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Referential currency (r)

[<Normal page] [**PEREZGONZALEZ Jose D (2011).** *Referential currency (r).* Journal of Knowledge Advancement & Integration (ISSN 1177-4576), 2011, pages 12-14.]

Referential currency (r)

This document describes a technological application for the field of economics. It aims to fix part of the economical wandering between the 'real' and 'nominal' value of money in order to increase standardization in reporting, as well as to allow for more meaningful comparisons in time and easier understanding by readers. The proposal made here is for a fix at sovereign currency levels rather than at international levels. That is, it works at the level of, for example, the US dollar, Australian dollar, British pound or Euro, but does not propose an international currency[2].

Thus far, economists have established ways for comparing the 'real' (or 'constant') value of money at two different periods of time by accounting for the effect of inflation and, then, deflating the corresponding nominal values of the currency at either year, accordingly. For this to work, any calculations need to be made in reference to a common, ad hoc year, the base year. Unfortunately, the reach and relevance of such procedure is relative to that particular study insofar other studies may use different base years. Therefore, comparisons across studies are of limited use and, more often than not, they require the setting of a third, ad hoc, base year for a meaningful comparison. In this context, the 'constant' value of money conveyed by those studies has little if any significance for society at large, in the sense that the average citizen will find it difficult to make meaningful comparisons between time periods that use different base years[3].

A fix to this dilemma is easy and straightforward, although it would require some agreement of convenience. We have more or less managed to find similar fixes with time (by establishing a year 'one' at some time in the past) and with temperature (by pairing a '0 degrees' point to a given temperature). It is interesting that we have not yet done so with the value of money.

The procedure is as simple as using a unique base year as standard year '0' for the general reporting of economic constant values[4]. That is, use an agreed year as year '0' (ie, base year), inflate or deflate any nominal values before and after that year as appropriate (nominal values thus become 'constant' in reference to such base year), and then interpret any nominal value in reference to its constant value, as usual.

As this is a new approach to standardization, 2010 could serve as a convenient base year. Inflation or deflation corrections will then be made to the years before or after 2010, respectively. For general use, the annual average CPI[5] for each year could be used for deflating or inflating the nominal value of a currency. For more precise uses (eg, economic reports) or when the annual average is not known, the CPI value closest to the day of the economic release in question may be preferred[6]. With such a standard base year, historic as well as present and future comparisons are more easily made and, thus, become more meaningful. Even better, this referential or standard value does not lose relevance with the passing of time, unlike nominal values and ad-hoc constant values.

The resulting output could be referred to as the 'referential' value of money or the 'standard' value of money. Such output could further be represented by an 'r' placed before the traditional currency symbol or denomination (thus, $ = nominal dollar, r$ = referential/standard dollar; EUR = nominal euro, rEUR = referential euro). Finally, such referential or standard value could be written after the

nominal value when it may be relevant to do so.

For example, a reporter could write that *"Berkshire Hathaway's net profits have diminished from $2.49 (r$3.46) billions in 1996, to $1.11 (r$1.13) billions in 2009, although its per-share book value has increased from $19,011 (r$26,421) to $84,487 (r$85,873) in the same period"*.

Or a researcher could conclude that *"if we consider the evolution of average annual salaries in the US each decade since 1949, as follows: 1949 - $2,950 (r$27,028); 1959 - $3,856 (r$28,894); 1969 - $5,894 (r$35,020); 1979 - $11,497 (r$34,447); 1989 - $20,100 (r$35,346); 1999 - $30,470 (r$39,881); and 2009 - $40,712 (r$41,380); we ought to conclude that average annual salaries have increased dramatically in nominal value up till the 21st century, but they have increased more erratically in real value, except in the '70s, when salaries lost standard value compared to the '60s (even when their nominal value almost doubled in the same period)"*.

Or a company claiming, in 2011, to have invested USD 8 million in the past and further claiming its intention to increase its investment to USD 10 million in the next 10 years, could see such figures easily 'translated' into referential values as such: *"The company plans to invest rUSD 8.5 million in the next 10 years (assuming USD 1 million invested each year and an annual inflation rate of 3% per year), which actually is a lesser inversion than the rUSD 8.6 million it has invested in the past (also assuming USD 1 million invested per year at each year's corresponding [historic] inflation rate)."*

For a use of referential currencies in practice, see, for example, Perezgonzalez, 2010[1], who reports both rUSD and rGBP in the footnotes of the article.

References

1. **PEREZGONZALEZ Jose D [ed] (2010).** *Child labour in cacao production.* Journal of Knowledge Advancement & Integration (ISSN 1177-4576), 2011, pages 1-4.

+++ **Footnotes** +++

2. International comparisons are, of course, possible by way of exchanging one currency into another and then applying any 'referential correction', as appropriate.
3. For this average citizen, the 'nominal' value of money will probably be more meaningful than 'constant' values using different base years, despite him not accounting for the impact of inflation on those nominal values.
4. For particular reporting, such as annual reports to shakeholders, ad hoc constant values may be more relevant, though. Notice, however, that the use of a standard 'constant' year does not necessarily conflict with such particular purposes.
5. Consumer Price Index.
6. Of course, a similar procedure could be used with a GDP deflator or any other index of inflation, if or when it is more appropriate to do so.

Want to know more?

Wikipedia - Real vs nominal value in economics
This Wikipedia page gives more information about the difference between real and nominal values.

Wikipedia - Constant dollars
This Wikipedia page gives more information about constant (aka real) values of a currency.

Wikipedia - Purchasing power
This Wikipedia page gives more information about purchasing power, a concept very much related to constant, real and referential values of a currency.

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page revision: 6, last edited: 16 May 2011, 15:47 GMT+12 (10 seconds ago)
