

Extended Abstract
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Paper/Poster Title	Foreign Price and Local Inflation: The Case of Wheat in Mexico
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Abstract prepared for presentation at the 96th Annual Conference of the Agricultural Economics Society, K U Leuven, Belgium

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Abstract	200 words max
<p>This paper analyzes the effect of the foreign price of wheat on the price deflator of this grain in Mexico. To measure further effects, a chain effect of the above deflator in the corresponding one on wheat flour is measured. In addition, the impact of this last one in four wheat products is being estimated. The period under study is from 1981 to date, through monthly data. An error correction model is implemented on cointegrating equations to gauge long and short term impacts. An elastic response is systematically found regarding the six equations in the long term. For the short term, the coefficients register in every case an inelastic outcome. The elastic coefficients registered in the long term have prevailed independently of the extent of the import share in the local market, where the wheat deflator appear to be exogenously determined. Diametrically opposite price policies for food staples did not change the fortunes of the deflator subject to foreign quotations. However, price differentials between wheat and its products are not specified.</p>	
Keywords	Foreign price of wheat, wheat deflator, wheat flour price index, Mexico.
JEL Code	C49, F14, Q17.
Introduction	100 – 250 words
<p>In the last decades, the subject of foreign price transmission to local prices has acquired particular interest. No shortage of literature is available on this topic. Evinced by the contributions of Reddy, 2006; Ihle and von Cramon-Taubadel, 2009; Myers and Jayne, 2012 and Araujo-Enciso, 2019. This paper takes an alternative venue by establishing a link between the foreign prices of wheat and the deflator of this grain in Mexico. Further, it analyzes the effect of this local wheat deflator on wheat flour. In addition, it measures the effect of this last product in five articles, flour, bulk white bread, boxed white bread, confectionery, pasta for soup, where wheat remains as the original raw material. Variegated approaches towards crop production have prevailed in Mexico during the period under analysis. It has been stressed substantial changes of policy and institutions, throughout the period under analysis. A salient feature of agriculture in the country are the frequent modification of public policies according to the current government.</p>	
Methodology	100 – 250 words
<p>The above model seeks to determine the extent at which the local producer price index of wheat is determined by the foreign price of this cereal, followed by a bilateral effective exchange rate of the local currency <i>vis a vis</i> the US dollar through the first equation. The second equation estimates the effect of the local wheat deflator in the price index of flour. The remaining four equations measure the impact of the wheat flour price indices in the corresponding ones of two kinds of white bread, <i>i.e.</i>, unboxed and boxed, as well as in confectionery and pasta for soup.</p>	

By means of an error correction model on cointegrating equations, the long and short terms are analyzed. The period under study is from 1981 to date, by means of monthly data.

Results

100 – 250 words

By means of cointegrating equations, an elastic response is systematically found regarding six equations in the long term. For instance, a unit coefficient is obtained in the case of the local price index of wheat with respect of its foreign price. A bilateral effective exchange rate of the Mexican currency *vis a vis* the dollar exposes a coefficient of 0.80. The effect of the price index of this cereal in wheat flour registers a coefficient of 1.14. The wheat flour price index exposes an elastic effect of 1.10 and 1.00 regarding bulk and boxed white bread, respectively. The effect of flour in confectionery is 0.98, and 0.94 regarding pasta.

In the short term, the effect of the price of wheat in the local producer price index registers a very low coefficient (0.17). Likewise, the effective exchange rate has an almost negligible value (0.20), in the price index of wheat.

The literature refers to the foreign price of wheat in the local market. This paper takes the implicit price index of wheat as a proxy for the local price of this grain. Greb *et al.* (2016: 13), reports a long term coefficient of 1.14 for Latin America, regarding wheat. The specific period is not specified in this paper devoted to different parts of the world including maize and rice.

Discussion and Conclusion

100 – 250 words

The price deflator of wheat in Mexico depends on the foreign price of wheat duly converted to local currency at the nominal exchange rate with an elastic coefficient (1.0). Alongside, a bilateral effective exchange rate between the Mexican peso and the dollar, exposes an elasticity of 0.80. Both elasticities refer to the long term, with a three month lag. The influence of the foreign price in the second most important grain for human consumption in Mexico, is confirmed.

The repercussion of the wheat deflator in wheat flour itself with a long term elastic coefficient (1.14) confirms how the foreign price makes itself felt through the grain deflator. Remaining within the long term scope, the elasticity of white bread, both in bulk (1.10) and boxed (1.00), further confirms the above mentioned influence, in this case with respect to flour. Also, with respect to this last product, the elasticity of confectionery (0.98), and pasta for soup (0.94), make evident the influence duly conveyed and initiated through foreign wheat price. The effect of foreign price in the local deflator of the grain and subsequent products through the production chain, remains invariant.

Regardless of a local policy where price containment of this grain and its products was in force, or a liberalization policy of wheat imports was duly implemented afterwards, it would appear that the Mexican wheat deflator has been exogenously determined throughout the last four decades.