

# Currency Devaluations, Product Pricing and Trade Deficits

DAVID AVIEL \*

## ABSTRACT

The paper explains why currency movements and trade volumes, while theoretically related, have a minimal effect on each other in practice. In addition, it argues that volatile currency movements and trade deficits are not good in the long term. A separate set of measures on how to deal with each issue, e.g., currency controls to control exchange rate movements, is also given.

## INTRODUCTION

The purpose of this study is to clarify the relationship between currency devaluations, product pricing and exchange controls. The paper also examines the impact of currency devaluations on trade deficits and probes the need for currency controls. The literature is replete with articles, books, and doctoral dissertations recommending currency devaluations as a vehicle to accomplish national economic and social goals such as narrowing trade deficits, boosting exports, and increasing domestic employment. According to these publications and to long-established theories, devaluations should achieve such goals.

This paper, however, shows otherwise in practice. Many countries with frequent devaluations often end up with weak currencies and big trade deficits, while countries with strong currencies such as Japan, Holland and Switzerland have strong currencies and trade surpluses. Other countries, such as China and Taiwan, have large trade surpluses but their coinage is

---

\* Professor of International Business, California State University, USA.

not considered hard currency. The US dollar is a world currency, traded and stockpiled by most countries, yet the US has been experiencing a trade deficit for a quarter of a century. This paper analyzes the reasons behind the gap between theory and practice.

### **CURRENCY DEVALUATIONS AND TRADE DEFICITS**

On March 16, 2001, the Wall Street Journal reported that the US current account deficit grew to a record \$435.38 billion. This persistent deficit, the 25th in a row, occurred despite repeated devaluations of the US dollar. In fact, since 1985, the greenback has fluctuated between 80 yen to 130 yen per dollar. By March 2001 it had lost about 55 percent of its value against the yen, yet the trade deficit keeps widening. A falling dollar should, according to theory, make US goods cheaper and foreign goods more expensive, so why didn't the trade deficit disappear instead of getting wider?

### **DEVALUATIONS AND PRODUCT PRICING**

The answer rests in the complexities of international finance, the multiple and often-contradictory forces at work, and the long lead-time involved in foreign trade transactions. First, the dollar's decline has not been universal. While it depreciated against the Deutsche mark and the yen, the dollar appreciated against other currencies, such as the Canadian dollar, the Mexican peso and currencies of other major trading partners, more than offsetting the fall against the mark and the yen. Indeed the Federal Reserve Bank of Dallas, using trade-weighted exchange rate indexes, calculated that the dollar appreciated by 67 percent between 1985 and 1994 (Federal Reserve Bank of St. Louis 1995)

Second, about two-dozen currencies are directly pegged to the US dollar and many others are partially linked, so when the dollar is devalued, these currencies are adjusted accordingly, neutralizing the effect of the devaluation. Furthermore, the US dollar is not only an American currency but is also a global exchange medium and a world reserve. The bulk of international trade is designated

and paid for in US dollars, even when the United States is not involved. Thus, for example when Italy purchases oil from Kuwait, or Denmark buys computers from Taiwan, payment is made in US dollars. Hence, the demand for dollars is universal, affecting its value and often neutralizing devaluations. A weak dollar may, in the long run, result in lower income, or even losses, to a German or Japanese firm when dollar revenues are translated back to the more expensive yen or Deutsche mark, as was the case with Lufthansa, Daimler-Benz and Sony. But that does not necessarily trigger an increase in prices and drop in demand for imports. Eager to protect their hard-won market share in a highly competitive global economy, exporters to the United States are reluctant to raise prices and opt instead for cost-cutting measures such as automation, outsourcing, moving plants offshore, introducing upscale models and reducing profit margins. In the long run, some prices may be raised but not proportionately to the drop in the value of the dollar. On the other side of the coin, devaluing the US dollar does not always produce a commensurate decrease in the price of American products. Many companies are locked into contracts with suppliers and are not about to change their prices or trade pattern any time a currency value changes.

Even when long-term contracts are not present, prices do not always drop when a currency is devalued. Instead merchants use the higher-profit margins to compensate for lean years and to build up reserves for the next storm, and do not pass the lower cost to the ultimate user. In some instances, when market share is in jeopardy, firms will hold the line on prices, or even lower them to protect the hard-won market share. But in general there is no clear correlation between prices and changes in currency values.

A significant portion, over 50 percent, of international trade is intra-company trade (Madura 1999), i.e., purchases by parent corporations from their overseas subsidiaries. Prices charged in these transactions are not a function of currency values but of domestic cost factors and transfer pricing strategies designed to minimize tax liabilities. Thus, if a parent company is located in a high-tax country, it will attempt to pay its subsidiaries high prices for components

and consequently show a lower taxable profit. Hence the price of a product is not proportionally affected by the value of the currency and the demand is not always directly a function of price. The Japanese yen, for example, is now twice as high as 15 years ago, but Japanese VCRs, Camcorders, TVs and cars are nowhere twice as expensive as in 1985. Some are even cheaper.

### **THE IMPACT OF DEVALUATIONS ON DEMAND**

Even when devaluation does result in lower prices, it does not always translate into higher demand. Price is not the only determinant in the purchasing decision process. Product quality, design, style, and reputations for service and after-sale support are at times more important to consumers than a low price. As determined by a large number of academic studies, perceived quality, relative risk, country of origin, anticipated status and prestige are all important considerations in the purchasing decision process, at times more important than the price. Certain luxury cars are in great demand regardless of their steep price, notwithstanding the fact that in practical terms a Honda or Camrey could perform the same function. In certain inelastic products or on proprietary items, higher prices have a minimal impact on demand. Some imports from Japan, like various memory chips, are not produced in the US and therefore higher prices have a negligible effect on the quantities imported. Sometimes, even when there are domestic substitutes local producers raise prices as soon as the price of imports rises, offsetting whatever effect the devaluation may have.

At times, a weaker dollar may, at least in the short run, widen the trade deficit as it takes more dollars to purchase the same quantity of goods as before, a phenomenon known as the *J curve* effect (i.e., the deficit sinks deeper before climbing up).

Goods and currencies differ widely in terms of valuation methods, trading volumes and transaction speed. The global volume of goods traded per year amounts to about US\$4 trillion. Currencies are traded around the clock, at a volume of US\$1.7 trillion per day (Table 1). In other words, two-and-a half days of

currency trading equal a whole year of merchandise flow. The difference in transaction speed is even more striking. The bulk of merchandise moves on ships at 25 miles per hour. Currency transactions travel at the speed of light, via satellite links, with the stroke of a key.

Order cycle time for goods is measured in months and at times in years, while currency cycle time is denominated in seconds. The lag time from the point a devaluation takes place to the next currency trade is measured in seconds while the impact of a devaluation on the price of goods would not take effect until 12 to 18 months later. By then, the economic weather has changed, many new factors have entered the market place, and whatever ripple effect the devaluation could have had has been sterilized. The number and size of the traders vary too. Goods are traded by tens of thousands of traders, some as big as General Motors and others as small as a one-person operation in Manila. Currency trading is concentrated in seven major centers, London, New York, Tokyo, Singapore, Hong Kong, Zurich and Frankfurt, with the first two accounting for 60 percent of the total volume (Table 1). The price of goods is determined through negotiations between importer and exporter and is often anchored into a long-term contract secured by a letter of credit. Currency prices change minute by minute and are influenced by speculations, political turmoil, social upheaval, economic uncertainties and psychological factors. An assassination south of the border can trigger a tidal wave of fleeing currencies, changing the financial equilibrium of a country while having little or no effect on the price of goods, which, as was mentioned, are quoted in US dollars.

### **THE EFFECT OF A PROTRACTED TRADE DEFICIT**

Various academic papers argue that there is no harm in having trade deficits. After all the US has lived with them for the past 25 years. In reality, a protracted trade deficit is harmful and can cause long-term damage. First, a trade deficit adds to the national debt burden, as the country has to borrow to make up the shortfall.

Each year, the US government shells out more than US\$220 billion in interest payments to service this debt, money that could be used for various domestic needs. Second, companies that cannot sell their products are forced to scale down operations, lay off workers and occasionally move the entire plant offshore. For each US\$1 billion drop in exports, the US loses 20,000 jobs (Czinkota et al. 2000) so when the trade deficit ballooned from US\$70 billion in 1983 to US\$338.9 billion in 1999, five million jobs were lost.

Devaluing the dollar to balance the trade deficit is an attempt to get something for nothing, a quick fix that rarely works. Germany and Japan have strong currencies and trade surpluses; numerous countries have weak currencies and trade deficits and it is not in the interest of the US to join the latter. A more constructive approach would be for the government to put its own house in order, that is, to reduce its debt burden, introduce legislation to encourage savings and investment that will ultimately lower interest rates, boost productivity and improve quality. In addition, by raising educational standards and increasing R&D outlays, the US can become more productive and more competitive in the global market place. Then the country could end up with a strong dollar and a surplus in its trade balance.

Table 1. Daily currency trading in billions of US dollars

	1989	1992	1995	1998
United Kingdom	187	290	464	637
United States	129	167	244	351
Japan	115	128	161	149
Singapore	55	74	105	139
Germany		57	80	100
Switzerland	57	68	86	82
Hong Kong	49	61	96	79
France				72
Australia	-	-	-	47
Netherlands	-	-	-	41
Denmark	-	-	-	28
Totals	592 (+43%)	845 (+ 46%)	1236 (+40%)	1,725

Average growth: 14 percent/per year

Source: Reuters

Note: This table does not include trading volumes in China, India, Russia, Brazil, Italy, Spain and various other centers, which do not participate in the surveys conducted every three years. Hence the total daily trading volume is probably significantly higher.

## USING CURRENCY CONTROLS INSTEAD

As was already mentioned, trying to influence and regulate the flow of goods by manipulating the value of currencies is futile and has not worked for the last 25 years. Far more effective and important is to regulate the flow of currencies across international boundaries, a controversial issue with widespread opposition in the literature. The mere mention of currency controls generates a loud howl of protest from currency traders, economists, free-market gurus, and libertarian prophets. Yet these very same opponents, along with the public at large, benefit immeasurably from numerous controls imposed on various aspects of daily life. Would anyone rather take a flight in an uncontrolled airline, landing in an unregulated airport? How about undergoing surgery in the hands of an unlicensed individual, or entering an elevator or crossing a bridge designed by an uncertified engineer and built without the proper permits? People of all ages consume large doses of medicines daily; how many would they swallow if these medicines were not tested and approved by the Food and Drug Authority or a similar regulatory agency? Would a normal citizen hand over his savings to a bank that was not regulated and insured by the Federal Deposit Insurance Corporation? While freedom and free markets are an admirable concept, carried to an extreme, they could prove counterproductive. Charity, for example, is another noble virtue, but giving away everything one owns does not solve the poverty problem; it just adds to it.

Controls and regulations are often enacted as a necessity, in response to new developments and emerging needs. In the later part of the 19<sup>th</sup> century and the beginning of the 20<sup>th</sup>, the US economy was a free, laissez faire system with minimal or non-existent controls. The result was a Darwinian jungle where enterprises were flying high one day and devoured the next. Scandals, frequent bankruptcies, large-scale deceptions, shams, and fraudulent stock offerings were commonplace, keeping prudent investors away. Enter the Securities and Exchange Commission (SEC), a tough regulatory agency with strong teeth, imposing stringent controls and strict regulations. The result: a

flourishing stock market that attracts millions of investors from home and abroad. How many households would entrust their cash to an uncontrolled and unregulated stock market?

World currency markets are now in a similar stage. Relatively young (currencies were pegged until 1971), they did not attract much attention until recent years, when trading volumes reached colossal heights. By the fall of 2000, over US\$1.7 trillion was traded daily, and the volume continues to grow. Similarly, the 1999 annual budget of the United States also stood at US\$1.7 trillion.

Technological breakthroughs in telecommunications now enable traders to transfer vast sums of cash across continents with the stroke of a key. The rapid growth of currency markets produced new profit opportunities to numerous firms. Toyota, for example, made a profit of US\$2.9 billion one year from the sale of cars, and US\$1.2 billion from currency trading. In one year, Caterpillar lost US\$57 million from regular operations but generated US\$89 million from currency trading, ending the year with a net profit of US\$32 million. The fast and speculative currency markets also introduced painful losses to Long Term Capital, Baring Bank, Daiwa, Orange County, and many others.

This explosive growth has produced an uncontrolled, potent, force, which dictates policy and serves as both judge and jury. As William Freund, former Chief Economist of the New York Stock Exchange, put it:

“The world’s financial markets have become the watchdog over domestic, economic, political, social and legal policies. They are judge and jury. Instead of governments dictating to markets, international markets oversee governmental policies.” [*The Wall Street Journal*, March 19, 1996]

The experience accumulated in world democracies proves that the concentration of immense power in a single arm is dangerous. Instead, checks and balances have proven the most effective approach. At present there is no countervailing force to this mighty torrent. No single government or a combination of governments



has the necessary reserves to balance or direct this "pilotless ship," gliding in different directions, unguided and at times misguided and out of control. Indeed when the 16 richest countries joined forces in the spring of 1995 to boost the value of the US dollar, their combined efforts did not have much of an impact, since the US\$30 billion that they had raised amounted to a drop in the bucket, 2 percent of the daily trading volume. Uncontrolled, massive currency flows can destabilize small- and medium-size economies that do not have an adequate infrastructure to absorb a sudden tidal wave. Indeed large, violent movements of capital can cause damage regardless of the directions in which they flow. A massive influx of foreign exchange causes a sudden change in the value of the local currency, impairing stability and hampering long-term planning. A sudden outflow of cash may prompt the authorities to raise interest rates, to protect the value of the currency, and to attract investors, thus causing an economic slowdown and unemployment.

Through necessity, nations have learned to regulate the flow of people, goods, and commodities. The flow of water, electricity, vehicles, airplanes, telephone calls and virtually all traffic is regulated as well. As the tide of currency trading rises, it is high time to set up some dikes to regulate this current as well. Indeed during the Asian currency crisis, countries that had maintained a certain level of foreign exchange controls, like China, India and Taiwan, were not severely affected.

When Malaysia erected in September 1998 some temporary gates to stem the currency flow, opponents protested vigorously, predicting dire consequences. Two and a half years later, it appears that these controls, albeit ridden with flaws, introduced a measure of stability and predictability. Similarly, when representatives of 44 governments met in Bretton-Woods in 1944, and instituted a system of anchored and controlled currencies, the outcome was a quarter-century of spectacular growth, prosperity, and stability.

Taking advantage of advanced technologies, financial institutions have proven quite astute in inventing new, sophisticated monetary instruments that transcend international boundaries. Some of these funds have grown to such immense proportions that only

governments, using the taxpayer's purse, are able to bail them out when they run into stormy weather. Shouldn't the taxpayer have some say beforehand?

While a lot is being said in the literature about the need for a "new architecture," an ambitious undertaking, which may be difficult, if not impossible, to implement, a more modest and feasible agenda is to enact a set of basic ground rules and a code of conduct that will introduce some order in this oft-chaotic market place. These rules could include carrots, sticks, temporary quotas, and licensing requirements. Direct foreign investments, which are long-term and hence more stable, could be encouraged through tax holidays, land grants, and other incentives, while short-term, speculative currency trading could be discouraged through a moderate tax, volume and time limits and licensing requirements.

Fostering stability and investor confidence is the name of the game and a balanced measure of controls could accomplish this objective. Indeed a stable and rational set of rules could benefit consumers and producers alike. A toy manufacturer in San Francisco gets many orders from Asia, although his prices are four times higher than those of his Asian competitors. The reason: consumers know that, due to the regulatory requirements in the US his toys are free of toxic chemicals, lead-based paints, and small hazardous parts.

## REFERENCES

- Czinkota, M., I. Ronkainen and M. Moffet. 2000. *International Business*. New York: Dryden Press.
- Federal Bank Reserves of St. Louis. 1995. *International Economic Trends*. August.
- Madura, J. 1999. *Financial Management*. New York: West Publishing Co.