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Central Bank Capital

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An argument that has been put against appreciation of the yuan (or indeed almost any currency) is that it will create "losses" for the country's central bank on its foreign exchange reserves, which after the appreciation will have a lower value in domestic currency than they did beforehand. This misleading argument against appreciation is given some credence by a recent book, *The Dollar Trap*, by Eswar Prasad, now of Cornell University and a former official of the International Monetary Fund, in which he suggests that China stands to lose billions on its large dollar reserves if it appreciates the yuan. I will take up the substance of this fundamentally incorrect claim below, but it is useful first to summarize the main message of Prasad's book, since its title is not self-explanatory. Although Prasad shares the widespread view that the current international monetary system is flawed, he also believes, correctly in my view, that the international role of the US dollar is deeply entrenched in the system, that this role will continue for a long time, and that paradoxically although it has some weaknesses, this deep role of the dollar lends a fundamental stability to the system. This view needs to be studied by those who hope or desire that substitutes or alternatives will be found soon.

Perhaps the simplest way to see how misleading is the claim of losses on reserves as a result of currency appreciation is to turn the argument around, since it should be symmetrical: a country can achieve gains on its reserves by depreciating its currency, and the larger the depreciation, the larger will be the gains on a given level of reserves. In this way, Zimbawe has excelled at improving its well-being, and Argentina, whose currency has depreciated significantly during the past year, is also doing well.

Putting it this way makes clear that something is wrong: countries cannot in fact improve their well-being through capital gains, measured in domestic currency, on their foreign exchange reserves through currency depreciation. Their command over resources in the rest of the world remains the same as before the depreciation. Similarly with currency appreciation: no change in the real purchasing power of the reserves on the world market, even though their domestic currency value of reserves has risen on the central bank's balance sheet under conventional accounting standards.

The People's Bank of China understands this point well. In response to a question about possible reserve losses, the State Administration of Foreign Exchange (SAFE) states: "An appreciation of the RMB will not directly cause losses of China's foreign exchange reserves…Variations in the RMB/USD exchange rate will result in a change in the book value of the RMB…which is not the actually realized gains or losses…and thus will not have a direct impact on the effective purchasing power of the foreign exchange reserves."

The problem arises from applying conventional accounting standards to central banks and assuming that their results are meaningful. Central banks are not profit centers like private banks or firms. It is true that they usually make profits because of "seigniorage" on the issuance of domestic currency and other forms of money, which typically do not carry interest obligations, and earnings on their assets in excess of the expenses of running the central bank. But that is not their purpose. They exist to manage the supply of money prudently for the domestic economy; and many exist to manage its currency's rate of exchange in international markets, for which purpose it holds foreign exchange reserves. These are two quite different activities, and indeed in some countries the second activity is controlled by the ministry of finance. Usually earnings on assets, including foreign exchange reserves, exceed expenses, and the central bank runs a profit. But that need not be the case, and indeed a central bank could function perfectly well if its "capital" (the difference between its assets and liabilities, as reflected on its conventional balance sheet measured in domestic currency) were negative. It can continue to create new money that is appropriate for the domestic economy; and it can continue to intervene in foreign exchange markets so long as its reserves, measured in foreign currency, are positive.

A country can run real losses on its foreign exchange reserves in economic terms, but not through currency appreciation. Real losses occur if world inflation exceeds the rate of interest it earns on the reserves. In general, interest rates will adjust to inflation over time, but there may be periods in which inflation exceeds the interest earned, so the real purchasing power of the reserves in the world market would decline. But that is a quite different phenomenon, and could occur even when conventional accounts show gains.

The inapplicability of conventional accounting to central banks is not merely a hypothetical point. Concerns about accounting losses may inhibit otherwise sensible actions, such as appreciation of a country's currency or, in the case of the United States, the willingness of the Federal Reserve to sell long-term bonds at a "loss" if that is required by booming conditions in the American economy.

The Swiss National Bank (SNB) failed to pay its normal dividend for 2013, according to reports, because of a sharp decline in the price of gold during the year. The Swiss central bank holds lots of gold, and apparently it values the gold on its books at or near market prices. A fall in the price of gold would therefore impose an accounting loss on the SNB, thereby depressing its normally positive earnings. The cantons of Switzerland have come to rely on SNB distributions as a source of revenue. The seigniorage of course continues, but was not enough to overcome the accounting loss on the gold. The SNB should estimate seigniorage and pay a regular dividend based on it, paying no attention to accounting gains or losses on its gold and extensive foreign exchange reserves. Even better, it should sell the gold so it can actually do some good.