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REAL EXCHANGE RATES AND ECONOMIC DEVELOPMENT

I. The Short and the Longer View

1. The public policy debate tends to be dominated by short-run considerations. This holds for Keynesian economists and for policy makers in general. Both tend to have a time horizon not extending beyond a two- or three-year period. In focussing on the short-run they are likely to overlook the fundamentals below the surface. These fundamentals, I suggest, are more relevant than is usually assumed. They relate to the real sector and hence to markets which are slow to adjust. Adherents of the rational expectations school suffer from a similar bias. They stress the absorption and processing of new information and thus tend to see an economy with short-run equilibria. This makes them pay less attention to the operation of market forces which are sluggish and tied to past plans and decisions, rational or not, many of which can be corrected only gradually in the course of time. But time lags and boomerang effects do matter. What is treated as an exogenous "shock" in a rational expectations model is in a longer perspective often the more relevant part of economic life that has to be explained. Monetarists, it is true, have a longer time horizon when it comes to judging the Phillips curve and the effects of alternative monetary regimes, but their approach leads them to neglect institutional rigidities, including labour market problems. It is here that the supply siders have a role to play, but only if they go beyond the tax issue to encompass the whole supply side in the spirit of classical economics.

2. It is the purpose of this paper to correct some of these shortcomings and to lengthen the time horizon in the public debate about exchange rates, notably about the dollar/DM rate. Long-term interest rates, most of all the real rate of interest and the profitability of investment, will be brought into focus. The hypothesis

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This paper was written in the summer of 1984 and addresses itself to explaining the foreign exchange situation at a time when the world was puzzled by a strong dollar and a strong U.S.-upswing. The author is grateful for helpful comments on earlier drafts to many of his collaborators in the Kiel Institute of World Economics, notably to R. Fürstenberg, H. Schmieding, F. Weiss.

emerging from this paper is that the dollar is likely to remain strong for fundamental reasons, i.e. for reasons rooted in the real sectors of the American and European economies. Temporary declines for short-term reasons are, of course, not excluded. They should, therefore, not be viewed as disproving the central thesis: what matters in the longer run are the vitality of an economy and its place and role in world economic development.

3. The longer run is to be understood as comprising more than one decade and at least one turning point in what Schumpeter called a "Kondratieff Cycle". This widening of the time horizon brings to mind that the real exchange rate between the dollar and the DM, i.e. the exchange rate adjusted for relative inflation, is now (end of July 1984) close to what it was in the 1950s, when most people thought it to be in equilibrium. To be sure, the U.S. and the Europe of today are not the same they were thirty years ago. But such historical comparisons may still serve as a useful background for forming a broad judgement about the present and the future.

4. In a shorter perspective, i.e. in comparison to the mid-1970s, the dollar appears to be grossly overvalued and U.S. interest rates look exotic. Within a Keynesian framework of thought both can be seen as the result of a large U.S. budget deficit which the Fed is unwilling to finance [Marris, 1984; Blanchard, Dornbusch, 1984]. Monetary and fiscal policy are seen to work against each other in the U.S., and the overindebted countries have to carry the double burden of high interest rates and an expensive dollar. If only the U.S. government could be induced to sharply reduce its deficit by raising some taxes or by reversing a previous income tax cut, both the dollar and real interest rates in the world would fall and find an acceptable equilibrium level [Bergsten, 1982]. This is the view prevailing in the international economic policy discussion.

5. A dramatic picture presents itself when cyclical forces are brought to the foreground in this Keynesian framework. The strength of the U.S. upswing which developed in 1983 despite high interest rates is then seen to be the result of deficit spending [Marris, 1984]. Much of the investment appears to be of the induced type (described by the acceleration principle), just as the capital imports which the U.S. needs in order to finance the current account deficit. These induced capital imports support the exchange rate of the dollar. Sooner or later the present business cycle will collapse, perhaps in 1985. Then the world will expe-

rience both a sharp decline of U.S. interest rates and a downfall of the dollar below its equilibrium level causing disruptions and new imbalances in the world economy. So this story goes. But it may well be that in the U.S. the fundamental conditions for investment and growth and hence for a strong dollar have improved relative to the fundamentals in Europe so that the dollar can remain strong irrespective of cyclical forces.

6. Monetarists usually take a longer view than politicians and Keynesians. Their assertion that an exchange rate is the relative price of two monies appears trivial at first glance, but their insistence on the quantity theory of money and its implications for the monies' domestic purchasing power certainly extends the time horizon. Moreover, they stress the real component in nominal interest rates and would, therefore, also join this paper's train of thought towards (changes in) real exchange rates. The bridge to the fundamentals is the concept of confidence in the long-run stability of the currency's domestic purchasing power. How a shift of confidence from one currency to another leads to currency substitution and thus changes the real exchange rate shall be considered below (para 28).

7. In a monetarist perspective budget deficits are likely to destroy confidence. As Latin American experience - and earlier European experience - amply shows budget deficits are often the result of fiscal irresponsibility; they can induce central banks to pursue an inflationary policy designed to finance the deficits and to reduce the real value of the outstanding public debt. But this is not what has happened so far in North America and present-day Western Europe. If markets were suspicious in this respect the dollar would be weak rather than strong.

8. Financial analysts watching day to day developments relate the strong dollar to high U.S. interest rates which they as well as monetarists [Mascaro, Meltzer, 1983] partly attribute to the volatility of Fed policy. But doubts come to mind immediately: would a less volatile Fed policy weaken the dollar? The answer will, of course, be "no" on monetarist grounds. We come closer to the fundamentals when we raise the question how the U.S. economy can afford to pay the risk premium for this volatility given the fact that its real sector is prospering and obviously has fully adjusted to present interest rate levels. The answer is to be found in a correspondingly high profitability (or marginal efficiency) of investment which can be due either to the cut in business taxes or to technological innovation or to the downward flexibility of real wages in the U.S. labour market. In an interdependent

system it is, of course, difficult to single out any one of these factors. But it is significant that they all belong to the real sector and explain why the latter is vital enough to support a strong dollar.

II. Purchasing Power Parity

9. Those who say that the dollar is overvalued have, of course, an implicit norm of what its exchange rate would be in normal circumstances or ought to be on efficiency grounds. Sometimes they implicitly or explicitly use a reference period or entertain the idea that the dollar will settle on a level in the middle between the high value it has achieved in 1984 and its trough in 1978. All this boils down to the question of what fundamentals really determine the external value of a currency in the medium run.

10. The appropriate starting point is the purchasing power parity (PPP) doctrine which is based on the law of one price. This law holds for tradables between any two countries if trade is not restricted and if tariffs and taxes, transportation and transaction costs are low enough to be ignored.

11. Deviations from this norm arise because the basket which is used to measure the purchasing power in the countries to be compared not only includes standardised commodities for which the law of one price may be taken to hold but also goods and services which do not enter trade at all. We call them local goods or non-tradables. If the relation between the prices of tradables and the prices of non-tradables develops differently in the countries concerned we will find that the exchange rate (which makes the price of tradables equal) deviates from PPP. These are long-run deviations. We can observe them in international comparisons between more developed countries and less developed countries and we think that they are also likely to play a role in a process of catching up or lagging behind. The major points and cases will be spelled out below.

12. Before doing so we propose to focus on a range of goods which are neither purely local goods (like the service of land in housing rents) nor standardised commodities to which the law of one price applies fairly well. These goods - call

them manufactures - are not sold in perfect markets but under conditions of monopolistic competition. They include such specific items as custom-tailored capital goods, consumer goods fulfilling country-specific tastes, and new products which can earn a monopoly rent, but must create their own markets first. Although these manufactures - and a great number of quite specific services - are tradables they are not strictly subject to the law of one price. Together with tradables and non-tradables they form part of the PPP basket.

III. Temporary Deviations from PPP

13. Changes in the price of these manufactures relative to the price of standardised commodities can lead to a deviation from PPP provided there is no compensating change in the relative price of non-tradables. Ignoring non-tradables for the moment we can say that changes in the price of manufactures relative to the price of standardised commodities matter in our context if they affect the terms of trade. This is the case in the following examples.

14. A country removing restrictions on its foreign trade in manufactures must at least temporarily lower the price of its exports in order to squeeze itself as an aggressive seller into tight world markets; perhaps it also has to pay more for the import of intermediate goods. This deterioration of the terms of trade goes along with a devaluation of its currency in real terms. This benefits the export sector and the import substitution sector at the expense of the domestic sector: the latter shrinks relative to the international sector. Let me call this the case of an export drive. It applied to West Germany in the early 1950s.

15. The export drive is, of course, facilitated if the exchange rates are fixed to begin with and if they happen to be fixed in such a way that the country can run an export surplus and the central bank can accumulate the other country's currency. This was relevant for Europe and for much of the Western World during the period of the so-called "dollar shortage". While the process of dollar accumulation gradually achieved its purpose the downward deviation from PPP ought to have been corrected gradually to avoid an overshooting. But as we are fairly sure to know, such overshooting did take place. A dollar overhang developed which again

led to a rather drastic reversal of the real exchange rate at the time when the Bretton Woods System broke down. An overshooting in the reverse direction - an excessive devaluation of the dollar as it happened in the 1970s - was perhaps necessary for shifting resources in Europe from the export sector to the domestic sector and in the U.S. from the domestic sector to the export sector. The U.S. had to become a relatively cheap country for Europeans, Europe a relatively expensive country for tourists from America. "Relative" here means compared to PPP, but even more so in comparison to the period when Europe responded to the so-called dollar shortage.

16. Another deviation from PPP equilibrium which is also connected with the terms of trade takes place when a country, instead of squeezing itself into export markets, finds its export mix of manufactured products faced with a high income elasticity of demand and uses this demand pull for expanding its export volumes instead of raising prices. The international sector grows at the expense of the domestic sector. The terms of trade are worse than they could be. Sooner or later the country will - like West Germany at the end of the 1960s - discover that it has an oversized export sector. An adjustment process will gather momentum either in the form of a domestic cost push - higher wages and costs at the given exchange rate - or in the form of a currency revaluation at constant prices. This adjustment process amounts to an improvement in the country's terms of trade. All rents from superior design and quality, from reliability and punctuality which were formerly used for promoting volumes will then be collected in the form of higher export prices. This improvement in the terms of trade goes along with an upward deviation from the previous real exchange rate, most likely also with an overshooting compared to long-run PPP.

17. Furthermore, changes in the terms of trade which involve a deviation from PPP and, thus, have an effect on the real exchange rate will have to be brought about to accomodate capital movements which are exogenous to the economic system. One case involves reparation payments under conditions of full employment. Their transfer in real terms requires a shift of resources from the domestic sector to the export sector and hence a real devaluation of the country's currency so that the export sector and the import substitution sector find their terms of trade vis-à-vis the domestic sector improved.

18. A parallel case is that of a country that has lived on capital imports and has run into excessive debt. In order to regain confidence in its viability and to im-

prove its standing in international capital markets it must shift resources from the oversized domestic sector to the export (and import substitution) sector and thus improve its balance on current account. A real devaluation of the exchange rate, involving a worsening of its international terms of trade, is necessary in such a case to remedy an otherwise hopeless situation.

19. The last case refers to a country which insulates itself from cyclical fluctuations in international demand. In a worldwide recession, a firm can maintain its sales by undercutting its competitors' prices. A country full of such firms in its export and import substitution sectors, supported by downward flexibility of wages, could maintain a high level of employment by exhibiting such price flexibility. Its trade balance on current account will then improve, its terms of trade become worse. In comparison to PPP and the situation before the recession the exchange rate will be considered undervalued. A good substitute for this is a devaluation. Although some observers will call this a beggar-thy-neighbour policy, the strategy is perfectly defensible if the recession has its origin abroad. No valid objection on cosmopolitical grounds can be raised against it. Clearly, if every country behaved in the same way without delay the real quantity of money in the world (or the price of gold under a gold standard) would go up, and the Haberler-Pigou-Effect would come into play. In the case of such a simultaneous action temporary deviation from PPP would, of course, be observable. The preceding argument applies symmetrically to the case of a country insulating itself from a worldwide boom [Giersch, 1970].

IV. Sustained Deviations from PPP

20. We so far used the notion of PPP in a fairly loose fashion by concentrating on manufactures and standardised commodities and leaving local goods and their prices out of the picture. It is now time to shift the emphasis. In the long run there is no reason to believe that the prices of manufactures will behave differently from the prices of standardised commodities. Market imperfections and processes of the kind described fade into the background, and the relative size of the domestic and the international sectors can be taken to be in equilibrium. This means that the rewards for capital and labour are the same across sectors within the country.

21. But this intersectoral equalisation of factor rewards does not exclude intersectoral productivity differentials. Indeed they become important for explaining permanent deviations from PPP. They matter in inter-country comparisons if - but only if - they are different in the countries to be compared. In order to bring this into sharp focus we consider only local goods which are not traded at all and international goods (traded goods) for which the law of one price holds. The main proposition here is that the production of tradables is subject to the productivity whip of competition (or what Samuelson [1984] calls a "Darwinian-Toynbeean challenge process") whereas local goods are produced behind the shelter of transportation costs and hence with much slack (x-inefficiency) or with an inferior technology.

22. There is no reason to expect greatly different productivity differentials between countries that have attained similar levels of overall productivity and development. Nevertheless, there are always exceptions. Thus we observe that some local goods in Europe and some services that are more strictly regulated on the old continent (e.g. air transportation, trucking, postal services) are distinctly more expensive in comparison to internationally traded goods than they are in the much larger markets of the New World. If the E.C. would deregulate and form a really common market, Europe would be even cheaper for U.S. visitors than it is now.

23. As a general rule, however, poorer countries should be cheaper in PPP terms than richer countries, just as poorer regions or cities in the same country tend to have a lower cost of living level than rich regions or cities, where the costs of local goods and services are boosted by the scarcity element in housing rents, unless these non-tradables are produced with a correspondingly high productivity. The rule of rich countries being expensive countries holds to the extent (a) that local goods have significant weight in the PPP basket, and (b) that in the course of the development process productivity in the international sector rises more than in the local sector. The second condition is essential. The proposition has been formulated by Balassa [1964], although somewhat differently, and can be traced back to Harrod [1933] and - with some modifications - even to Ricardo [1817] (1).

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(1) "Since gold rewards are proportional to efficiency in the output of tradable goods, highly efficient countries may find the gold cost of providing their ...services, in which proportional economies cannot be made, higher than in the less efficient countries...The efficient countries will therefore tend to have a high cost of living" [Harrod, 1933, pp. 68 f]. And Ricardo notes: "...the prices of home commodities, and those of great bulk, though of comparatively

As indicated it can be supported by the presumption that competition is a productivity whip that operates more forcefully in the international sector than in the sector producing local goods.

24. As a corollary, countries in a catching-up process, i.e. countries becoming richer relative to their trading partners, will have an exchange rate which - although still undervalued in absolute PPP terms until they have fully succeeded in catching up - is becoming less and less undervalued. Compared to the past, the catching-up country will experience an upward revaluation in PPP terms. Some observers using the past as a norm may even (wrongly) interpret it as an overvaluation. The process bringing this about not only includes competition that raises productivity in the international sector more than in the local sector, but also the technology transfer from the more advanced countries. This presumably also affects the international sector more strongly or earlier. Apart from the technology transfer, the catching-up country is likely to benefit from capital imports. This again will primarily affect its international sector, not so much - or only with a time lag - its domestic sector. Capital imports, of course, mean a deficit in the external balance on current account, and those who (wrongly) judge the exchange rate with the norm of a current account equilibrium will see a strong (perhaps additional) reason to say that it is overvalued.

25. When the German Expert Council in 1964 passed its first judgement on the DM/dollar exchange rate, the dominant view in the public was that the (fixed) rate still was what it ought to be. This is why the Expert Council, considering the catching-up process and its effect on PPP, said that the Federal Republic, which had been a cheap country (in PPP terms) at the beginning of the catching-up process, should have ceased to be one. The exchange rate, therefore, was to be judged as undervalued and a revaluation (or an upward float) was to be put on the policy agenda [S.R., 1964/65]. But none of us at the time thought that the revaluation required for these reasons would be more than 5-10 per cent. There is no reason to question this judgement in retrospect. As the real exchange rate of the dollar against the DM is now (July 1984) about 5 per cent higher than it was in 1964, the dollar on these (partial) grounds appears to be overvalued by 10-15

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small value, are, independently of other causes, higher in those countries where manufactures flourish" [Ricardo, 1817, p. 123]. For a discussion of Ricardo's contribution to the PPP theory see Officer [1982] and Samuelson [1984].

per cent. The undervaluation of the DM in the 1950s and the 1960s took care, of course, of the original "dollar shortage" and contributed to the accumulation of the dollar overhang mentioned before (para 15). There is, therefore, no additional item to be added on this account if we make a historical comparison the basis of our judgement.

V. Currency Disturbances: The Downfall and Renaissance of the Dollar

26. Historical comparisons with the 1950s and 1960s are valid only to the extent that the decline and rise of the dollar in the 1970s can be considered an episode due to exceptional circumstances. Without going into details we may just note:

(a) the financial implications of President Johnson's Great Society Program,

(b) the inflationary financing of the Vietnam War,

(c) the price control experiment of the Nixon Administration,

(d) the overdue breakdown of the Bretton Woods System,

(e) the 1973 oil shock,

(f) Watergate,

(g) the bad luck of the U.S. under the Carter Administration, and

(h) the rise of inflation (to almost 14 per cent) and of inflationary expectations until late 1979.

27. This period, however, also includes events in the real sector which can be taken to have led to a reversal of the trend. Worth mentioning are the deregulation of the trucking and airline industries; the creation of millions of new jobs in response to demographic changes; the emergence of new technology centers which had hardly any parallel in the rest of the world, perhaps not even in Japan; and the astonishing fact that real wages declined, partly under the impact of inflation, partly in response to demographic changes and increasing female participation rates. Immediately crucial for the dollar exchange rate was, of course, the monetary stance adopted in late 1979 which led to positive and high real rates of interest, while these rates had been negative when the dollar was at its low.

28. A country like the U.S. which previously performed a leadership role but loses ground in this respect to its competitors will suffer a devaluation of its currency in real terms for the following reasons:

(a) If technological leadership is being lost, the (transitory) monopoly rents from innovation or from superior quality will disappear: people will have to work harder to export more to pay for the same volume of imports.

(b) Monetary leadership may be lost in the sense that assets denominated in the country's currency, including cash, suffer a decline in foreign demand because foreigners (as well as domestic holders of such assets) lose confidence in the currency's long-run stability in terms of domestic purchasing power. In order to describe this case I prefer the metaphor that "portfolios emigrate" or that "the currency area implodes". Emigration in this sense implies immigration into another currency area which thus tends to become larger [Giersch, 1977, para 6]. The "implosion" goes along with a devaluation of the real exchange rate in a process of currency substitution.

29. If a country - like the U.S. after 1979 - resumes its leadership role in the field of technology or as a trustworthy supplier of the Western World's international money, it will experience a sharp upward revaluation of its real exchange rate. Why then should we be so surprised about the renewed strength of the dollar?

VI. Growth Equilibrium

30. What would real exchange rates look like in a smoothly growing world economy? A first answer is that they should not be judged by the yardstick of current account balance because there is a positive role to play for autonomous capital flows from richer to poorer countries. Wilhelm Röpke once said that people in the upper floors of the income pyramid tend to devote themselves to capital formation while the inhabitants of the lower floors take care of population growth. I prefer to use the metaphor of a Thünen cone [Giersch, 1949, 1979] for portraying the world economy or any spatial system with rich centres and poor peripheries. The cone can grow in a smooth fashion, i.e. with a minimum of structural change, if the

marginal efficiency of capital tends to rise everywhere at the same rate and if capital flows from the rich centre where the marginal propensity to save is high towards the periphery where it is closer to zero. However smooth the growth process may be thought of, it must be sustained by the creation and application of new knowledge, presumably in the centre, to prevent a fall in the profit rate under the impact of Ricardian constraints (rising rents). But such innovative growth in the centre goes along with what we call "locational innovations". This means that the optimum location for producing standardised commodities is moving from the centre towards the periphery.

31. To bring about this locational shift, the countries closer to the periphery must make themselves attractive by having their domestic resources "undervalued" via the exchange rate. Undervaluation in this specific sense means "in terms of costs for the production of standardised industrial commodities", for brevity's sake called "Heckscher-Ohlin" goods. The counterpart to this are high and rising rents and wages for local labour in the centre; they push out the locus of production of Heckscher-Ohlin goods to the countries closer to the periphery. The structure of real exchange rates must reflect this structure of cost incentives. If the overvaluations and the undervaluations (in this sense) are not sufficiently pronounced the process of locational shift (locational innovations) will be retarded. Retardation grants excessive time for process innovations to defend the old locations for Heckscher-Ohlin goods. A reversal of factor insities is then likely to emerge as we observe it in Thünen's stationary model in the case of wood as a result of relatively high transportation costs for this commodity. Defensive process innovations are, of course, also promoted by protectionist policies. Undervaluations and overvaluations have to be more pronounced if, in addition to transportation costs, such policy-induced resistances are to be overcome.

32. This spread argument for real exchange rates is a close cousin of the amendment to the PPP discussed in the section about sustained deviations (para 23). However, there are important differences. In para 23 the reason was the high price of local commodities in rich countries (say housing rents) which are part of the PPP basket. Here, it is the price of inputs for Heckscher-Ohlin goods and an international cost differential needed to induce and support this continuous process of locational innovations. There, it was a cross-section comparison that would make sense even if the world economy were in a stationary equilibrium. Here, we have overvaluation and undervaluation as part and parcel of a moving equilibrium, as

the incentive system necessary for bringing about the minimum adjustment needed for a process of trickling down. We may still say that the law of one price holds for standardised commodities (apart from transportation costs) at any moment in time, but then we have to consider that the value of the stock of fixed capital used in producing these goods goes down in the advanced countries under the influence of an exchange rate that people may feel to be overvalued. At the same time the low valuation of the exchange rates of the less advanced countries raises the marginal efficiency of capital for the (potential) production of Heckscher-Ohlin goods in these countries.

33. This model of a smoothly growing world economy offers itself as a reference system against which important disequilibrium cases can be judged. As to the U.S. and the dollar we can say so far:

(a) As a rich country the U.S. ought to run an export surplus to support the outflow of capital to poorer countries. Yet, given the fact that there are poorer countries which have overborrowed and must regain confidence on world capital markets by servicing - and perhaps temporarily repaying - their debt, a deficit in the U.S. current account may help to prevent a debt crisis. Imagine what would happen if the U.S. now behaved in a similar way as it did in the interwar period when Germany tried to pay off its reparation debt but failed because the final recipient - via the inter-allied war debt - did not co-operate by running a current account deficit.

(b) A high valuation of the dollar may hurt numerous firms producing Heckscher-Ohlin goods and stimulate protectionist demands in the U.S. Yet this is exactly the type of competitive pressure which is needed for the relocation of these industries to less advanced parts of the world economy.

VII. Growth Leadership

34. Countries leading in world economic development must be engines of economic growth. Those who associate growth with the expansion of demand - implying that demand is the limiting factor - focus on budget deficits. The "Reagan deficit" is thus seen as a source of growth.

35. However, the same observers who support Keynesian remedies for unemployment and stagnation criticise this deficit for raising the level of interest rates in the world. Some of them would like Europe and Japan to have higher public deficits instead of the U.S., implying (or not?) that the level of interest rates in the world would be different in that case (would it really be lower if the world economy substituted second-rate borrowers for the very best public borrower it presently has?).

36. Nevertheless, the Reagan deficit deserves criticism, first, if it has to be considered as an act of dissaving for the world economy as a whole or, second, if it implies a waste of capital compared to a situation in which total public expenditure in the U.S. were the same, but the counterpart of the deficit were (additional) productive investment - say in infrastructure instead of public consumption or rearmament. As always, the resulting judgement depends upon the reference systems chosen and the way the alternatives are evaluated.

37. If the Reagan deficit is seen to be the result of the cut in income taxes and business taxes, one can well argue that this cut is equivalent to a productive investment to the extent that it helped to improve the incentive system and to raise the motivation level in society, including the propensity to work, to invest and to innovate. It is true that our bookkeeping rules do not allow us to consider this as an investment but in certain circumstances it may be a better form of investment than an outlay for hardware of the same magnitude. Whether this interpretation has some value can, however, only be judged in the long run or perhaps in comparison with Europe where taxes are higher and where motivation levels appear to be lower.

38. From a European perspective or a vantage point which permits a long-run view the U.S. can be seen to behave as an engine for world economic growth. Its real sector seems to have adjusted to the growth conditions of our time much better than the real sector in large parts of Europe. In order to support this view we note or recall the following interrelated points.

- While Europe suffers from a level of real wages which is still too high [Giersch, 1978; Artus, forthcoming] and from a rigid wage structure which does not sufficiently allow for relative scarcities (excessive wages for unskilled workers and for workers in structurally weak regions, too small wage incentives - after

taxes and deductions for social security - for attaining qualifications, for accumulating human capital and for moving to better paid jobs elsewhere, the U.S. has a balkanised and hence more flexible labour market and a union system which has become much weaker after the strike of the air controllers and after the severe 1982 recession. Instead of shortening the working week and reducing the retirement age, which is on the agenda in Europe, the U.S. has raised the retirement age and also the number of jobs which support going real wages.

- In Europe profits are still low compared to the interest that can be earned on financial assets [Dicke, Trapp, 1984]. They fail to respond to the shortage of productive capital relative to the supply of labour - the combination of capital shortage and unemployment that emerged in the 1970s [Giersch, 1978]. The U.S. economy, on the other hand, has succeeded in raising profits to levels which match the high real rates of interest that exist and are likely to prevail as long as the structural unemployment (or capital shortage unemployment) calls for giving capital formation the first priority in the growth process. This is mainly due to the flexibility of the U.S. labour market.

- In large parts of Europe, including the North of West Germany, people still believe technology to have a labour-saving bias as one may expect it to have if real wages are excessively high. Therefore, they adopt an attitude which amounts to opposing technical progress (Europessimism). In the U.S. the population has never been really affected by such opinion trends and seems to have almost maintained, or even recently strengthened, its optimism towards the future course of economic development and technological advance.

- In the U.S. public opinion seems to have recognised that government regulations and private barriers to entry weaken the economy's capacity to adjust to future developments. In Europe large sections of society still cling to policy conceptions and political ideas which are closer to state regulation, corporativism or the traditional guild society (Eurosclerosis). There may have been some shift to conservatism on both sides of the Atlantic, but conservatism in Europe essentially means conserving traditional structures rather than the flexibility of society.

39. Taken together, these judgemental propositions (perhaps very subjective ones, short of further research which appears desperately needed in this field) suggest that the U.S. is already much better prepared for starting a new spurt in econo-

mic development, at least in comparison to Europe, perhaps less so in comparison to Japan. In this perspective, Europe is seen to be in the very early phase of an adjustment process which is likely to cover more than one of the short-term business cycles which we have become accustomed to observe. In the opinion (or the unspecified socio-economic model) of the present writer the transatlantic time lag in the real sector's adjustment to faster growth may well lie in the range of five to ten years. It could be shortened by a concerted movement towards freer trade among Western countries. Freer international trade would surely help to break up internal protection in Europe's domestic markets. In that case, the immense productivity source of international trade and of competition from abroad could be tapped. This would allow monetary policy to anticipate a somewhat faster growth of potential output. But the prospects for such a move appear to be dim within the next couple of years.

VIII. The Short and the Longer View in Contrast

40. The transatlantic time lag in the adjustment to high real rates of interest and to new technologies supports an explanation for the strength of the dollar and for the superior performance of the U.S. economy which has its foundations in the real sector rather than in the monetary-fiscal policy mix. The following statements may help to bring the two alternative explanations into sharp contrast.

41. If the Reagan deficit is the villain of the piece, capital imports into the U.S. are of the induced type. They will fade away with the weakening of the present upswing, so that the dollar declines to correct a current account deficit which corresponds with the budget deficit. If, however, the high marginal efficiency (profitability) of investment in the U.S. is the dominant force in the scenario, the capital flows to the U.S. are more of the autonomous type. They will then decline only slightly during the next recession, which itself will be weaker if autonomous investments in the U.S. remain fairly strong. To the extent that the profitability differential between the U.S. and Europe is decisive and does not substantially decline, the real exchange rate of the dollar will continue to have strong fundamental support.

42. The short-run explanation suggests that European countries ought to boost domestic demand by running higher fiscal deficits. They would weaken the induced flow of investible funds to the U.S. and thus contribute to bringing down the external value of the dollar. The longer-run explanation offered here suggests that Europe should imitate the U.S. in reducing its real wages, in changing its attitude towards technical progress and in opening up its markets so that European markets become more flexible and more attractive to potential entrepreneurs. It is only in such a process of revitalisation that Europe will regain its former competitiveness in long-term capital markets. Only then will the fundamentals induce a weakening of the real exchange rate of the dollar vis-à-vis European currencies, then, however, in combination with a faster growth of potential and actual output in Europe. In this longer-run perspective there is no reason to object to potentially higher budget deficits in Europe, if they do not arise from higher public spending but from tax cuts that raise the profitability of investment and - by reducing marginal taxes for wage earners - the motivation level of the labour force and the whole population.

43. The dominance of the short-run explanation in the public discussion has drawbacks for a lasting therapy of Europe's economic problems. By making investors believe that the real value of the dollar will come down quickly, this explanation discourages U.S. foreign direct investment in Europe. It also makes European firms pessimistic about the longer run prospects for exporting to the U.S. market. In the longer run perspective the high dollar is to raise the profitability (marginal efficiency) of investment in Europe's export sector. This structure of exchange rates could well transmit part of the driving power for sustainable growth which the U.S. economy develops to Europe and other countries. However, Europe is unlikely to take advantage of it if the high external value of the dollar is considered to be a short episode rather than a replay of the development which Europe experienced in the 1950s and 1960s.

44. The view that real interest rates will come down rather quickly makes investors believe that it is not worthwhile to reverse the present bias in investment and even applied research which favours capital-intensive and labour-saving technologies in sharp contrast to a situation that displays a shortage of productive jobs in relation to an abundant supply of labour.

45. The idea that Europe - and West Germany in particular - needs just a little bit of fiscal expansion supports populist pressures. This may very well weaken the efforts to reduce the waste element in public expenditures in order to free resources for productive investment in the private sector which would be the right response to Europe's capital shortage cum unemployment. Moreover, the concentration on vague macro-economic concepts like deficit spending impairs the chances for tax cuts designed to promote capital formation and the creation of new firms on the old continent.

46. Emphasis on short-run measures to boost demand may do less harm in the U.S., where real wages could be brought down in the 1970s partly under the influence of unanticipated inflation. But in inflation-experienced Europe with fairly centralised wage bargaining in many countries the wage problem will have to be tackled directly. Centralised unions always tend to maintain that unemployment is not their fault and must, therefore, be due to exogenous factors (like technical progress) or to a deficiency of overall demand. But although it is effective demand that matters, i.e. demand in relation to supply prices, they yield to strong membership pressure for raising real wages when demand improves so that "job owners" fully benefit from any productivity advance, cyclical or trend-based. It is true that a learning process has started in Europe, here or there, but it may be swamped by a policy debate which ignores the micro-economic foundations and depicts the U.S. policy as the source of the evil. The problem is not only real wages paid out to the employees but numerous restrictive regulations and practices which raise the shadow wage for the employers, as they often make the hiring of new workers an almost irreversible decision. Irreversibility here and a belief in the reversal of the strengthening of the dollar add up to a situation which is by far not as encouraging for Europe as the situation was under U.S. growth leadership in the 1950s and 1960s.

IX. Conclusions

47. If there is to be a brand name for distinguishing this longer view interpretation of the present dollar/DM rate, it may be called a flagship hypothesis. By raising the marginal efficiency of investment the U.S. economy is speeding up its

trend rate of growth relative to the laggards in the convoy. The driving power is autonomous investment rather than induced investment of the accelerator type. The capital imports into the U.S. which compensate for the crowding-out effect of the Reagan deficit are, therefore, more trend-based than cyclical. They raise the external value of the dollar and thus weaken the competitive position of the less productive parts of U.S. manufacturing to the benefit of locations in countries with lower labour costs. Some of the laggards have to transfer debt services; others see the marginal efficiency of investment in their export sector improved, but have difficulty in making full use of this imparted and imported driving force. This speeding up of the pacemaker and this lagging of the followers is a plausible explanation for the transatlantic tensions in the field of economic policy.

48. At the end of a tiring series of reflections an applied economist must try to arrive at a hard conclusion. To make it short: the author would be more than mildly surprised if the real exchange rate of the dollar vis-à-vis the DM during the next three years dropped by more than the 10 or 15 per cent mentioned above on the average during any period of twelve months (1). This rests on the (realistic) condition that the U.S. is remaining on a monetary path which does not give rise to inflationary expectations (as it did in the second half of the 1970s). Moreover, the flagship hypothesis suggests that the range for the fluctuations of the dollar might even have a somewhat higher floor. In subsequent years Europe may well succeed in lowering this floor just as the world may succeed in bringing down the real rate of interest by accelerating capital formation and economising on the use of capital. But such success on the exchange rate front will largely depend upon how far the old continent regains strength in curing Eurosclerosis.

(1) When this paper was drafted towards the end of July 1984, the exchange rate was approximately 2,85 DM/dollar.

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