

# What Exchange Rate for the Lev?

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One of the many problems facing the former socialist countries (FSCs) is choosing an exchange rate policy. Given their multitude of other problems, this problem has not received the attention that it otherwise would have. This paper argues that this lack of attention has led Bulgaria to follow a policy that is extremely costly, and is making a difficult transition problem even more difficult.<sup>1</sup>

The argument is a simple one: Trade does not simply happen as is assumed by the theory of comparative advantage which underlies the current Bulgarian exchange rate policy. When one looks at the micro-foundations of trade one sees that *international trade comes about because traders make it come about*; they do so by gathering information about trading possibilities and marketing their goods. Such activities can be hindered by a low value of a currency and, in the case of Bulgaria, at the current exchange rate the hindrance more than offsets the benefits. Thus, if Bulgaria is to have a currency convertible on the current account, it must consider supplemental policies which will raise the value of the lev.

## The Evolution of the Current Bulgarian Exchange Rate Policy

The Bulgarian exchange rate policy followed in the early 1990s can best be understood in the context of the entire liberalization policy that Bulgaria had undertaken, a policy that closely follows the generic IMF-proposed policy for FSCs.

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<sup>1</sup> An excellent discussion of the financial transition problems is Ronald McKinnon's **The Order of Economic Liberalization** (Johns Hopkins University Press, 1991). My thinking about the Bulgarian situation has been significantly influenced by his arguments.

That liberalization policy is to move to free markets as quickly as possible. The general philosophy behind this policy is simple: Biting the bullet now strengthens the country and will make it strong in the future. This liberalization policy is based on the IMF experience with Latin American countries where, in notable cases, it has been successful relative to the alternative strategies.

In the early 1990s Bulgaria had little choice but to accept this IMF policy since the IMF was its only source for hard currency loans. The reason goes back to the mid-1980s when Bulgaria began to establish relationships with Western countries and borrowed significantly from Western banks. This debt was denominated in dollars and, since all industry was government-owned, this was debt for which the government has responsibility.

In the late 1980s the political landscape in the formerly socialist countries changed enormously. Both the political and the economic reforms accelerated much faster than anyone had predicted. Bulgaria needed advice, both as to how to move to a market economy and how best to manage its international economic affairs. The IMF and World Bank stepped in to provide that advice. They advised Bulgaria to free most domestic prices, to establish a freely convertible exchange rate on the current account while maintaining some controls on the capital account, and to keep restrictions on international trade to a minimum.

After a brief period of rapid price level increases (on the order of 800%) which eliminated of monetary overhang that had existed, Bulgaria tightened up its monetary policy significantly. Savings interest rates rose to 45% and lending interest rates rose to between 55% and 70%. It was unclear what real rate of interest this represented since inflationary expectations varied widely, but it was a high enough interest rate to prevent almost all long term loans; the banking system provided

mostly short term credits while attempting to deal with the many pre-existing non-performing loans on its books.

Bulgaria also followed IMF advice on fiscal policy; government spending was cut drastically and new taxes, including a profits tax and a personal income tax, was established. These taxes were intended to balance the government budget. However, because of a precipitous drop in Bulgarian output and hence decline in government revenue, these spending cuts and taxes did not accomplish the desired end.

Output fell for two reasons: (1) trade with CMEC countries and Iraq, which had made up a large portion of Bulgarian trade, was disrupted by political disputes; and (2) the Soviet Union stopped selling Bulgaria energy and raw materials at subsidized prices and instead began charging world market prices, which amounted to a cut-off of a subsidy of well over a billion dollars a year.

The above two events also led to an enormous decline in export demand from traditional markets. Bulgarian industry faced an evaporating market for its exports, combined with a large increase in the price of its foreign-bought raw materials. In such an environment, no matter what policy it followed, the Bulgarian economy was in for a rough time.

The IMF policy was to liberalize the economy quickly, and attempt to redirect trade to the West. This meant making the lev convertible on the current account as quickly as possible. Bulgaria did so in the early 1990s, and in early 1992 the market value of the lev had fallen from a non-convertible 1-1 ratio to about a 24-1 (lev to dollar) ratio in early 1992 and about 60-1 in mid-1994. Part of this fall was due to Bulgarian inflation, but the fall also involved a significant four-fold real depreciation of the lev (a fall in the exchange rate adjusted for relative rates of

inflation). This real fall in the value of the lev is seen as desirable; it is supposed to stimulate the Bulgarian economy by stimulating the Western demand for Bulgarian exports and, after a brief period of price shock and suffering, was meant to set the Bulgarian economy on a high growth path.

The fall in the exchange rate, however, had some serious side effects. Specifically, it increased the burden of its dollar-denominated foreign debt enormously. This burden could not be met, which meant that Bulgaria had to suspend payment on the foreign debt. Private capital sources quickly dried up. This left the World Bank and the IMF as the only sources of outside funds.

Since the foreign reserves of the central bank amounted to the value of only two weeks' trading, the resulting exchange rate was in large part a free float, rather than a dirty float. The market was also quite thin; there are fewer than 20 licensed foreign exchange dealers and the total volume of transactions is only about \$10 million per day. In such a thin market individual transactions (such as the delay in the sale of oil due to bad weather postponing a tanker's arrival) can move the market significantly. Thus, large fluctuations in the value of the lev (from 17-1 to 30-1 in 1992) are not surprising; what is surprising is how small those fluctuations have been. One reason for this is that private traders, in combination with the central bank, have attempted to reduce fluctuation by spreading out large purchases, helping to stabilize the market.

### **Bulgaria, Comparative Advantage and Exchange Rates**

There are two competing analyses of exchange rate determination: the classical theory based on comparative advantage and the monetary theory of exchange rates

in which demands for currency based on comparative advantage are swamped by asset demands for currency. Because of Bulgaria's previous default on loans, the uncertainty about the safety of deposits in Bulgaria, the undeveloped capital sector, and the capital control on Bulgarians (who are allowed to hold dollar accounts, but legally are not allowed to change lev to dollars), the supply and demand for lev is determined primarily by currency demands reflecting exports and imports. Thus, the Bulgarian situation reflects the classical theory of exchange rate determination based on comparative advantage.

### **How the Theory of Comparative Advantage is Supposed to Work**

According to the theory of comparative advantage, Bulgaria will produce the goods in which it has comparative advantage; its trading partners (which is hoped to be Western economies) will produce the goods in which they have comparative advantage, and the exchange rate will operate as a fulcrum to maintain trade flows in equilibrium.

Advocates of comparative advantage recognize that, when a country isn't producing many internationally desirable goods, the fulcrum may have to be significantly off center. The country will pay what seems extortionately high prices for its imports and receive what seems extraordinary low prices for its imports.<sup>2</sup> According to the theory of comparative advantage if there are no inherent differences in productivity, these anomalous prices will be a short-run phenomenon which will, eventually, reverse themselves. In other words there are long-run

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<sup>2</sup>"Extraordinarily high and low" are relative terms, but ones which will have meaning to many people who don't see any objective basis in skills which can account for the different valuation of labor's worth in these countries. Its technical meaning would be high or low relative to what they would be if there were a level playing field.

benefits that makes those costs worth bearing. The benefits, according to the theory of comparative advantage, are that lower prices will stimulate exports by making that country's goods competitive. Eventually, the fulcrum will gravitate to a level reflecting inherent productivities and competitiveness.

The questions this paper asks are: Is the theory of comparative advantage sufficiently appropriate to the Bulgarian situation, so that an exchange rate policy can be based upon it? Can one expect that the fulcrum will move to a point reflecting inherent productivities in a reasonable length of time? And, if not, what can be done about it?

### **Problems with the Theory of Comparative Advantage**

The theory of comparative advantage best explains exchange rates among countries in which their trade, specialization, and production all develop simultaneously so there is a level playing field. Only then can it be possibly assumed that trade flows, and hence exchange rates, reflect inherent comparative advantages. Each country must have a competitive chance to specialize in one area or another, or to develop the markets necessary to take advantage of economies of scale and name recognition development.

When countries do not start from a level playing field, the theory has intuitive problems. It assumes that *goods sell themselves*, or at least markets quickly equilibrate to replace high-cost producers with low-cost producers. But in the real world for that to happen, goods must be marketed and sold. Bulgarian industry is not in a position to do so. Because of the low value of the lev, it is prohibitively expensive for a Bulgarian firm to send a salesperson to the West, even if the firms

had such salespersons, which, because of their past, they don't. The structure of Bulgarian firms was designed for a command and exchange economy, not a market economy; they have no domestic sales or marketing departments. A low value of the lev makes it more difficult for Bulgarian firms to establish an international presence and thereby take advantage of comparative advantage.

The IMF's argument that a market determined exchange rate is the best policy is based on experience in Latin America. In the Latin American countries, where IMF views of financial liberalization policies were honed, more of the foundation for international competition was already in place; the countries had extensive contacts with the West and Western markets and numerous expatriates who provided necessary cross-cultural information about potential exports. The Latin American problem was a flabby state-controlled industrial system. They needed an incentive to compete harder.

The Bulgarian case is quite different. Its industries and people do not have the needed cross-cultural information and Western contacts in place. Immersing them in international competition will not only kill the flabby; it will kill and is killing many otherwise viable industries. Some of them may deserve to die. Many Bulgarian industries, however, especially the high-tech industries have an enormously well-trained and bright work force and could be world-class competitors. But, without the foundations for trade, they, too have little chance to develop. Instead, there will be a brain-drain, and Bulgarians will lose the dynamic individuals who would otherwise make it develop.

### **Bulgaria's Comparative Disadvantages**

Putting the argument more formally, Bulgarian industry faces a set of comparative disadvantages which limit the applicability of the theory of comparative advantage.

### ***Information Disadvantage***

First, there is the *information disadvantage*. Many Western goods are well-known in Bulgaria; few Bulgarian goods are known outside Bulgaria. To demand a product requires knowledge of a product so the demand for Bulgarian products is low. Developing name recognition to counter this information disadvantage would be extremely costly. The lower the value of the lev, the more costly it is.

### ***Perception of Quality Problem***

Second there is a *perception of quality disadvantage*. Most Bulgarian goods are grouped together with other products of the formerly socialist countries and are collectively seen as inferior (by Bulgarians and Westerners alike). This holds true regardless of whether there is a real quality disadvantage or not. For example, when in Bulgaria, I was talking to the head of a cement company who could significantly beat Western cement company prices, but could not sell cement in the Western markets. The lower price did not help him and may have hurt him since price is often used as a proxy for quality. Lowering the price is not going to counter this perception of quality problem. It will require significant marketing and improvements in quality of goods.



One could argue that this low price/quality perception problem is a problem of international pricing, not of exchange rates. However, buyers of Bulgarian goods want to same price charged domestically, and hence Bulgarian's pricing options are limited. (On some goods, such as state controlled hotels where differential pricing is possible, Bulgaria is modifying the prices of its goods. But on many other goods, differential international pricing is not an option.

### ***Change in Energy Price Disadvantage***

Third, there is the *change in energy price disadvantage*. Because Bulgarian industry was developed to respond to the previous low energy prices, it's structure is enormously energy-inefficient relative to world energy prices. Any country which based its production facilities on a different set of prices than the current world prices would face that problem; it has nothing to do with inherent comparative advantage. If it receives low prices for its goods, which it does with low exchange rates, it can't afford to modernize and hence compete. This has been somewhat helped by the continued low price of international oil through 1994, but even that low price is significantly higher than what Bulgaria paid previously.

### ***Knowledge of Trade Disadvantage***

Forth, there is the *knowledge of trade disadvantage*. Trade doesn't just take place; it relies on knowledge of what is tradable and knowledge of how to handle the technicalities of customs and the like, once one discovers what is tradable. Because of Bulgaria's previous isolation, Bulgarians do not have extensive knowledge of

Western markets--what might be exportable and what might not be. But such knowledge is necessary in order to trade effectively.

Trade operates by intermingling cultures. A Bulgarian expatriate sees something in another country and says, "In Bulgaria, we did that better; if I could sell our Bulgarian way here, I could make a profit." But Bulgaria was until recently, isolated; Bulgarians don't have knowledge of what might sell in Western markets, and the West doesn't have knowledge of what might sell in Bulgaria. To counter this, Western businessmen are coming to Bulgaria to sell their wares. At current exchange rates, few Bulgarian businessmen cannot afford to travel to the West.

### ***Marketing Expertise Disadvantage***

Fifth, there is the *marketing disadvantage*. Goods do not sell themselves; they are sold. Western firms have large marketing and sales departments; without them they would soon go broke. Because of their previous reliance of trade with CMEC markets, Bulgarians do not have any expertise in marketing; they have no brochures, nor do their businesses have sales departments, let alone international sales divisions. At current exchange rates organizing any such international division is prohibitively costly.

### **Comparative Disadvantages and Alternative Dimensions of Trade**

The theory of comparative advantage can in principle deal with these disadvantages. They simply mean that the fulcrum must shift over further; the relative value of the lev must fall more than otherwise. But if one considers the

microfoundations of trade and asks how that fall in the lev is going to eventually lead to increased trade, one sees a problem in this argument. The problem is that *disadvantages such as those described above, are not offset by a low exchange rate; they are worsened.*

The reason is as follows: Trade takes place in two dimensions. One dimension is the price dimension; it is that dimension to which the theory of comparative advantage refers. A second dimension is in the information and selling dimension: Are your produces known and visible? Are they presented in the most effective way at the right time, to the right people? Western businesses worry as much or more about this information and selling dimension than about the price dimension. They have marketing and selling departments; they don't have pricing departments. The theory of comparative advantage assumes all such information and selling problems away.

Of course it isn't just Bulgarian firms which can initiate trade. Foreign firms entering into Bulgaria to take advantage of the low relative cost of skilled Bulgarian labor can also make the theory of comparative advantage work. But that isn't happening, and should not be expected to happen for some of the same reasons that Bulgarian firms have in selling their goods abroad. Western firms know little about "exotic" Bulgarians and there are few Bulgarians in the West who can tell them. I met a number of Western businesspeople in my two months in Bulgaria; almost all were selling Western goods. I met only one who was interested in buying Bulgarian goods and establishing a production unit in Bulgaria, and that was a Bulgarian émigré.

In summary, the low value of the lev holds export earnings below what they would be at a higher exchange rate. While the quantity of exports rises with a fall in

the exchange rate, the net revenue from those exports decreases as the exchange rate falls. The backward falling demand occurs because the low value of the lev increases the comparative disadvantages of Bulgarian goods in the dimensions of trade in which it is weakest. If export earnings decrease with a fall in the value of the lev, the question arises: Will there be an equilibrium exchange rate which balances exports and imports? The answer is yes, there will be at least one exchange rate, but it will not be one which in any meaningful sense reflects inherent comparative advantage. It will simply be one that lowers the value of a country's currency far enough to limit spending on imports to match export earnings.

Once an exchange rate has fallen far enough, imports will be significantly influenced by price rise in foreign, which in Bulgaria's case means Western, goods. (although it is the income effect of that price rise, not the substitution effect which is the powerful influence). At that point the supply of lev (the demand for foreign currency) will be quite elastic, so even if the demand curve is backward falling and a fall in exchange rates reduces foreign exchange proceeds from the sale of exports, the exchange rate market will reach a stable equilibrium. But it will not be an equilibrium which reflects that country's comparative advantage, nor will it be an equilibrium that will most effectively make a country competitive in the long run.

A strong argument can be made that the above described situation is the one that Bulgaria currently finds itself in the early 1990s. Bulgaria's current low wages do not reflect Bulgarian labor's inherent low productivity based on any objective relative comparison of skills with the West. The Bulgarian labor force is highly skilled, and probably better trained and more strongly motivated than the U.S. labor force.<sup>3</sup> Starting on a level playing field, one would most likely predict Bulgarians

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<sup>3</sup> The enormous fall in the value of the lev over the last few years leads to marked differences in estimates of per capita real income based on exchange rates--from \$7000 a year in the mid-1980s

would do rather well in international competition. But all agree that playing field is not level, and Bulgaria must bear the costs of transition. Their internationally relatively low wages and low value of their currency are part of those costs of transition. But if, because of their effects on the information dimensional of trade, those costs are not making Bulgarian industry competitive in the intermediate, or even in the long run, then these costs are serving little purpose. They are simply making a bad situation worse.

Thus, a strong argument can be made that a value of the lev at current prices of between 15-1 and 25-1 (lev to dollar) *would more effectively stimulate Bulgarian industry and exports* than the current 60-1 rate. It is true that such an exchange rate would more than double the current average real monthly wage which a western firm would have to pay to produce a good in Bulgaria, but since that monthly wage is less than 1/20 the monthly wage for a U.S. worker, it is difficult to see how that change will prevent the price effect from operating, given the high skill level of the Bulgarian work force. Most Western firms' decisions about establishing a business in Bulgaria will not be significantly affected by such a rise in the average wage since they would cannot expect the current low wage for highly-skilled labor to continue into the future. But the rise in the value of the lev would decrease the cost for Bulgarian firms to market their goods, increase the net revenues from exports and thereby improve Bulgaria's long run competitiveness.

### **Policies to Deal with Comparative Disadvantages**

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to \$5000 a year in the early 1990s to somewhere around \$1000 a year in late 1991. Real income has fallen, but most estimates place the fall at about 25%, not the enormous fall one gets using market exchange rates to measure real income.

If I am correct in my analysis that the theory of comparative advantage is not working in the Bulgarian case, one of the important pillars of financial liberalization of the exchange rate is removed. But this does not necessarily mean that Bulgaria should retreat from convertibility and financial liberalization? Not necessarily; despite the problems, the advantages of free exchange on the current account are considerable (and well-known, which is why I don't discuss them here): any retrogressive movement would likely isolate Bulgaria from international markets more than it already is. Before one even considers such a drastic move, all other options for raising the value of the lev need to be considered.

Unfortunately, those other options are limited. Given Bulgaria's lack of international resources and the lack of any IMF or World Bank policy to deal with such problems, any long-term propping up of the lev through intervention is impossible.<sup>4</sup> Similarly, a high interest rate policy is unlikely to bring in significant flows of foreign currency to hold the value of the lev up.<sup>5</sup> With recent memories of an inflation which eliminated the monetary overhang, and the newness of the governmental financial structures, any interest rate policy is unlikely to be an effective policy tool in holding up the value of the lev.

That leaves two policies Bulgaria, and countries sympathetic to Bulgaria's problem, could follow to achieve a higher international value of the lev: tariff policy and foreign ownership policy.

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<sup>4</sup>If the argument presented here is correct, it is possible that one of the most effective assistance programs would be to set up such a support and stabilization fund.

<sup>5</sup> Currently the lev is not convertible for Bulgarians on the capital account, although Bulgarians are allowed to hold dollar deposits and higher interest could bring about some flow from Bulgarians holding dollar accounts.

## **Tariff Policy as an Offset to Comparative Disadvantage<sup>6</sup>**

As a general rule, Western economists oppose tariffs and all trade restrictions; they decrease world welfare, they shelter domestic industries from international competition, and they tend to create internal prices which are distorted relative to world prices. But much of that opposition is based on the theory of comparative advantage, and if that theory does not hold, then high tariffs may be called for as a means of improving a country's exchange rate.

A high tariff policy on Western goods, say 100%, would significantly reduce the demand for Western imports while simultaneously raising needed revenue for the government, helping to bring its budget into balance.<sup>7</sup> This tariff would not raise prices of Western goods to Bulgarians by 100%, since by decreasing the demand for imports and hence for foreign currency, it would raise the exchange rate of the lev.

The disadvantage of such a tariff is that it reduces international competition for Bulgarian industry. This disadvantage can be partially offset by making the tariff rate dependent on the ratio of Bulgarian income to the countries' income in some fashion, and making the tariff a declining one, pre-scheduled to be eliminated over a period of years. For example, initially there could be large tariffs on developed Western countries' goods but no (or a small 10%, as at present) tariff on the goods of countries in a similar situation to Bulgaria. The large tariff on Western goods could be scheduled for elimination over a period of 10 years. Many variations on this approach are possible and that chosen would depend on administrative feasibility.

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<sup>6</sup>The argument here is based in part on McKinnon's discussion of this policy.

<sup>7</sup>The IMF requires that countries, upon joining, agree to lower their tariffs from previous levels. Since Bulgaria previously had a non-convertible currency and hence an extremely large effective tariff, had they followed this proposed policy initially, they would have met this requirement. To follow this approach at this point in time, and remain consistent with IMF policy, the IMF would have to be consulted and convinced that Bulgaria's tariff policy is still new enough so that the tariff would be compared to the initial state, not the current 10% rate.

It should be made clear to the population that the purpose of this tariff is not to make them pay more for Western goods; the purpose is to affect the exchange rate and make Westerners pay more for those Bulgarian goods that they buy.

Implementing such a policy would not be easy; a tariff policy goes directly counter to GATT, the European Union associate member initiative, and IMF standard operating procedure. In my view, special allowances should be made for transitional economies which exhibit significant amounts of comparative disadvantage. To offer free trade from an unfair initial playing field somewhat disingenuous, and is a policy that needs serious reconsideration by the Western countries.

### **Foreign Ownership Policy as an Offset to Comparative Disadvantage**

Besides its output, a second category of goods that Bulgaria has to sell is Bulgarian assets--real estate, factories, production facilities. The policy it follows in the sale of these assets significantly affects the value of the lev. Allowing foreigners to come in and buy real estate and property in Bulgaria will push up the value of the lev, speed up the integration of the Bulgarian economy with the world economy, and, in the long run, increase international trade.

Foreign tourists who own real property in a country are much more closely tied to that country; foreign manufacturers who own, and control, production facilities in a country are more likely to invest in that country. Selling off Bulgarian assets to foreigners will both increase the value of the lev and start establishing the international connections between Bulgaria and Western countries that is a necessary foundation of international trade.



There is, of course, a cost of doing so. Bulgaria is a small country with a rich heritage in literature, art, and history. Allowing foreigners to buy Bulgarian assets will make it more difficult to preserve that heritage. So, too, will establishing the foundations necessary for international trade. International trade means intercultural influences--a blending of not only the economies, but also of culture, of people, and of ideas. Given Bulgaria's relative size in the world community, integration will, in large part, mean "internationalization," and strong cultural pressure towards domination by Western culture. If Bulgaria wants to follow a financial liberalization policy, it must be willing to accept such a blending; some liberalization of laws on foreign ownership is necessary. The current approach--having a convertible currency, but severely limiting foreign ownership, is hurting Bulgaria by reducing the demand for lev, thereby reducing the exchange rate for the lev, and in effect giving Bulgaria's products away at a very low price. If Bulgaria doesn't want to have foreign ownership, then the entire liberalization policy, including convertibility, should be called into question.

Foreign sales of Bulgarian real assets do not have to mean giving Bulgarian away. Such sales can be controlled. For example the exchange rate at which such purchases are made can be set at a higher level than the current account exchange rate; only long term leases could be given to foreigners rather than infinite ownership. Bulgarian minority ownership could be required in all in all foreign holdings.

Allowing foreign ownership was a cost that Western Europe was willing to bear after World War II during which time there was heavy Americanization of Western Europe. Yet, by the late 1970s, the Western European economies had grown to the point where "Yankee imperialism" was no longer feared. Instead, Western European imperialism in the U.S. was beginning.

In the 1990s it is a cost that the U.S. is bearing as the U.S. has in large part opened its borders to foreign ownership. That policy has kept the value of the dollar much higher than it otherwise would have been. Most American economists see this "selling of America" to foreigners as a positive event, which can reinvigorate U.S. industry and introduce new ideas to the U.S. which will allow it to maintain a strong, or at least a less weak, economy in the 21st century.

Ultimately, in the clashing of cultures, the winning outcome depends on the individuals in the country. Individuals, not economic policy, preserve the culture. It is my belief that the Bulgarian people are quiet, but strong, that Bulgarian culture and economy would fare well in a free competition of cultures, and that in the 21st century, with a relatively loose policy on foreign ownership in Bulgaria, the Bulgarian culture would remain distinct, and its economy would evolve into a highly competitive one.

## **Summary**

A country's window to the economic world is through its exchange rate. It is a small window which can distort a country's relationship with the international community. That is what has happened to Bulgaria. Its comparative disadvantages have lowered its market exchange rate to levels which gives too many of its products for what it is gets. Thus, it needs to undertake policies which will raise the value of the lev.

Two policies which are consistent with financial liberalization that can contribute to raising the value of the lev are tariff policy and foreign ownership

policy. Such policies can partially offset Bulgaria's comparative disadvantages and push up the value of the lev. They are policies which Bulgaria should consider.

The arguments made here are specifically for the Bulgarian situation, which because of its previous isolation, its small size, its geographic location, and its history, make it especially susceptible to the problems of comparative disadvantage. The arguments apply in lesser degrees to the other transitional economies. Whether they apply sufficiently to warrant the type policies I am advocating for Bulgaria in this paper would have to be considered on a case by case basis.