exacerbate unemployment effects and reverse the progress made in reducing inequality.

The research also notes that the decreased probability of remaining employed for low-wage non-affected workers means that the policy is not currently achieving its goal to improve income for all low-paid workers.

This study is only the beginning and further research should be conducted to account for choices other than remaining employed or not, such as moving from formal to informal employment.

Similarly, further research should analyze the minimum wage policy during an economic downturn to assess the welfare impact of both government and worker choices.



In 2012, with support of the UK Department for international Development (DfID) and the International Development Research Centre (IDRC) of Canada, PEP launched a new program to support and build capacities in “Policy Analyses on Growth and Employment” ([PAGE](#)) in developing countries.

This brief summarizes the outcomes of PEP project [PMMA-12808](#) supported under the 3<sup>rd</sup> round of the PAGE initiative (2015-2016). To find out more about the research methods and findings, read the PEP [working paper](#)