

Peg the Export Price

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Commodity prices and currency swings

Among the many vicissitudes of developing countries in recent years have been fluctuations in world prices of the commodities that they produce, especially mineral and agricultural commodities, as well as fluctuations in the foreign exchange values of major currencies, especially the dollar, yen, and euro. Some countries see the currency to which they are linked moving one direction, while their principal export commodities move the opposite direction.

In the Gulf states, the recent explosion of oil prices, rapid growth, a tightly fixed exchange rate, and the big depreciation of the dollar against other currencies (especially the euro, important for Gulf imports) is leading to strong money inflows and alarming inflation which in turn is causing unrest among immigrant workers. There is now talk that the United Arab Emirates (UAE) and other Gulf states should abandon the dollar peg, as the only solution to stop inflation.

The need for a nominal anchor

Governments can achieve anti-inflation credibility by being seen to tie their hands in some way so that in the future they cannot follow expansionary policies even if they want to. Otherwise, they may be tempted in a particular period (such as an election year) to reap the short-run gains from expansion, knowing that the major inflationary costs will not be borne until the future. A central bank can make a binding commitment to refrain from excessive money creation via a rule, a public commitment to fix a nominal magnitude.

Currency boards or other firm exchange rate pegs constitute one of a number of possible nominally anchored monetary regimes. Others include monetarism, inflation targeting, nominal income targeting, and a gold standard. In each case, the central bank is deliberately constrained by a rule setting monetary policy so as to fix a particular magnitude - the exchange rate, the money supply, the inflation rate, nominal income, or the price of gold. Monetary policy is automatically tightened if the magnitude in question is in danger of rising above the pre-set target, and is automatically loosened if the magnitude is in danger of falling below

the target. The goal of such nominal anchors is to guarantee price stability.

The disadvantages of various nominal anchors

Preventing excessive money growth and inflation is the principal "pro" argument for fixing the price of gold or some other nominal anchor. What are the disadvantages?

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The overall argument against the rigid anchor is that a strict rule prevents monetary policy from changing in response to the needs of the economy. The general problem of mismatch between the constraints of the anchor and the needs of the economy can take three forms: (1) loss of monetary independence, (2) loss of automatic adjustment to export shocks, and (3) extraneous volatility.

First, under a free-floating currency, a country has monetary independence. In a recession, when unemployment is temporarily high and real growth temporarily low, the central bank can respond by increasing money growth, lowering interest rates, depreciating the currency, and raising asset prices, all of which work to mitigate the downturn. Under a pegged currency, however, the central bank loses that sort of freedom. It must let recessions run their course.

The second point is that even if the central bank lacks the reflexes to pursue a skillful and timely discretionary monetary policy, under a floating exchange rate, deterioration in the international market for a country's exports should lead to an automatic fall in the value of its currency. The resulting stimulus to production will mitigate the downturn even without any deliberate action by the government.

Some have argued, for example, that Australia came

through the 1997-98 Asian crisis in relatively good shape because its currency was free to depreciate automatically in response to the deterioration of its export markets. Canada and New Zealand, like Australia, are said to be commodity-exporting countries with floating currencies that automatically depreciate when the world market for their export commodities is weak. Almost all the victims of balance of payments crises since 1994 have found it necessary to devalue and move to more flexible arrangements.

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A third consideration makes the pegging problem still more difficult. If a country has rigidly linked its monetary policy to some nominal anchor, exogenous fluctuations in that anchor will create gratuitous fluctuations in the country's monetary conditions that may not be positively correlated with the needs of that particular economy.

The vulnerabilities of some nominal anchors are summarized in Table 1 below.

The disillusion of discretionary monetary policy

But the last few decades have seen widespread disillusionment, both among academics and practitioners, with the proposition that governments are in practice able to use discretionary monetary policy in an intelligent and useful way. This is particularly true in the case of developing countries. As a consequence, the trend in the 1990s was away from government discretion in monetary policy and toward the constraints of nominal anchors as a credible commitment to fight inflation, to affect favorably the expectations of those who determine wages, prices, and international capital flows.

Moreover, flexible exchange rates have worked sometimes but there have been movements in floating exchange rates that appear unrelated to trade shocks or other observable fundamentals which have provided an argument for giving up on exchange rate flexibility.

Besides, the loss of a nominal anchor for monetary policy is a serious disadvantage to small open countries floating. Today's reigning orthodoxy is to add an inflation target as the new nominal anchor. Such countries as the United Kingdom, Sweden, Canada, New Zealand, Australia, Chile, Brazil, Norway, Korea, and South Africa have adopted it, and monetary economists approve. In part this is a consequence of the disillusionment with exchange rate targets that arose in the course of the currency crises of the last 15 years, from Mexico 1994 to Argentina 2001.

But this doesn't protect exporters when their exports market is hit by a shock. When there is an adverse movement in the terms of trade, one would like the currency to depreciate, while price level targeting can have the opposite implication. If a central bank is constrained to hit an inflation target, oil price shocks (as in 1973, 1979, or 2000), for example, will require an oil-importing country to tighten monetary policy. The result can be sharp falls in national output. Thus under rigid inflation targeting, supply or terms-of-trade shocks can produce unnecessary and excessive fluctuations in the level of economic activity.

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Small and developing commodity exporters must therefore protect themselves from swings in their export market and at the same time give a credible commitment to fight inflation, by adopting a nominal anchor. Inflation targeting does not protect them against commodity prices' swings while being pegged to a currency does not prevent inflation when the currency in question is hit by fluctuations which can also produce needless volatility in the country's international price competitiveness. Most often discussed as an alternative to the dollar peg is a peg to a basket of major currencies.

For example, Kuwait, an oil exporting country, made this switch a year ago. But a basket peg does not address the fact that when oil prices rise generally (not

Table 1 Six proposed nominal targets and the Achilles heel of each

Regime	Targeted variable	Vulnerability	Historical Example
Inflation targeting	CPI	Import price shocks	Oil shocks of 1973, 1980, 2000, 2008
Monetarist rule	M1	Velocity shocks	US 1982
Gold standard	Price of gold	Vagaries of world gold market	1849 boom; 1873-96 bust
Commodity standard	Price of agricultural & mineral basket	Shocks in market for imported commodity	Oil shocks of 1973, 1980, 2000, 2008
Nominal income targeting	Nominal GDP	Measurement problems	Less developed countries
Fixed exchange rate	\$(or euro)	Appreciation of \$ (or euro)	Emerging market crises of 1997-2001

just against the dollar), as they have in recent years, monetary policy is constrained to be looser than it should be. Similarly, when oil prices fall generally (not just against the dollar), as they did in the 1990s, monetary policy is constrained to be tighter than it should be.

For those small countries that want a nominal anchor and that happen to be concentrated in the production of a mineral or agricultural commodity, a peg to the export price (PEP) of that commodity may make sense. Or, in a less radical version, the export commodity should be included in the currency basket.

For example, the Gulf countries should peg to a basket composed of 1/3 dollars, 1/3 euros, and 1/3 oil. For them, fluctuations in the international value of their currency that follow from fluctuations in world commodity market conditions would not be an extraneous source of volatility. Rather they would be precisely the sort of movements that are desired, to accommodate exogenous changes in the terms of trade and minimize their overall effect on the economy. In these particular circumstances, the automatic accommodation or insulation that is normally thought to be the promise held out only by floating exchange rates is instead delivered per force by the pegging option. Thus PEP gives the best of both worlds: adjustment to trade shocks and the nominal anchor.

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In its purest form, PEP fixes the price of that commodity in terms of domestic currency, or, equivalently, set the value of domestic currency in terms of that commodity. For example, African gold producers would peg their currency to gold - in effect returning to the long-abandoned gold standard. Middle Eastern oil producers would peg to oil. Coffee producers would peg to coffee, wheat producers to wheat, and so forth.

How would PEP work operationally?

Conceptually, one can imagine the government holding reserves of gold or oil, and intervening whenever necessary to keep the price fixed in terms of local currency. Operationally, a more practical method would be for the central bank each day to announce an exchange rate vis-à-vis the dollar, following the rule that the day's exchange rate target (dollars per local currency unit) moves precisely in proportion to the day's price of gold or oil on the London market or New York market (dollars per commodity). Then the central bank could intervene via the foreign exchange market to achieve the day's target. Either way, the effect would be to stabilize the price of the commodity in terms of local currency.

Illustration when commodity export prices fall

Taking the example of oil exporters, if a peg of the domestic currency to oil had been applied in the past, they would have gained export competitiveness at precisely the time when their balance of payments was under maximal strain. Such countries as Mexico and Venezuela would during the sensitive years 1997-98 have achieved stronger current account positions if they had been pegged to oil, as can be seen in the figures below which show simulated paths of exports under four hypothetical currency-pegging regimes.

Similar points apply to other commodities. If South Africa had been pegged to gold in the late 1990s, Jamaica to aluminum, Chile to copper, Colombia to coffee, Mauritania to iron ore, Mali to cotton, and Guinea-Bissau to peanuts (groundnuts), each of these countries would have seen their currencies depreciate at precisely the time when they most needed the boost to exports. This result would have obtained automatically -as is supposed to happen with a floating exchange rate -- and yet without having to give up the benefits of a nominal anchor.

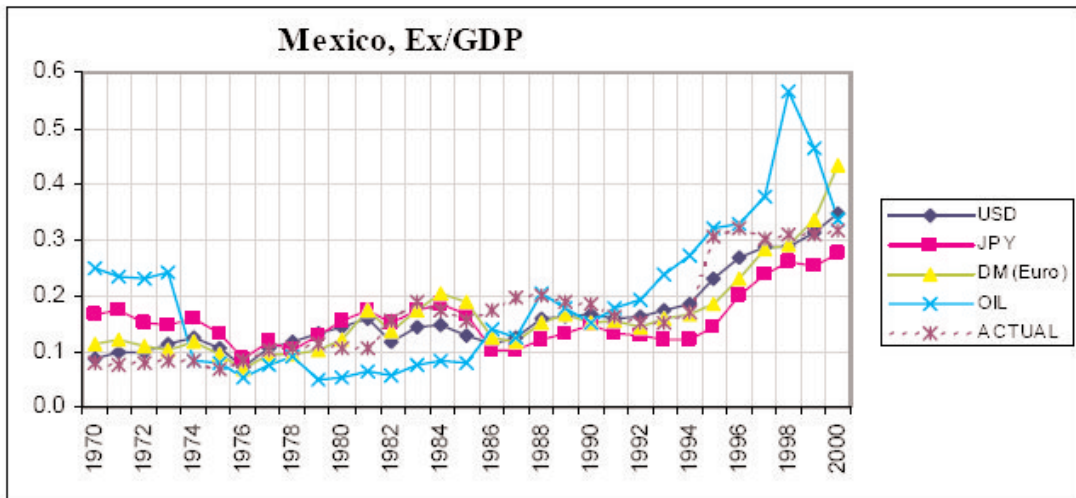
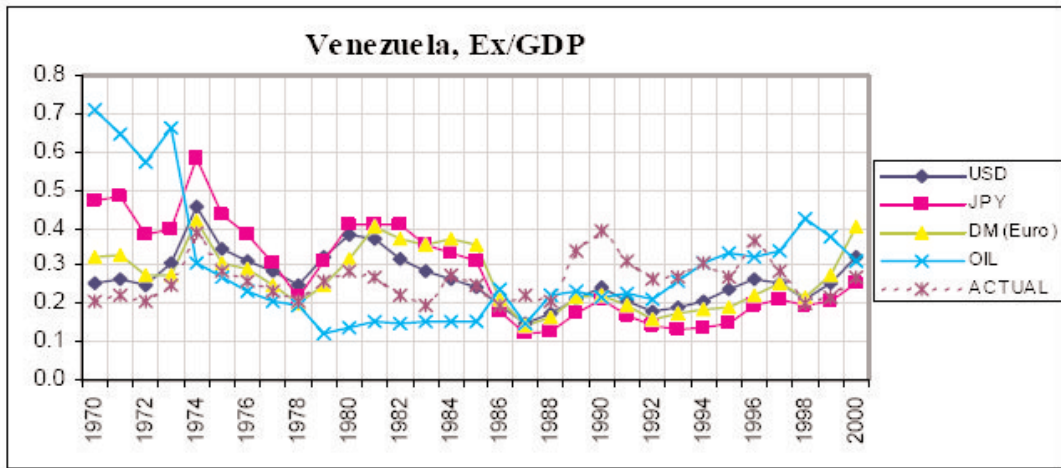
Not all countries will benefit from a peg to their export commodity, and none will benefit in all time periods. One must go through simulations to get a feeling for the variety of outcomes that is possible. Nonetheless, for countries specialized in a mineral or agricultural export commodity, the proposal that they peg their currency to that commodity deserves to take its place alongside pegs to major currencies and the other monetary regimes.

Less radical forms of the proposal

Since pegging to only one export commodity could lead to unnecessary volatility in the price in local currency of other export goods, another moderate form of the proposal is that, for small exporters, monetary policy should target a basket of basic mineral and agricultural commodities, in other words, peg the export price index (PEPI).

How would PEPI be implemented operationally?...It would be a matter of setting a target zone for the year, with monthly realizations, much as a range for the CPI is declared under the most standard interpretation of inflation targeting.

Some confuse the PEPI idea with old proposals to get to a global basket of commodities. The idea is that a broad-based commodity standard of this sort would not be subject to the vicissitudes of a single commodity such as gold, because fluctuations of its components would average out somewhat. The global commodity basket proposal might work if the basket reflected the commodities produced and exported by the country in question. But for a country that is a net importer of oil,



wheat, and other mineral and agricultural commodities, such a peg gives precisely the wrong answer in a year when the prices of these import commodities go up. Just when the domestic currency should be depreciating to accommodate an adverse movement in the terms of trade, it appreciates instead. Korea should not peg to oil, and Kuwait should not peg to wheat.

Indeed, minimizing the weight of import commodities in the target price index is as important as including weight on the export commodities. This point also gives PEPI its advantage over the popular CPI target in all countries, not just commodity-producers. Around the world, central banks of countries such as Korea that import food and energy have recently experienced in a painful way the inconvenience of having a CPI target in the face of increases in the world prices of oil and agricultural commodities.

How would PEPI be implemented operationally?

That is, how would an index of export prices be stabilized? As noted, in the simple version of the PEP proposal, there is nothing to prevent a central bank from intervening to fix the price of a single agricultural or mineral product perfectly on a day-to-day basis. Such

perfect price fixing is not possible in the case of a broad basket of exports, as called for by PEPI, even if it were desirable. For one thing, such price indices are not even computed on a daily basis. So it would be, rather, a matter of setting a target zone for the year, with monthly realizations, much as a range for the CPI is declared under the most standard interpretation of inflation targeting.

The key attribute is that monetary policy should tighten enough to appreciate the currency proportionately when export commodity prices go up, not when import commodity prices go up.

The declared band could be wide if desired, just as with the targeting of the CPI, money supply, exchange rate, or other nominal variables. Open market operations to keep the export price index inside the band if it threatens to stray outside could be conducted in terms either of foreign exchange or in terms of domestic securities. For some countries, it might help to monitor on a daily or weekly basis the price of a basket of agricul-

tural and mineral commodities that is as highly correlated as possible with the country's overall price index, but whose components are observable on a daily or weekly basis in well-organized markets. The central bank could even announce what the value of the basket index would be one week at a time, by analogy with the Fed funds target in the United States. The weekly targets could be set so as to achieve the medium-term goal of keeping the comprehensive price index inside the pre-announced bands; and yet the central bank could hit the weekly targets very closely, if it wanted, for example, by intervening in the foreign exchange market.

Conclusion

Perhaps the version of the proposal that monetary economists and central bankers would find the least threatening is simply to substitute the Producer Price Index in place of the Consumer Price Index. The key attribute is that monetary policy should tighten enough to appreciate the currency proportionately when *export* commodity prices go up, not when *import* commodity prices go up. CPI targeting gets this exactly backward. PEP, PEPI, and PPI-targeting all get it right.

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