

MacroShot

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Value of Litas through the Windows of McDonald's

Several days ago, *The Economist* celebrated the 20th anniversary of *Big Mac* index calculation. *Big Mac* index proved to be quite illustrative test for accuracy of currency exchange rates using only one good that is homogeneous in more than 120 countries, i.e. *Big Mac*.

As *Big Mac* index shows, theoretical purchasing power parity does not hold. This might be explained by several reasons. If only tradable goods existed, there would be no deviations of market exchange rate from the one implied by purchasing power parity. Meanwhile, in reality consumer basket includes both tradable and non-tradable commodities. Thus, the pricing of consumer goods is formed not only according to competition principles but also living costs, salaries etc. For making a hamburger, both categories of goods are used and thus the price of *Big Mac* is condemned to vary in different countries.

Traditional results of *Big Mac* index for testing fairness of currency exchange rates is undervaluation in emerging markets and overvaluation in developed countries that have relatively heavy tax burden. The latter marginality is most obvious in Norway and Iceland, where national currency is overvalued by 127% and 106% in regards to US dollar, respectively. Lithuanian national currency confirms the traditional "rule" as 1 US dollar, according to *Big Mac* index, costs 2.10 litas, while market exchange rate is

2.70 litas, i.e. litas is undervalued by 22% in regards to US dollar.

Some years ago, confidence in litas was much lower both in Lithuania and abroad compared to present reliance. Back to those days, *Big Mac* theory provided an effective counterargument against false prophecies of litas' devaluation. The *Big Mac* argument that litas should be revaluated but not devalued was rather convincing but did not calm the sceptics entirely. At current, fixed rate of litas to euro is almost unquestioned until the end of litas' days. Thus, only two factors may change the ratio between actual and the *Big Mac's* exchange rate of litas. The first factor is fluctuation of litas', i.e. euro, exchange rate in regards to US dollar; the second one is change in *Big Mac* (taking more broadly, overall consumer basket) price in Lithuania and the US. The "hamburger theory" shows similar undervaluation of currencies in all three Baltic States, however, the least (20%) undervaluation is registered in Latvia, which has the highest inflation in Central and Eastern Europe. Price convergence between Western and Eastern economies is the most realistic scenario, under which market currency exchange rate in the Baltic States would approach the one indicated by *Big Mac* index. Certainly, this process would go on only until Lithuanian, Latvian and Estonian currencies disappear from economic world map and "hide" themselves in the euro zone.

National currency value according *Big Mac* index

Country	<i>Big Mac</i> price		Implied PPP of the dollar	Actual dollar exchange rate May 22nd	Under(-)/over(+) valuation against the dollar (%)
	in national currency	in US dollars			
Estonia	29.5	2.40	9.52	12.3	-23
Euro zone	2.94	3.77	1.05	1.28	+22
Latvia	1.35	2.47	0.44	0.55	-20
Lithuania	6.50	2.41	2.10	2.69	-22

Source: *The Economist*.

- Dr. Gitanas Nausėda, CEO Adviser