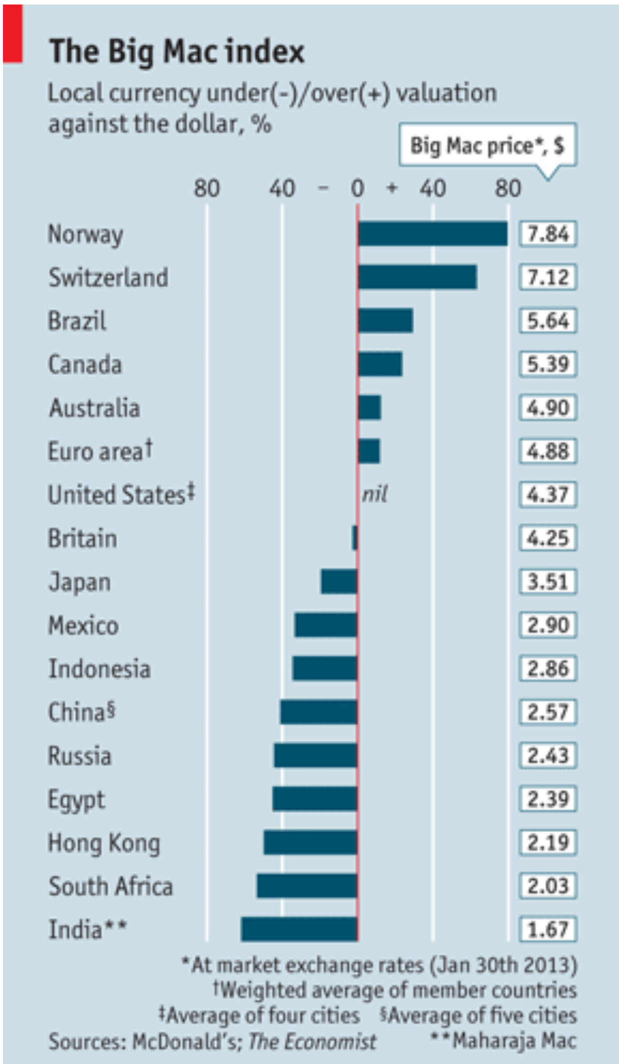
The Economist

## The Big Mac index

# Bunfight

### Currency wars: the burger's verdict

Feb 2nd 2013 | Washington, DC | From the print edition




AN OLD beef is again dividing the world of international finance: the spectre of "currency wars". Jens Weidmann, the head of Germany's Bundesbank, recently fretted that central-bank efforts to revive flagging economies could lead to an "increasing politicisation of exchange rates". Bill Gross of PIMCO, a huge bond-fund manager, reckons the world is entering a spiral of competitive devaluations reminiscent of the 1930s, as economies anxious for growth massage their currencies downward to give exporters a boost. What does burgernomics have to say?

The Big Mac index is *The Economist*'s lighthearted analysis of foreign-exchange rates. Its secret sauce is the theory of purchasing-power parity (PPP), according to which prices and exchange rates should adjust over the long run, so that identical baskets of tradable goods cost the same across countries. Our basket contains only a Big Mac, and relies on the efforts of McDonald's to produce identical products from the same ingredients everywhere (or almost everywhere: for India we use the Maharaja Mac, which contains chicken rather than beef).

At market exchange rates, the Canadian version of the burger costs $5.39, compared with an average price of $4.37 in America. By our reckoning, then, the Canadian dollar is roughly 24% overvalued relative to its American counterpart. In Mexico, by contrast, a Big Mac is just $2.90 at market exchange rates, suggesting the peso is 33% below its long-run value relative to the dollar. The greenback buys much more Big Mac south of the border than north of it.

The Big Mac index suggests that currencies are particularly overvalued in Norway, Switzerland and

Brazil (see chart). The continuing strength of the real is a big source of irritation to Brazil's finance minister, Guido Mantega, who first trumpeted the phrase "currency wars" in 2010. Brazil battled back by introducing capital controls in the form of taxes on foreign purchases of Brazilian securities, but the currency remains overvalued. In December Brazil notched a record current-account deficit as its exports tumbled, contributing to a slide in the economy's growth prospects. Switzerland handled its overcooked currency by pegging its franc to the euro in 2011. That halted the Swiss franc's appreciation against the then-beleaguered single currency, although not against the dollar.

Currencies in much of the emerging world, including Russia, China, and India, are too cheap relative to the dollar on our gauge. Critics of burgernomics say that you would expect average prices to be cheaper in poor countries than in rich ones because labour costs are lower: PPP signals where exchange rates should head over the long run, as a country like China gets richer, not where prices should be right now. Even so, the perennially undervalued yuan has scarcely moved towards the Big Mac measure of fair value. That, many reckon, is down to meddling by the chefs at the People's Bank of China, who are relying on export growth for sustenance: China posted a larger-than-expected $36.1 billion trade surplus in December, thanks to 14% growth in exports year-on-year.


Track global exchange rates over time with our new interactive Big Mac index (http://www.economist.com/content/big-mac-index)

Japan is the country that caused the most recent talk of currency battles. The new government's plan to reflate the economy with fiscal and monetary stimulus has helped drive the value of the yen down in recent months. The Big Mac index put the yen close to fair value against the dollar in July; it is more than 19% undervalued now. That's a tasty development for Japanese exporters but indigestible news for rivals.

Europeans are feeling particularly chippy. The euro is now around 12% too expensive relative to the dollar, according to our gauge; in the summer of 2012 it was close to fair value. The euro has strengthened in recent months as fears of a euro-area break-up have receded, but many Europeans also point the finger at currency manipulation. The European Central Bank has done little to boost an ailing euro-area economy even as other central banks, including the Federal Reserve and the Bank of England, have acted aggressively to add sauce to their economies. If the single currency keeps rising, euro-area exporters will end up in a pickle.

From the print edition: Finance and economics