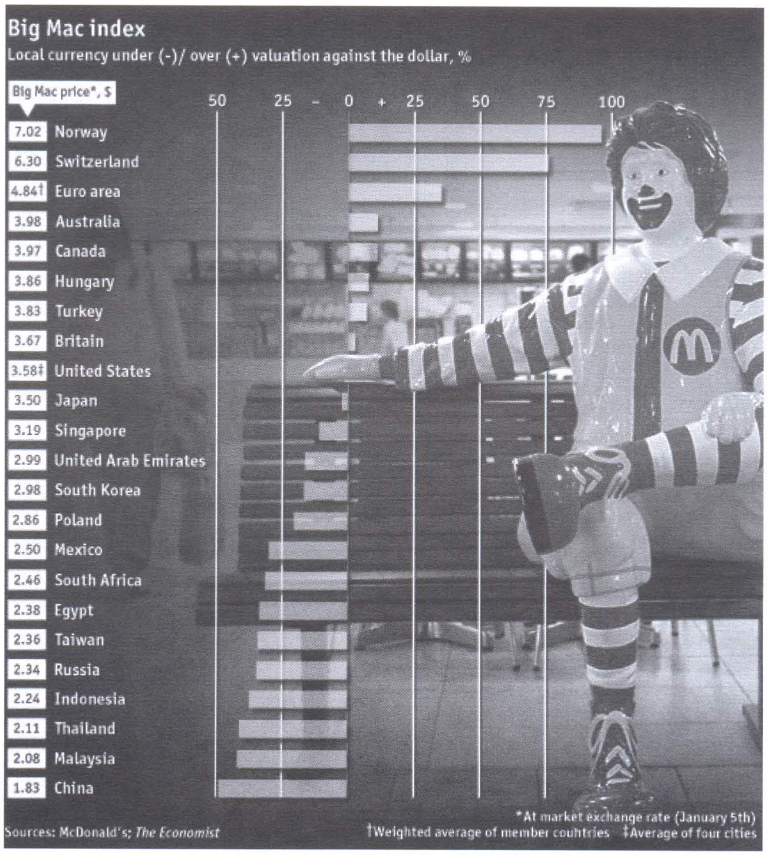
THE BIG MAC AND THE REAL – OVERVALUED?

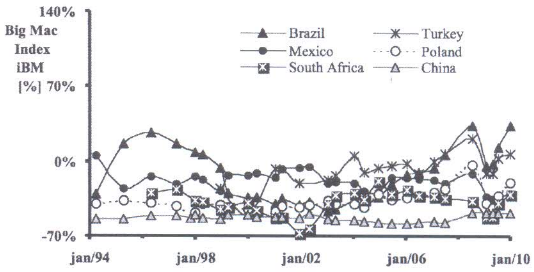
Marcelo Henriques de Brito

There is considerable debate as to whether the Brazilian currency is now overvalued in relation to the US Dollar, and the extent of such revaluation.

Values of the **Big Mac Index** published by the British newspaper *The Economist* may highlight whether the Brazilian Real is too expensive, especially when comparing the country's current value of the index with previous data and with values from other countries in the same year. The Big Mac Index proposed by *The Economist* is indeed an excellent indicator of the currency situation.



*[The **Big Mac index** is based on the theory of purchasing-power parity (PPP) — exchange rates should equalise the price of a basket of goods in different countries. The exchange rate that leaves a Big Mac costing the same in dollars everywhere is our fair-value benchmark. So our light-hearted index shows which countries the foreign-exchange market has blessed with a cheap currency, and which has it burdened with a dear one. The most overvalued currency against the dollar is the Norwegian kroner, which is 96% above its PPP rate. In Oslo you can expect to pay around $7 for a Big Mac. At the other end of the scale is the Chinese yuan, which is undervalued by 49%. The euro comes in at 35% over its PPP rate, a little higher than half a year ago. – The Economist 6 Jan. 2010]*



Values of The Big Mac Index iHdB for developing countries. Raw data from *The Economist* was compiled by Marcelo H. de Brito

Almost all published data for the Big Mac Index clearly indicate that developed countries, especially in Europe, tend to present positive values for the index, whereas developing countries tend to present negative values, especially China. These conclusions were confirmed by recent data published on 6 January 2010 on *The Economist* website as may be seen on the two charts shown. A country should be deemed to have an under – or overvalued – currency if countries with a similar background and wealth present values for the Big Max Index which are respectively higher or lower. Furthermore, the current value for the Big Mac Index should stay within the range of its historical data, unless a nota-ble economic surge or slump occurs.

One can easily see that China has strategically, for more than a decade, kept its currency undervalued in respect to important currencies throughout the world, since the Big Mac Index for China is consistently the lowest, even compared to developing countries. The Big Mac Index for China would not rest so incredibly stable for so many years, if the Chinese currency could fluctuate in response to its economic boom and all the market instability heretofore. This fact turns out to be very strong evidence of currency manipulation by the Chinese government.

Actually, the news "Taste and see" on *The Economist's* website did not disclose the Big Mac Index for Brazil at the beginning of January 2010. At that time, the price for a single Big Mac in Rio de Janeiro was R$ 8,25 (about US$ 4.76 vs 3.58 in the USA), which takes Brazil's Big Mac Index to 33%. This value equals the number that *The Economist* published on 24 July 2008, shortly before the debacle of the Lehman Brothers and a significant currency overshooting in Brazil. "Looking at all the data for Brazil in Chart 2, the recent peak value indicates that a new fall in Brazil's Big Mac Index is indeed probable, hinting at a possible devaluation of the Real.

The above method to forecast currency movements in Brazil may also be helpful when deciding whether stock exchange investment may become more profitable than fixed income. The latter tends to be more attractive than the former when there is a devaluation of the Real.

Regardless of the validity of the insights described above, personal factors must also be considered all along when making investment decisions. Thus, the following important, recurring message from Benjamin Graham in his famous book *The Intelligent Investor* must always be kept in mind: "The kind of securities to be purchased and the rate of return to be sought depend not on the investor's financial resources but on his financial equipment in terms of knowledge, experience, and temperament".

[Marcelo Henriques de Brito Ph.D. is a Certified Financial Planner CFP®, Brazilian Certified Investment Professional (CNPI), director of the Associação Comercial do Rio de Janeiro (ACRJ) and owner of PROBATUS, <www.probatus.com.br>]