

## *THE PRICE DETERMINED BY THE COST AND COSTS DETERMINED BY PRICES: A REPLY TO ISRAEL*

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**M**y comments on Karl-Friedrich Israel's criticism (2018, p. 393) of my piece (Machaj, 2018) are not really a typical reply as I fully accept his criticism of my explanation from his thoughtful and in-depth review of the book. While being grateful for his discussion, I would like to develop the point of reproduction further, as quarrels about price-cost relations may be ambiguous.

Israel points out that "price-elasticity of demand" is essential in understanding how prices (and costs) are formed. That is certainly true, but what remains to be explained is: which price elasticity. The main point of my short discussion was to demonstrate that the price for blue shirts does not only depend on marginal utility of blue shirts (demand for them). Moreover, the prices for blue shirts may go up, because costs went up, *even if absolutely nothing changed in the demand for blue shirts*. The answer how this happens lies in the Böhm-Bawerkian explanation of cost formation and causal-realistic considerations of how costs go up in the first place.

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Assume that blue shirt purchasers are the most eager and determined in obtaining cotton related products. Imagine a catastrophe happened to cotton industry and world production has been cut in half. The potential production of cotton related products is lower, *for all cotton related products*. Marginal utility of the last cotton related product goes up, because of decreased supply. Henceforth the value of that last produced cotton product is imputed back to the price of cotton as a factor of production. That implies that costs of cotton are higher as entrepreneurs are bidding more for a shrunk supply. Those increased costs of production would lead to higher prices of our considered blue shirts, provided they would still be in high demand as initially.

Consequently, even if nothing changed in the demand for blue shirts, their prices are directly related the cost of production. One may ask the question—if they were so high in (inelastic) demand, why did the price did not go higher in the first place? Because of forces of competition. The key in understanding how price formation works is the force of rivalry. Yes, producers focus on demand elasticity, but they are interested in *individual* demand and price elasticity *for their own product*. And that one is elastic even if total demand curve is inelastic, because as they raised the price for blue shirts, they would lose customers in favor of other producers, who would take advantage of lower costs and offer product with a lower price margin. Henceforth forces of competition are keeping the final price of a product in close relation to its costs. Let me emphasize that this does not mean that costs are the ultimate cause here, since they themselves are reducible to marginal utilities of all cotton products.

Böhm-Bawerk expressed that thought quite well in a similar copper example:

Again, we must not endeavor to find in the law of cost either more or less than the Austrian economists have found in it, namely, a universal law of leveling. And this is an influence which operate not merely upon certain final elements, but also at every stage of the productive process. There is a leveling or equating not merely of the final elements, labor and the disutility of labor, but also of productive goods and of utility with utility. This last takes place independent of, and oftentimes in direct opposition to the influence of the final elements. Why, in our example of the copper kettle, does the price rise from fourteen to eighteen dollars? Simply because through the common cost it can and must be leveled to the price of the other commodities produced from copper, i.e., in this

case to the price of the strongly demanded copper wire. But why have prices in the entire copper business advanced? Because, and in so far as, through the increased demand for copper, the marginal utility of this material has been raised (Böhm-Bawerk, 1962, pp. 367–368).

A summary of the example could therefore be: the price for blue shirt is determined by the cost of cotton, but costs of cotton are in the final instance determined by utilities of cotton related products, represented in their final prices. In other words, when entrepreneurs are considering costs in their decisions, they are considering others' expectations of competing marginal utilities sort of disguised as costs of production. Monetary costs of factors are a price we pay for withdrawing other projects from materializing (they simply are a form of opportunity cost).

Additionally, considering the forces of competition I would be careful with the neoclassical notion of equalizing marginal costs and marginal revenues. Such an approach does not have a typical place in the usual Austrian reasoning. It has to be very stretched and highly adjusted to make sense in real world examples. This is primarily because definition of "marginal cost" is actually quite subjective and depends on the chosen (longer or shorter) run (Rothbard, 2009, p. 695). It also wrongly suggests that fixed costs play no role in price formation and production decisions. For the real world companies they do.<sup>1</sup> Only sunk costs, capitalized losses, do not play such role, but not all fixed costs are sunk.<sup>2</sup> Consider the case of purchased real estate. It is a fixed cost, but usually a substantial part of it can be recovered very easily by selling it to someone else. That is why while making production and pricing decisions companies consider fixed costs in their calculations all the time (not just marginal costs). Since virtually all of the ones staying afloat do so, fixed costs are part of strategic decisions. If the consumers are backing out from purchasing a product, losses are revealed and the signal is sent that the particular real estate has

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<sup>1</sup> In general, the equation  $MR=MC$  is not really mistaken, since it may be tautological and true under the chosen assumptions. The problem lies a step back, in the assumption that costs can be easily divided into fixed and variable, and that the division can easily separate the apparently relevant from the apparently irrelevant.

<sup>2</sup> On the very significant difference between sunk and fixed costs see an underrated paper: Wang and Yang 2001.

an alternate employment which should be considered. Such is the process which through Internet revolutionized typical in-house stores. Many of them became closed, because a different selling channel had been created, so to stay profitable the cost of real estate would have to fall. But the cost cannot go much further down, because there are other potential renters having other marginal utilities in mind, which will justify profitable renting of the real estate. In other words, there are other marginal utilities which justify paying a higher cost. If an in-house store cannot secure a sufficient money stream for that rental price, then it means that goods sold in that place do not have sufficiently high marginal utility to the consumers. That is how *all costs* (not just marginal) are actually influencing and shaping entrepreneurial decisions all the time. This is a notion that comes from the Austrian version of marginalism—much stronger than a neoclassical one.

Henceforth, while I accept Israel's blue dye point, I would state it without referencing neoclassical  $MC=MR$  rule, and with a Boehm-Bawerkian style of reasoning.<sup>3</sup> Blue shirts and other shirts usually in the market will have similar prices even if they have radically different marginal utilities. They could have different prices, for example, if the price of a particular dye (blue) went up. Under those circumstances the price of a blue shirt would go up, but that increased cost would reflect higher marginal utility of alternate blue dye employment, whereas marginal utility of cotton in both blue and other shirts would be along similar lines.

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<sup>3</sup> Also criticized in the same book from another perspective by Newman (2018, pp. 64–67). See also Herbener (2018, pp. 161–165).

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