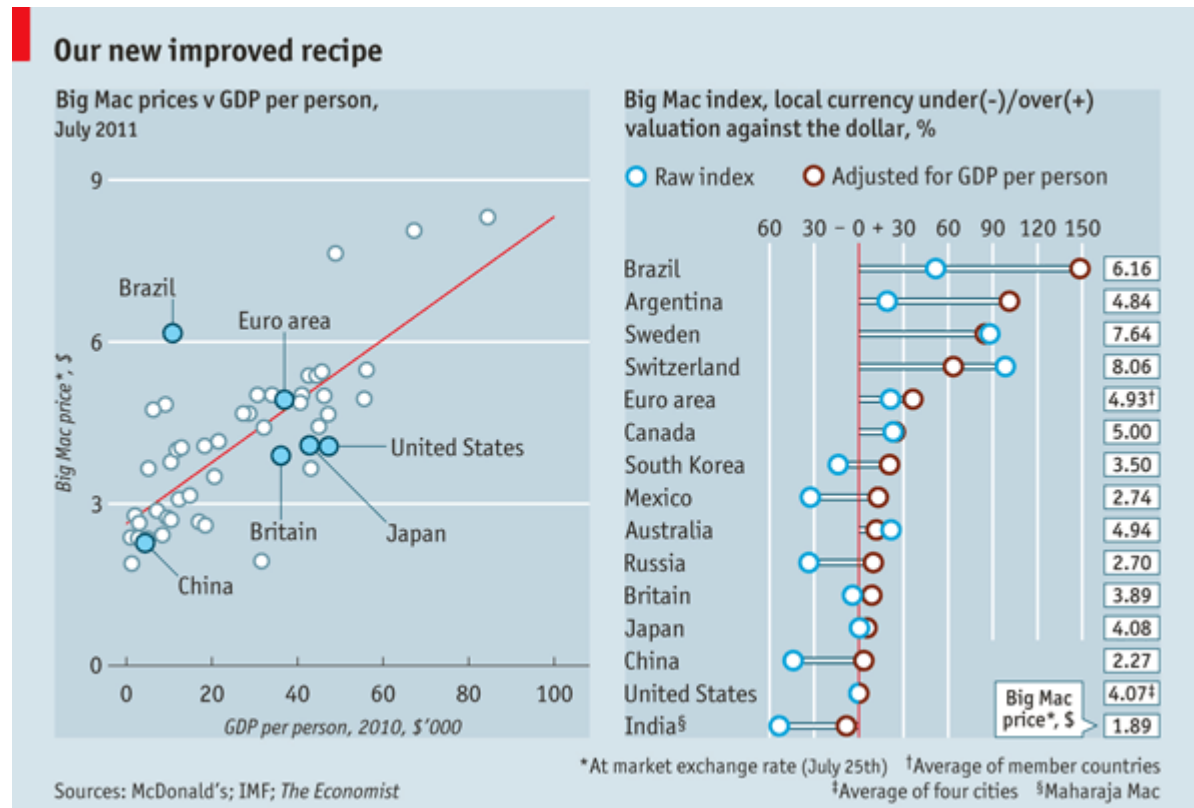


The Big Mac index

Jul 28th 2011, 14:35 BY THE ECONOMIST ONLINE

A beefed-up version of the Big Mac index suggests that the Chinese yuan is now close to its fair value against the dollar



THE Economist's Big Mac index is a fun guide to whether currencies are at their "correct" level. It is based on the theory of purchasing-power parity (PPP), the notion that in the long run exchange rates should move towards the rate that would equalise the prices of a basket of goods and services around the world. At market exchange rates, a burger is 44% cheaper in China than in America. In other words, the raw Big Mac index suggests that the yuan is 44% undervalued against the dollar. But we have long warned that cheap burgers in China do not prove that the yuan is massively undervalued. Average prices should be lower in poor countries than in rich ones because labour costs are lower. The chart above shows a strong positive relationship between the dollar price of a Big Mac and GDP per person.

PPP signals where exchange rates should move in the long run. To estimate the current fair value of a currency we use the "line of best fit" between Big Mac prices and GDP per person. The difference between the price predicted for each country, given its average income, and its actual price offers a better guide to currency under- and overvaluation than the "raw" index. The beefed-up index suggests that the Brazilian real is the most overvalued currency in the

world; the euro is also significantly overvalued. But the yuan now appears to be close to its fair value against the dollar—something for American politicians to chew over. Read more in our Economics focus and leader.

Click on the tabs in the table below for a ranking of currencies on both the raw and the adjusted index:

The Economist		The Big Mac index: July 2011				Learn more	
Table		Raw index			GDP adjusted		
The hamburger standard							
Country	Big Mac prices		Implied PPP† of the dollar	Actual dollar exchange rate July 25th	Under(-)/over(+) valuation against the dollar, %		
	in local currency	in dollars*			raw index	adjusted for GDP per person	
United States‡	\$4.07	4.07	-	-	-	-	
Argentina	Peso 20.0	4.84	4.92	4.13	19	101	
Australia	A\$4.56	4.94	1.12	0.92	22	12	
Brazil	Real 9.50	6.16	2.34	1.54	52	149	
Britain	£2.39	3.89	1.70§	1.63§	-4	9	
Canada	C\$4.73	5.00	1.16	0.95	23	24	
Chile	Peso 1,850	4.00	455	463	-2	58	
China	Yuan 14.7	2.27	3.60	6.45	-44	3	
Colombia	Peso 8,400	4.74	2,066	1,771	17	108	
Czech Republic	Koruna 69.3	4.07	17.1	17.0	nil	45	
Denmark	DK 28.5	5.48	7.01	5.20	35	23	
Egypt	Pound 14.1	2.36	3.47	5.96	-42	11	
Euro area**	€3.44	4.93	1.18††	1.43††	21	36	
Hong Kong	HK\$15.1	1.94	3.71	7.79	-52	-43	
Hungary	Forint 760	4.04	187	188	-1	57	
India§§	Rupee 84.0	1.89	20.7	44.4	-53	-8	
Indonesia	Rupiah 22,534	2.64	5,543	8,523	-35	24	
Israel	Shekel 15.9	4.67	3.91	3.40	15	43	
Japan	¥320	4.08	78.7	78.4	nil	5	
Malaysia	Ringgit 7.20	2.42	1.77	2.97	-40	2	
Mexico	Peso 32.0	2.74	7.87	11.7	-33	13	
New Zealand	NZ\$5.10	4.41	1.25	1.16	9	29	
Norway	Kroner 45.0	8.31	11.1	5.41	104	46	
Pakistan	Rupee 205	2.38	50.5	86.3	-42	16	
Peru	Sol 10.0	3.65	2.46	2.74	-10	63	
Philippines	Peso 118	2.78	29.0	42.4	-32	33	
Poland	Zloty 8.63	3.09	2.12	2.80	-24	21	
Russia	Rouble 75.0	2.70	18.5	27.8	-34	10	
Saudi Arabia	Riyal 10.0	2.67	2.46	3.75	-34	-3	
Singapore	S\$4.41	3.65	1.08	1.21	-10	-6	
South Africa	Rand 19.45	2.87	4.78	6.77	-29	24	
South Korea	Won 3,700	3.50	910	1,056	-14	21	
Sweden	SKr 48.4	7.64	11.9	6.34	88	85	
Switzerland	SFr 6.50	8.06	1.60	0.81	98	63	
Taiwan	NT\$75.0	2.60	18.5	28.8	-36	-7	
Thailand	Baht 70.0	2.35	17.2	29.8	-42	6	
Turkey	Lira 6.50	3.77	1.60	1.72	-7	53	

*At current exchange rates †Purchasing-power parity; local price divided by price in United States
‡Average of Atlanta, Chicago, New York and San Francisco §Dollars per pound
**Weighted average of prices in euro area ††Dollars per euro §§Maharaja Mac

For more on the **Big Mac index**, see this week's **leader** and **economics focus**