

1990

Alternative Roads to Economic Integration: The Case for Currency Competition in European Integration

Deepak Lal

Follow this and additional works at: <http://scholarlycommons.law.case.edu/jil>



Part of the [International Law Commons](#)

Recommended Citation

Deepak Lal, *Alternative Roads to Economic Integration: The Case for Currency Competition in European Integration*, 22 Case W. Res. J. Int'l L. 299 (2015)

Available at: <http://scholarlycommons.law.case.edu/jil/vol22/iss2/7>

This Speech is brought to you for free and open access by the Student Journals at Case Western Reserve University School of Law Scholarly Commons. It has been accepted for inclusion in Case Western Reserve Journal of International Law by an authorized administrator of Case Western Reserve University School of Law Scholarly Commons.

SPEECHES

Alternative Roads to Economic Integration: The Case for Currency Competition in European Integration*

*Deepak Lal***

I. INTRODUCTION

For an economist there is economic integration when there are no barriers in the form of legal restraints to the free movement¹ of commodities and factors of production between different regions or countries. Such integration is compatible with different tax-transfer (fiscal) systems in the different regions such as the different state and municipal regions within the United States or with the existence of different currencies within an economically integrated area such as the 19th century gold standard period when there was virtually worldwide convertibility of different currencies into a common standard, and thereby stable exchange rates between them.

For many laymen and politicians, economic integration has also implicitly meant some form of political integration, with a pooling of national sovereignties into a common unity or federal political structure. A common currency, a common legal system and a common fiscal system, at least at the apex of subordinate state systems in a federal polity, are seen as the hallmark of economic integration.

These competing visions of the 'end state' to be achieved by the current movement toward European integration by '1992' have been explicitly stated by the two major protagonists on the European stage. The first, outlined in her Bruges speech by Mrs. Thatcher, the British Prime

* Expanded version of a Speech delivered at the Kieler Woche Konferenz, June, 1989, Kiel, West Germany.

** Professor of Political Economy, University College London.

¹ Such "free movements" do not imply a frictionless economy nor international legal integration. What is required is that there is no discrimination between goods and factors supplied by domestic and foreign sources of supply. This would still allow countries to have different 'quality' standards, but they would not discriminate against a foreign supplier who met these standards.

Minister, and the second embodied in the Delors Report² and further enumerated in various speeches by the President of the European Commission, Jacques Delors.

This Article will first set out these different visions and show that they are historically based on two different routes for the attainment of that power or prestige which is universally sought by the political elites in any country. The fact that they are based on two alternative visions about social orders—what Hayek has labelled 'constructivist' versus 'spontaneous' will be discussed. Also, the burning issue of the route to European monetary integration in terms of these different socio-political visions will be examined. Finally, the reasons why the competitive solution based initially on competing currencies is likely to provide the best route toward European monetary integration, particularly in light of prospective German reunification will be addressed.

II. CONSTRUCTIVIST V. SPONTANEOUS VISIONS

The two alternative visions of European integration identified with Mrs. Thatcher and Jacques Delors can be described as follows. The Thatcherite vision is of an end state which would lead to otherwise sovereign nation states, competing with each other, but with no barriers to economic transactions between them, in other words a modern day Concert of Europe. The Delors vision, by contrast, is of a federal United States of Europe in which national economic policies and even outcomes through the 'social' dimension of the Delors Plan are harmonized under the aegis of an imperial bureaucracy. These alternative visions in turn reflect deep-seated differences between what Richard Rosecrance has described as historically two distinct systems of international relations.³ The first, the Delors version, of "a territorial system which harkens back to the world of Louis XIV". The second, the Thatcherite version, of "an oceanic or trading system that is the legacy of British policy of the 1850's."⁴ In the former system, wealth and power, is achieved by extending the 'nation's' territory. In the second, peaceful trade is seen as the means of improving national fortunes.

Rosecrance argues that since the end of the 16th century, except for the brief period between 1850-70, the period of free trade under British leadership, the chattering classes in most countries have been moved by the territorial imperative. Since the Second World War, however, there have been a number of notable examples of trading states; Japan, West Germany and the newly industrializing countries in the East. But the

² COMMITTEE FOR THE STUDY OF ECONOMIC AND MONETARY UNION, REPORT ON ECONOMIC AND MONETARY UNION (1989) [hereinafter Delors Report].

³ R. ROSECRANCE, THE RISE OF THE TRADING STATE (1986).

⁴ *Id.* at 16.

United States and USSR still retain their territorial imperatives. The choice before the European states is whether they will become another large "territorial" state between the United States and USSR, or, as they briefly did in the 19th century, join Britain in establishing another example of "the trading world of international politics." Thatcherism leads to the latter, Delorsism to the former.

Not only do the end states envisaged by these different visions of integration diverge, so do the processes by which integration is to be achieved. This concerns both the processes for the so called harmonization of national policies relating to existing legal and fiscal regimes which impinge on the creation of the Internal Market by 1992, and the movement toward European monetary integration. Again, the route of imperial harmonization exists, where the politicized bureaucracy of the Community lays down common standards that apply to all Member States. This of course is favored by Delorsism. The other route is one of competitive harmonization, where a community wide standard emerges as a result of 'consumer' choice.⁵ The difference in the two approaches are equivalent to the planned universal language, Esperanto, which was unsuccessfully promoted by the Fabian George Bernard Shaw and the spontaneous adoption of English as a virtual world "lingua franca" as a result of the free competition of various languages.⁶

The former route toward harmonization is the constructivist solution toward integration. The latter is based on the emergence of a spontaneous order. As Hayek has repeatedly emphasized the constructivist solution, as in all forms of central planning, is likely to be inefficient as compared with that resulting from the competitive process, because of the problems of information and incentives.⁷

Imperial harmonization will inevitably lead to a territorial state, particularly if joined with majority voting in the Council of Ministers. Competitive harmonization, as outlined for instance by Horst Siebert will lead to a concert of trading states.⁸

⁵ See H. SIEBERT *The Harmonization Issue in Europe: Prior Agreement or a Competitive Process?*, in *THE COMPLETION OF THE INTERNAL MARKET* (1990).

⁶ At least among the European languages spread around the world through imperialism and white settlement: English, French, Spanish, Portuguese, and Dutch.

⁷ See F. HAYEK, *INDIVIDUALISM AND ECONOMIC ORDER* (1976). The information problem relates to the difficulty that any central planning authority faces in obtaining the relevant information about both current and future tastes and technology, which is widely dispersed among the myriad of economic agents in an economy. The incentive problem is concerned with devising a framework for ensuring that planners' directives are followed by firms whose self-interest may conflict with following the Plan.

⁸ See H. SIEBERT, *supra* note 5.

III. ROUTE TO EUROPEAN MONETARY INTEGRATION

The two visions have clashed most significantly in the plans for monetary integration. The Delors Commission envisages the establishment of a single European Bank issuing a common currency for the Community.⁹ The British envisage a regime of competing currencies, in which consumer choice would determine which, if any, single currency would become the European currency.¹⁰

In discussing these alternatives, it is important to keep a few important points in mind. First, there are two separate but connected aspects of monetary integration that can be distinguished. One concerns the integration of capital markets. The other concerns the unification of national exchange rates. As far as the former is concerned all that is required is the removal of various controls on capital flows. This has been done, by and large, by the major European countries, and most of the others are due to follow suit in the next few years.

Therefore, the debate about monetary integration now revolves around exchange rate unification. Corden has distinguished a pseudo exchange rate union from a complete exchange rate union.¹¹ In the former the Member States maintain their central banks and monetary independence but agree to maintain fixed exchange rates between their national currencies. In a complete union, the national central banks pool their monetary reserves, and a central monetary authority is created. In this case the maintenance of fixed exchange rates between the different national currencies is assured. However, a common currency is not an essential ingredient of a complete exchange rate union. Under the gold standard, for instance, with each currency maintaining convertibility into gold at a fixed parity, exchange rates were fixed and stable without the existence of a common currency.

The current exchange rate arrangements within the European Community ("EC"), the European Monetary System ("EMS"), is a pseudo exchange rate system, akin to the adjustable peg Bretton Woods system in the international economy.¹² To see why such an exchange rate regime was rightly described as "half-baked" by Sir Alan Walters, Mrs.

⁹ See Delors Report, *supra* note 2.

¹⁰ See U.K. TREASURY, AN EVOLUTIONARY APPROACH TO ECONOMIC AND MONETARY UNION (1989). The scheme outlined in U.K. TREASURY is only flawed in so far as it seeks a regime of competing currencies within the straitjacket of the European Monetary System ("EMS"). However, the EMS is likely to be a frail bridge towards European monetary integration.

¹¹ See W.M. CORDEN, INFLATION, EXCHANGE RATES AND THE WORLD ECONOMY 135 (3d. ed. 1986).

¹² Under the Bretton Woods system all countries, except the United States had to maintain fixed parities with the dollar, which were adjustable if the country had a fundamental disequilibrium in its balance of payments. The U.S. dollar was pegged to gold.

Thatcher's personal economic advisor, it is necessary to consider the role of exchange rates in the balance of payments adjustment process.

It is well known there are only two automatic adjustment mechanisms: (i) a fixed exchange rate system with a complete exchange rate union, like the gold standard or a common currency area (such as the USA); and (ii) a system of freely floating exchange rates.¹³ The former requires flexibility of domestic money wages and prices to achieve balance of payments equilibrium while maintaining "full" employment. By contrast a floating exchange rate system will achieve the same objectives even if money wages are rigid, but real wages are flexible.

An adjustable peg exchange rate system, such as the EMS, is a pseudo exchange rate union, which allows discretionary changes in the exchange rates of participating countries. But the exercise of this discretion requires information on changing real and monetary variables as well as the expectations of private agents. This is a tall order, as demonstrated by experience under another adjustable peg system, the Bretton Woods system. As became apparent during its prevalence as the international monetary system, in the real world no one can acquire the requisite information. All agents public and private must take gambles about the future or speculate. Therefore, since there is no reason why the governments' speculation will be based on any better information than speculation by private agents, it is better to allow decentralized speculation based on the hunches and guesses of a myriad of economic agents, rather than commit the economy to a fallible central forecast.

When the number of gambles or speculations is large and there is not an infinite supply of "suckers" who enter the market each day to be fleeced by the professionals, the speculators whose guesses are right will be "better" and will usually make profits at the expense of the rest. Thus, there is a presumption that private speculation will be stabilizing even though the possibility of destabilizing speculation leading to "bubbles" cannot be ruled out. But even "bubbles" burst and hence there is a self-correcting mechanism in a floating exchange rate system. By contrast, under an adjustable peg system, lacking the necessary information, most discretionary exchange rate changes are made reluctantly. Thus, they must offer private speculators, if there is freedom of capital flows, a

¹³ See D. LAL, *A LIBERAL INTERNATIONAL ECONOMIC ORDER: THE INTERNATIONAL MONETARY SYSTEM AND ECONOMIC DEVELOPMENT* (Essays in International Finance No. 139) (1980). This article contains a fuller discussion of the relative merits of alternative exchange rate mechanisms, which in particular takes note of the irreducible uncertainty surrounding future real exchange rate movements. It shows why these real exchange rate and portfolio equilibria in the world economy cannot be predicted. As discretionary exchange rate regimes, like the adjustable peg system of Bretton Woods, or the EMS, require the authorities to know the future path of these unknowable equilibria, they are inherently unstable, and will not perform as well, in the long run, as compared with the automatic adjustment mechanisms.

one way bet, compared with the situation under a floating rate, where 'bears' and 'bulls' about the future exchange rate have to bet against each other.

As a result, a pseudo exchange rate union is particularly prone to speculative attacks, as in the face of a balance of payments disequilibrium where the credibility of maintaining a particular parity comes under question. Capital controls have usually been required to maintain such systems. With the abolition of capital controls as part of the Internal Market program, there is the ever present danger of the current EMS being undermined by the speculative capital flows that will undoubtedly be triggered by the continuing divergence in the inflation rates of the participating countries and, more importantly, the structural changes flowing from the unification of Germany.

In this context the movement towards European monetary union must be assessed. First, if a central monetary authority for the community, which issues a single European currency, is created then there can be no destabilizing capital flows since there will not be any national monies left to speculate against. There is also another alternative, that the national European currencies could be allowed to freely float against each other. Balance of payments adjustment would still be automatic, and in effect there would be integration through the European wide market in national foreign exchanges. In this context it is necessary to address the reasons for balance of payments disequilibria and the political implications of setting up a complete exchange rate union with a European central bank issuing a common currency.

It is useful to divide goods in any economy into two sets. The first are tradeable goods whose domestic prices are determined by foreign currency prices set exogenously in world markets and the nominal exchange rate. The second are non-traded goods, which by definition are not traded internationally, whose domestic price is set by domestic demand and supply. The relative price of the non-traded to the traded good is the real exchange rate of the economy. A balance of payments deficit arises when there is excess demand for the traded and excess supply of the non-traded good. This in turn implies that the real exchange rate, the relative price of the non-traded good, is above its equilibrium level. A depreciation of the real exchange rate is required to cure the deficit. If money wages and prices in the economy were fully flexible, the excess supply of non-tradeables would put downward pressure on their relative price and lead to the required real exchange rate depreciation. This is how the adjustment would have to take place in a complete exchange rate union.

If, however, there was some inflexibility in money wages and prices, then the required real exchange rate depreciation could be achieved by a rise in the price of traded goods, brought about by a devaluation of the nominal exchange rate. The trade deficit could also be cured by domestic

deflationary policies, but, in the absence of money wage-price flexibility, this would lead to unemployment.

It has been argued that a devaluation which reduces the real wage, even when money wages are rigid, is equivalent to a monetary policy of the Keynesian variety, which seeks to cure unemployment through inflation, and a reduction in the real wage. However, the monetarist counter-revolution has demonstrated that there need not be such a tradeoff between unemployment and inflation in the long-run. Clearly, therefore, monetary policy, and *ipso facto* a devaluation of the nominal exchange rate cannot be used to cure incipient or actual unemployment. Hence, there is no case for departing from the fixed exchange rate regime of a complete exchange rate union.¹⁴

There is much merit in this argument. But it immediately points to another important aspect. Changes in the real exchange rate can arise from real causes such as shifts in consumer tastes, or changes in resource endowments and technologies or from changes in the balance between aggregate demand and supply generated for instance by discretionary monetary policy.

Even assuming that monetary policy cannot make any permanent impact on the level of unemployment, and that there is a *prima facie* argument in favor of a complete exchange rate union, there is still one other equally important function that monetary policy has served and it is necessary to note its implications for the exchange rate regime. That important function is its fiscal aspect. The nationalization of money by centralizing the note issue of a fiat money that is inconvertible into any commodities, in a government controlled central bank, has meant that the central bank, and therefore the government, apart from collecting the seigniorage from issuing paper money, also determines the economy's inflation rate. Inflation is a tax on money holdings and can be used by governments, as it has been on many occasions in the past, to meet their pressing fiscal needs. Even as governments eschewed the use of inflationary finance to deal with unemployment, they have been reluctant to give up the power to levy the inflation tax.¹⁵

Suppose there is a complete exchange rate union, with exchange rate stability maintained by a European central bank which issues a common currency. The locus of the authority to levy the inflation tax will then shift from national governments and their central banks to the new European monetary authority. Obviously, if the new European Bank was a creature of the EC or European politicians, there would be a temptation

¹⁴ See generally W.M. CORDEN, *supra* note 11.

¹⁵ See THE SEARCH FOR STABLE MONEY (J. Dorn & A. Schwartz eds. 1987). This collection reviews various fundamental political, economic, and constitutional issues concerning the provision of a stable money.

to levy a European wide inflation tax to meet the chronic fiscal problems of the EC; in large part due to economically inefficient, but politically expedient, policies like the Common Agricultural Policy. How can it be ensured that this new 'authority' will not levy an even heavier European inflation tax, or generate even more European monetary instability than has accompanied the advent of nationally monopolized inconvertible paper currency in the participating countries over the years? The Delors report argues that an independent central Bank along the lines of the Bundesbank should be set up, and recently, President Poehl of the Bundesbank has provided an outline of how he envisions such independence from political forces to be maintained: essentially, by giving long tenures to the governors of the new European central bank together with a mandate to pursue non-inflationary policies. However, even the famed independence of the Bundesbank now looks a bit tarnished after it has been over-ruled by the politicians on the proper exchange rate for German Monetary Union.

Moreover, the experience of another independent central bank in a federal polity, the United States, does not augur well for the likelihood of an independent European Central Bank following stable, non-inflationary monetary policies. Milton Friedman recently summarized its experience as follows:

"To summarise its 69 year record: two major wartime inflations; two major depressions; a banking panic far more severe than was ever experienced before the Federal Reserve System was established; a succession of booms and recessions; a post World War II roller coaster marked by accelerating inflation and terminating in four years of immense instability—the whole relieved by relative stability and prosperity during the two decades after the Korean War."¹⁶

He blamed this dismal performance on the bureaucratic inertia of the institution which prevented it from learning from its experience. This inertia in turn being due to the "absence of a bottom line. The Federal Reserve is not subject to an effective budget constraint. It prints its own money to pay its expenses. The Federal Reserve does not have to face the voters".¹⁷

Therefore, he recommended that the Federal Reserve's independence be removed, because then at least its discretionary authority would be subject to the constraint imposed on politicians by the need to be elected.¹⁸ Without endorsing Friedman's plan to politicize a future Eu-

¹⁶ Friedman, *Monetary Policy: Tactics versus Strategy*, in *THE SEARCH FOR STABLE MONEY* 362 (J. Dorn & A. Schwartz eds. 1987) [hereinafter *Tactics versus Strategy*].

¹⁷ Friedman, *Monetary Policy: Theory and Practice*, *J. MONEY, CREDIT & BANKING* 365 (1982).

¹⁸ See Friedman, *Should There Be Independent Monetary Authority*, in *IN SEARCH OF A MONETARY CONSTITUTION* (L. Yeager Ed. 1962); See also *Tactics versus Strategy*, supra note 16.

ropean central bank, it cannot be emphasized enough that the creation of an independent central bank is by no means a guarantee of monetary stability. It could lead to the opposite outcome.

IV. COMPETITIVE SOLUTION

This leaves the only other exchange rate regime for an integrated Europe as one based on floating exchange rates, but with some of the smaller countries tying themselves by a *de facto* currency board type system¹⁹ to one or other of the major European currencies the Deutsche Mark, the French Franc, or Sterling. This currency competition would alleviate and possibly solve the incentive problem faced by any state protected monopoly issuer of inconvertible paper money, in following a stable monetary policy. If all community currencies were legal tender in every Member State and, as is likely, the governments in these countries continued to collect their taxes in their own "national currency" but could not necessarily pay for their expenditures in it, there would be two incentives against inflating national supplies of paper money.

First, and as has already happened to the asset demand for money, consumers would shift out of holdings of unstable monies into more stable monies. This, as the free-banking school has emphasized, would reverse Gresham's Law,²⁰ reducing the seigniorage available on the country's paper currency. To increase that seigniorage would require a reversal of its relatively inflationary policies. Second, a country inflating its money faster than other Member States in the Community, but whose tax revenues were denominated in its own currency, while its expenditures were not, could find that its fiscal position worsened as it inflated the paper currency. For private agents would be paying their taxes in a depreciating currency, while demanding payment for their services in a more stable one. The resulting self-interested restraints on government's from inflating their currencies flowing from currency competition could do more for monetary stability in Europe than the alternative of a complete exchange rate union with a European central bank, whose constitution, however devised, could not provide a counterweight against the lack of incentives to follow non-inflationary stable monetary policies in the monopolized area of its jurisdiction. The fundamental flaw in the constitutional route towards monetary stability is provided by de Jasy's quip: "With its key always within reach, a chastity belt, will at best occa-

¹⁹ Under the currency board system the domestic currency is in effect backed 100% by foreign exchange. Two of the most successful of the newly industrializing countries, Hong Kong and Singapore have, by and large, maintained such a system in the post war period.

²⁰ Gresham's Law stated that bad money drives out good. But See Friedman, *Currency Competition: A Skeptical View*, in CURRENCY COMPETITION AND MONETARY UNION (P. Salin ed. 1984). [hereinafter CURRENCY COMPETITION]. Friedman, among others, has noted this really depends upon assuming fixed rates of exchange between the different currencies.

sion delay before nature takes its course."²¹

In the context of the revolution in Eastern Europe, and the reunification of Germany, there are further reasons to follow the competitive currency rather than the centralized common European currency route toward European monetary integration. This is best illustrated by considering the likely long-term macro-economic consequences of German reunification, particularly as regards the likely movement of the Deutsche Mark relative to the dollar and yen, but also in the absence of a fixed exchange rate system within Europe, vis-à-vis other European currencies.

It follows from a well know identity connecting domestic and foreign price levels,²² that the rate of change in a country's nominal exchange rate against another country can be decomposed into the sum of the rate of change of its real exchange rate, the relative price of non-traded to traded goods, and the inflation differential between two countries. Assume, as is plausible, that the Bundesbank is successful in absorbing the monetary overhang in East Germany, with only a modest increase in the supply of Deutsche Mark's.²³ This increased money supply being matched by the demand rising from the increased output of unified Germany, should not by itself lead to any inflationary pressure in the United Germany leading to any movement in the Deutsche Mark.

But what of the real exchange rate? The absorption of East Germany implies a large, immediate increase in the ratio of labor to capital in the enlarged German economy.²⁴ At unchanged relative prices of non-traded goods, the real exchange rate, it is well known that this change in its relative factor endowments, would lead to an increase in output, in which the good using labor more intensively will increase its share not only relatively, but absolutely.²⁵ It is fair to assume that Germany's tradeables are more capital intensive than its non-tradeables.

²¹ A. DE JASY, *THE STATE* 187 (1987).

²² Thus: $e = (p - p^*) + d(P_t - P_n) - d^*(P_t^* - P_n^*) - (1)$ where all variables are in natural logarithms:

e = nominal exchange rate. P, P^* = price levels in the home and foreign country. P_t, P_t^* = price of traded goods in the home and foreign country. P_n, P_n^* = price of non-traded goods in the home and foreign country. d, d^* = weight of non-tradeable goods in the home and foreign price levels.

For the derivation see Frenkel & Mussa, *Asset Markets, Exchange Rates and the Balance of Payments*, in 2 *HANDBOOK OF INTERNATIONAL ECONOMICS* 717 (R. Jones & P. Kenen ed. 1985).

²³ Recent estimates by Shearson Lehman economists reported in the U.K. financial press suggest that the absorption of the East German monetary overhang should only lead to a three percent increase in the supply of Deutsche Marks.

²⁴ From the World Bank's *World Tables*, the East German labor force was about one-third of the Western German one. Assuming that most of the capital stock in East Germany is unproductive, there is a rough increase of about a third in the enlarged German labor to capital ratio.

²⁵ This is the well know Rybczynski Theorem of International Trade Theory. See Rybczynski, *Factor Endowments and Relative Commodity Prices*, 22 *ECONOMICA* 336-41 (1955).

Hence, it would be expected that labor intensive non-traded good output would increase, both relatively and absolutely, at the given real exchange rate. Unless German consumer demand is biased toward non-traded goods, the increased demand arising from higher aggregate incomes and output will be less than the increased output of non-traded goods. To bring the non-traded good market into equilibrium, the relative price of non-traded goods must fall, that is the real exchange rate must depreciate. Assuming neutral monetary policy and flexible exchange rates the nominal exchange rate can also be expected to depreciate.

However, the rise in the economy's ratio of its labor to capital endowment with the expansion of the economy, will also lead to a rise in the marginal productivity of capital and in the real interest rate. With free capital mobility this will lead to capital inflows, whose effect will be to dampen the incipient real and nominal exchange rate depreciation. The final outcome will nevertheless involve some real exchange rate depreciation. If the German price level is to remain constant, and if there is in the limit perfect capital mobility, then it can be shown that the nominal exchange rate would have to depreciate by the same extent as the real exchange rate.²⁶

If, however, the exchange rate was fixed as in the current EMS, then the requisite real exchange rate adjustment could also come about with a relative fall in the German price level through a German deflation.²⁷ Given the political dangers inherent in this policy it is much more likely that the German EMS commitment would be repudiated, particularly if the required devaluation of the Deutsche Mark or equivalent appreciation of their currencies was resisted by its European partners. This looks very similar to the pressures that emerged in the United States at the end of the 1960s which led to its breaking out of the Bretton Woods adjustable peg system.

V. CONCLUSION

The purpose of this lengthy speculation is to underline the fatal flaw in the managed exchange rate system of the EMS type which requires the national monetary authority to target exchange rates rather than adopt monetary targets. Because of the ubiquitousness of unpredictable and unquantifiable real exchange rate changes, which arise not only from the structural type of change discussed, but also from changing 'news' which effects asset markets and capital flows, eschewing automatic nominal ex-

²⁶ Thus from equation (1) in footnote 22, if the inflation differential $(P - P^*)$ and the foreign real exchange rate $d^*(Pt^* - Pn^*)$ are constant, the $e = d(Pt - Pn)$, as asserted.

²⁷ Again from equation (1) in footnote 22, we now assume that e and $d^*(Pt^* - Pn)$ are zero, as the home country's nominal and the foreign country's real exchange rate are constant. Then, again from equation (1), we must have $(P - P^*) = d(Pn - Pt)$.

change rate variations requires discretionary national monetary policies to fine tune inflation differentials, a virtually impossible task. For the small countries which comprise the European community it would be much better, in Friedman's words, to let

different national currencies compete with one another, to impose no exchange controls, no restrictions on the use of other currencies of other countries, and in this way enable good money to drive out bad In a world of floating, market defined exchange rates good money will drive out bad money rather than the reverse.²⁸

There is still the remaining argument against currency competition that the failure to establish a common currency, would leave the inconvenience of changing a multiplicity of national monies into each other for transaction purposes. However, the resources involved in these money changing activities are not likely to be large, and their savings have to be set against the resource costs of switching all existing contracts to a new currency.²⁹

An even more radical solution would be to allow free banking by ending the national monopoly of issuing currency by government central banks. But while this proposal recently revived by Hayek has much merit it is unlikely to be politically acceptable.³⁰

Thus, free currency competition offers the best feasible solution for creating a stable monetary framework for monetary integration in Europe.

²⁸ See CURRENCY COMPETITION, *supra* note 20, at 46.

²⁹ Dowd, *The Case Against a European Central Bank*, 12 THE WORLD ECON. 361-72 (1989).

³⁰ On free banking see F. HAYEK, DENATIONALIZATION OF MONEY (Institute of Economic Affairs, Hobart Paper No. 70, 2d. ed. rev. 1978). This topic is more fully developed in Greenfield & Yeager, *A Laissez-Faire Approach to Monetary Stability*, 15 J. MONEY, CREDIT & BANKING 302-15 (1983); G. SELGIN, THEORY OF FREE BANKING (1988); K. DOWD, THE STATE AND THE MONETARY SYSTEM (1989). Also see the collection edited by Salin which explicitly looks at the free banking alternative in the context of European monetary union, P. SALIN, CURRENCY COMPETITION AND MONETARY UNION (1984). See also L.H. WHITE, FREE BANKING IN BRITAIN: THEORY, EXPERIENCE AND DEBATE (1800-1845) (1984).