SAVING, INVESTMENT AND GOVERNMENT DEFICITS -A MODERN KALECKIAN APPROACH -

by

Heiner Flassbeck

Paper presented at the International Conference in Commemoration of Michal Kalecki on the 100-th Anniversary of his Birth, Warsaw, 27-28 September 1999

1. Introduction

The major puzzle of the world economy in the last 40 years is the growing discrepancy between the development of the world savings rate and the development of interest rates. While the rate of savings and investment had risen from the beginning of the 60s to the mid of the 70s, it fell, after the first oil price explosion, back to the level of the early 60s and did not recover thereafter. World interest rates, short and long term, were low up until the mid of the 70s but both rose sharply since the beginning of the 80s and, up to our days, never returned to levels which had been regarded as "normal" in the first decades after the 2.World War.

These facts are outlined in a recent document of the International Monetary Fund (IMF,1995, pp.67-89, mainly Chart 23 and Chart 33). But the Funds reading of the empirical evidence reveals a deep misunderstanding of the interdependent structure of a monetary economy. The Fund acknowledges that an exogenous upward shift in world investment demand is "unlikely" to be the reason for the rise in long term interest rates. The Fund supposes "that the high degree of public dissaving over the 1980s and 1990s has been a key factor" (p.84). This is a surprising conclusion. The fact that the savings rate has been falling from 23 percent (in the period 1960-72) and 25 percent (1973-80) to 22½ from 1980-94 and even less in the last years shows, if anything, that world investment demand has decreased as the overall growth rates of the world economy (the numerator of the savings ratio) definitely have been falling since the first oil shock. To break down the data for the major industrial countries "into private and public saving" and to find that "*virtually all of the decline took place in public sector saving*" (italics in original) reveals nothing, given the fall in overall growth rates in company with rising unemployment (IMF,1995, p.68).

Up to now we do not have a reliable method to identify the active or passive character of public budget deficits. But it is a priori a more than surprising thesis of the IMF to suppose that the switch to conservative governments in some big countries of the G-7 (United States, Germany, United Kingdom) at the beginning of the 80s, with Japan being taken as "conservative" in this respect too, can explain the shift towards an active role of public dissaving. Given these political circumstances it is obviously much more likely that public dissaving in this period was the result of the slowdown of growth and investment rather than

its cause. In this as in other cases, the notion of "public dissaving,, is not helpful at all. It seems to be used only to hide the absence of a stringent theory.

The underlying theoretical constructs get even more confused if we take into account other facts. The most striking one is the rise of short term interest rates over the same period. Whereas the increase in long rates could have been explained with the (unexplained) fall in the supply of long term capital (savings), the rise in short rates (real as well as nominal) is hard to reconcile with the facts of a fall of the growth rates of real income, the fall of inflation rates and rising public deficits, given the traditional instruments of analysis. The Fund tries to explain *short* rates (p.84) with "government budget policy" on the one hand. On the other hand he states that "the relationship between monetary policy and real interest rates is not straightforward, (p.85) even without mentioning any differentiation of short and long rates. This is not only crude in theory but obviously result of the vested interest of an institution mainly governed by central banks.

Even more surprising than the role which is imposed to budget deficits in the discussion of savings and investment (see Ball/Mankiw, 1995) is the fact that an other phenomenon seems to be totally ignored. The capital output ratio, at least of some of the Western industrial countries (see Obstfeld/Rogoff, 1996), is rising. Such a development was regarded to be of the utmost importance by many economists, including the one we are to honour at this conference, some decades ago¹. With falling productivity of capital, so their argument, only permanently falling interest rates could compensate investors for falling rates of return on fixed capital thereby preventing a secular fall in the savings and in the investment ratio. Rising interest rates and rising capital output ratios, as witnessed in the 80s and 90s had, according to this theory, to result in a fall in investment ratios and a fall of the growth rate of overall real income.

This paper intends to illustrate that the analysis of the IMF and other recent publications on the topic are misleading and that the former writers like Kalecki were right. The relationship between savings and investment on the world level cannot be adequately handled with the simple instrument of supply and demand, assuming that the level of output or income or their growth rates are given. Any assertion, attributing movements of the real short and the real long interest rates to "real" factors ("additional demand of developing or transforming countries, rising public deficits") alone, thereby neglecting the role of monetary policy and thus relying on a strict neutrality hypothesis, is not tenable.

2. The Traditional Approach

To illustrate the point of dissens between today's majority view and a Keynesian or Kaleckian theory let me first give a very simple example: At the beginning of 1994, nominal and real long interest rates all over the world started to rise (see chart). The proponents of the traditional approach explained this increase by the rising demand for capital from all over the world. It was, according to their view, only by chance that the Federal Reserve System of the United States had increased its short rates just before long rates began to climb. Robert Barro (1994) wrote in The Wall Street Journal:

¹ See Kalecki (1944), p.385

"The recent rise in real rates is a symptom of an improving economic situation and has nothing to do with Fed policy. Basically, real rates are high when growth prospects are good and investment demand is correspondingly strong....Mr.Greenspan could have told senators that the Federal Reserve lacks any strong influence over expected real interest rates, even in the short run. These rates are determined by the interplay between supply and demand of credit, determined by the willingness of people all over the world to save and their desire to invest....The recent rise in long-term real rates is a good sign about the world economy. It suggests that long-run prospects for growth and investment are improved relative to those that prevailed last fall.,,

The IMF and Stanley Fischer argued that the increased demand for capital from the transforming countries of the east tended to increase real interest rates in 1994. This view should have been clearly falsified by the developments in the following year. The economies of the industrial countries slowed down remarkably after the expected lag in 1995 and nominal as well as real rates came down to the pre-slowdown levels first and to much lower levels later..

The budget deficit theory of interest rates is faced with insurmountable problems too if it is to be used to explain such a short run change in real interest rates as in 1994. All over Europe and in the United States budget deficits were reduced in the course of 1994 as governments benefited from a temporary acceleration of economic activity. But even in the "long run" of the 90s as a whole there is no correlation between government deficits and interest rates. Since the beginning of the 90s long term interest rates in the world (see chart 1), real as well as nominal, had been coming down. Budget deficits in Europe were quickly rising after the recession which started in 1989 and could be reduced for the first time, as mentioned, in 1994. The United States were able to reduce the public deficit at an earlier stage as economic policy, i.e. monetary policy there was able to initiate a private investment boom at a rather early phase of the cycle.

The most striking case in the 90s is Germany. Due to the burden of unification the budget deficits, which had been virtually eliminated at the end of the 80s, exploded in a very short period and reached 4,5% (in relation to GDP) in 1993. Nevertheless, the nominal long rate fell from 8,5% in the first quarter of 1990 to 6% in the last quarter of 1993. The fall in the real rate in the same period was even steeper: from 5,7% to 2,25%. All this despite the fact that there was a boom in West Germany with an unprecedented rise in the ratio of private investment to GDP. The riddle which the orthodox view faces today is of a similar quality: The United States have achieved surpluses in their government balances at the end of the 90s but the long rate is much higher than in Europe where most of the governments are still struggling with high current deficits and high overall indebtedness of the government sector.

But a monetary explanation of interest rates is in a difficult situation too if it is used in a national geographical context. The short term interest rate rose in Europe up to the Autumn of 1992 (chart...) whereas the long rate, as mentioned, fell since the end of 1990. In 1994, the short rates in most of the European countries did not rise although the long rate in Europe too jumped from 6,75% to 8,65% from the first quarter of 1994 to the first quarter of 1995.





It seems that most of the usually used theories to explain interest rates and their effect on savings and investment are not adequate, given the fact that there is a world market for capital and money, which, after the liberalization efforts of the 1980s and the convergence of inflation rates all over the industrialized world, seems to be much closer interrelated as it was before. To find satisfactory explanations for the world wide increase in long and short term interest rates as well as for the fall in savings and investment to be observed in major regions of the industrialized world, at least since the end of the second oil price explosion, we will have to focus the investigation on events of a global dimension. Any kind of partial approach, be it sectoral or regional, is in danger of misinterpreting developments by putting artificial boundaries into a global economic framework.

3. Basics

The theory of saving and investment unfortunately is, up to our times, a rudimentary one. It consists mostly of the more or less sophisticated breakdown of an identity. Let Y be the gross domestic product of a closed economy (or the world), then the whole product obviously can be split into a part (C) that is consumed immediately (in the period of production) and a part (S) which is saved to be consumed later or to be invested (I) in order to increase the product Y (the national dividend) in a later period. We can write the product as:

$$Y = C + I \text{ or } Y = C + S$$

and we ,,find,, what was assumed, namely that:

To split up consumption and investment into the consumption or investment of certain groups of actors like "the government, or "foreign countries, in the case of an open economy does not add much information to the identity. It remains a simple definition². To make a theory of it, we have to identify the variables which determine the movements of C and I and in consequence the product of the world.

It is, from a priori reasoning, questionable to search for variables which equate S and I. In the past the standard error of many authors has been a notion of the kind that...,,In equilibrium, however, the world interest rate equates global saving to global investment,, (Obstfeld/Rogoff, 1996, p.31). As S and I are always identical, the notion of ,,equilibrium,, as well as the assumed role of the interest rate is, as Michal Kalecki has pointed out time and again, without any meaning and without any informational contents³. It is dangerous to use the idea of the interest rate as an equilibrating mechanism of saving and investment without saying what it implies. It implies that real income (the product) of the economy under consideration is assumed to be either constant (or growths with constant rates). This eliminates, however, any information of the theoretical nexus. Alternatively one has to assume that the amounts of saving and investment are independent from changes of the real income. But this is obviously absurd for any theory claiming to deal with problems of real life.

One can squeeze a bit more information out of S = I if we regard both not as, ex post, given variables but, ex ante, as a planned amount of money (S^* , I^*) at the beginning of a certain period. There are two cases then which mark the range of the possible outcomes. If $I^* > S^*$, planned investment (demand on the capital market) exceeds planned saving (supply on the capital market) interest rates may rise to an extent that the product (real income) remains unchanged (the classical case). If interest rates do not rise at all, then the product (real income) must rise and induce the higher amount of saving which is "needed" for the ex post equality of saving and investment. Still, we do not know much about the determinates of the system. But we begin to realize the gulf that separates the two extreme cases.

The IMF (p.73) characterizes these two cases as if there is a choice, allowing in both cases a similar dynamic interrelationship between investment and growth:

"In one view, saving is seen as resulting from a choice between present and future consumption. Individuals compare their rate of time preference to the interest rate, and smooth their consumption over time to maximize their utility. The interest rate is the key mechanism by which saving and investment are equilibrated. The other view sees a close link between current income and consumption, with the residual being saving. In this view saving and investment are equilibrated mainly by movements in income, with the interest rate having a smaller effect.,,(p.73)

 $^{^2}$ The typical error as regards the informational contents of the identity can recently be found in Ball/Mankiw (1995). They argue (p.97) that ...,This simple equation (S=I,H.F.) sheds considerable light on the effects of budget deficits,. But the equation has no light at all. Thus, Ball/Mankiw are mislead from the beginning in their interpretation of what budget deficits do. I will come back to this at a later stage.

³ This is obviously a similar discussion as the one Keynes had fought against the "classical theory of interest, (Keynes, 1935, p.14ff.). Keynes concludes that the classical theory is... "faulty because it has failed to isolate correctly the independent variables of the system. Saving and investment are the determinates ...not the determinants of the system,.. (p.183)

This is a misleading description of both concepts. As had been said above, the idea that there should be a mechanism to "equilibrate, saving and investment is per se highly questionable as their equality is an ex post identity. But if the interest is regarded as a device to avoid any huge deviations of planned saving and planned investment, the analysis is bound to lead to the conclusion that real income is constant (or constantly growing) over time. The second view, however, rejects the idea of a constant real income a priori. In a Keynesian world, the fact that saving and investment are equal ex post (not "equilibrated"!) is an important feature of economic analysis but it is not important for the dynamics of the system. The creation of income ($I^* > S^*$) is the main target of the actors in the economy.

In a big closed economy there are three groups of actors to be separated out, private households, the company sector and the government. In small open economies we have to take into account the role of foreign trade and the behavior of the comparable sectors in other countries or regions. The stylized behavior of these groups can be described in a rather simple way.

Private households receive income from different sources, companies as well as governments or foreign countries. Private households save a certain part of their income and keep assets of diverging maturities. Let us assume that the ratio of saving to income is a positive function of the (real) interest rate and a positive function of changes in (real) income. In this case private households act as a stabilizer on the capital as well as on the goods market. In the course of the trade cycle the interest rate usually rises with rising real incomes. Private households normally increase their saving rate and thereby dampen the growth of demand and vice versa. Whether this smoothing of consumption is the result of a rational comparison of time preference with the expected interest rate or just slow adjustment to rising incomes (the attempt to keep the once reached level of consumption in a recession) is an open question. But the reasons are less important than the effects.

Private households *react* to events like movements in real income or interest rates, they usually don't act. They have no means to increase real income for the economy as a whole although they may try to improve their specific income position by increasing their supply or improving their terms of trade. Whenever a private household is acting to use current savings for activities which will pay out only in a later period it slips into the role of the entrepreneur and should no longer be treated as a private household. Per balance (net) the household sector is in most of the western advanced economies the main supplier of funds to the capital market.

The company sector is the main investor. Companies act through their investment to create real income by using resources (savings) of other sectors. This is a unique role which the entrepreneur or investor has occupied (see Schumpeter, 1912). He is the economic agent who acts despite the fact that the outcome cannot be calculated, that there is objective uncertainty in the Knightian or Keynesian sense: "We simply do not know" (J. M. Keynes) what will happen. The effects of the creation of income through investment by entrepreneurs will spill over the whole economy in an unpredictable way and - create new savings. These savings appear as savings of private households, after their real income or the level of employment has been improved, or as reduced dissaving of the government after more taxes have been paid by companies and households. The (gross) savings of the company sector appear as retained profit which will, as a rule, be invested again. Per balance (net) the company sector has a deficit of receipts corresponding to its net investment.

Governments are consumers and investors. They collect taxes and fees to be spent for consumptive purposes (wages, pensions and other social contributions) as well as for public investment in infrastructure, environmental protection and the production of other public goods. Governments may be net saver or net dissaver and thus supplier or demander on the capital market depending on their role as investor or consumer. But governments, unlike other sectors, may, due to their macroeconomic responsibilities be forced to dissave in special circumstances in an attempt to stabilize demand. A priori, government saving or dissaving cannot be discriminated against any other form of saving, moreover so as there are close interdependencies between saving and investment of the three sectors.

A lot of confusion surrounds the question "What do budget deficits do?" (see as the most striking example: Ball/Mankiw, 1995). The source of the confusion here is mostly to be found in the uncritical mixture of judgements concerning the role of governments in questions of welfare and the efficient allocation of resources on the one hand and judgements concerning the role of governments as players on the macroeconomic field. One may argue that governments indeed are inefficient in many respects if compared with the private actors and that a withdrawal of government intervention may increase welfare in many cases. But this is a question quite independent of the one which deals with swings in macroeconomic balances of all the actors on the stage. And as on the stage the fact that one actor doesn't play his role adequately obviously doesn't mean that his character for the play as a whole is redundant.

The orthodoxy in economics, nevertheless, has fallen back to pre-Kaleckian and pre-Keynesian categories. Ball/Mankiw in their investigation of the effects of budget deficits start with a surprising hypothesis: "Budget deficits have many effects. But they all follow from a single initial effect: deficits reduce national saving. National saving is the sum of private saving ...and public saving...When the government runs a budget deficit, public saving is negative, which reduces national saving below private saving" (Ball/Mankiw, 1995, p.96/97).

This is economic nonsense. Ball and Mankiw work with a model which must be based on the idea that there is something like a "fund, of national saving which can be exhausted by the government. But a growing government deficit does not per se imply a reduction of national saving. The government may, this is the case Kalecki mainly focussed on, with the new funds increase overall investment in the economy more than the private sector has done and could have done. Government deficits may rise because private investment falls and the government stabilizes demand in an effort to prevent a further fall of private investment and saving. In this case national savings will be higher with than without the budget deficit. Public budget deficits may rise because the government. Again national saving increases. Or budget deficits increase because a government stimulates private investment by tax cuts. Will national saving, the national investment ratio fall?⁴ There is no fund of national savings and it is only a sad testimony of the regress in economic thinking that has taken place in many fields in the last years that a paper like the one of Ball and Mankiw could have been published.

⁴ Ball/Mankiw seem to believe too that an increase of the government deficit "leading, to a fall of national saving may induce a deficit on the current account too (p.100). There is no theory for such an assertion. If government deficits rise all over the world, as it happened in the 80s this will obviously not induce current account deficits everywhere. Only if governments are successful in inducing high growth rates and a positive growth gap between their countries and the rest of the world, as it was the case during the German unification, a current account deficit may occur. But then the government deficit will not have "reduced, but increased national saving, i.e., increased investment.

At this stage we have to mention **other countries**, i.e. the surpluses or deficits of regional conglomerations of private households, companies and a government sector. These are measured at geographical borders and are accounted as current balances. These balances are often called "a country's savings, (Obstfeld/Rogoff, p.162). But such a terminology is extremely misleading. "Countries, do not act economically at all. Countries, at least those at a similar stage of development, consist of the same groups of actors as other countries and the world as a whole. Each unit of these groups has, to survive in the market, to preserve its competitiveness in the whole free trade region, whatever the national borders may be. Given a more or less equal distribution of the groups inside the national borders will, as a rule, not lead to huge and sustained surpluses or deficits of the geographical conglomerations because that would imply a gain or loss of competitiveness or a permanent "living beyond or below your means,, of many units of the region. But this is prevented by sanctions of the financial system on the micro level (hard budget constraints) which are well known to everybody.

Thus, huge swings or persistent saving or dissaving of regions can only be due to discrepancies emerging between countries as a result of long-lasting divergent policy interventions (too expansionary or too restrictive policies and their effect on internal absorption) or as result of huge swings in the competitive position of a region (e.g. overshooting nominal exchange rates). The normal outcome, excluding policy interventions like interregional transfer systems, will be a more or less balanced "budget" of any region in a free trade area. This is confirmed by many empirical investigations. Slope coefficients for industrial countries national investment and saving rates are usually close to 1. That is to say that there seems to be not much of a contribution of "foreign countries" to national saving.

This fact, which is, according to the above reasoning, the normal outcome has, after the publication of a paper by Horioka and Feldstein (1983), been the basis of many misleading speculations concerning international capital mobility. Feldstein/Horioka argued that the high slope coefficient is evidence for a rather small mobility of capital or restrictions for capital mobility even in the group of industrial countries as otherwise capital should be free to move and "...to seek out the most productive investment opportunities worldwide" (Obstfeld/Rogoff, 1996, p.162). This is a fundamental misunderstanding. It is just the other way round: The more similar in their structure and the more open the countries under consideration are, the smaller will be the net movements of capital (the balances) between them. Such a finding has no direct implications for gross movements. These can be extremely important and their movement may lead, without the "contradiction" seen by Obstfeld/Rogoff, to "...the remarkable closeness of the interest rates that comparable assets offer despite being located in different industrial countries" (Obstfeld/Rogoff, 1996, p.162). The "country" is usually no category of importance in the markets and for economics as well if we are not dealing with interferences into the market by national governments.

4. Profits and Investment

To discuss the interdependent structure of the system which determines the behaviour of the actors more systematically, Keynes, Kaldor and Kalecki found, for good reasons, another identity usefull. Given the identity used above the profits of enterprises (P) always equal Investment (including the consumption of entrepreneurial households) (I) plus the deficits of the other sectors (DG: deficit of government; DF: deficit of foreign countries or export surplus of domestic economy) diminished by the saving of the non-entrepreneurial private households (S):

$$\mathbf{P} = \mathbf{I} + \mathbf{D}\mathbf{G} + \mathbf{D}\mathbf{F} - \mathbf{S}$$

An increase in government deficits or an increase in current account surpluses increases profits as well as a reduction of private saving increases profits. This irrefutable relationship given, the role of government deficits as well as private saving in the process of the determination of national or world saving appears in a different light. Additional expenditures of the government or private households leading to higher dissaving or reduced saving of these sectors do not imply a reduction of the national saving rate if these activities induce an increase of saving and investment in the company sector.

There has been a lot of discussion about the so-called Ricardian equivalence, i. e. the thesis that any fall of government saving (increase in government deficits) is fully compensated by a rise in private saving. The equation of distribution, however, sheds new light on this relationship. If the Ricardian equivalence perfectly holds for private households deficit spending of governments obviously cannot increase profits of enterprises and investment. But in reality there may be lags. If there is no full and immediate compensation by private households profits will increase and may induce additional investment⁵. In this case the empirical evidence, which is anyway not convincing, has to be interpreted even more cautiously. Increased savings of the private sector as a whole may mean more investment in fixed capital plus higher private savings instead of a higher savings ratio of private households alone which is usually associated with the Ricardian equivalence. Government deficits may in this case bring about exactly the outcome a Keynesian or Kaleckian theory predicts but the evidence may seem to fit the Ricardian equivalence. The case demonstrates, the question how higher savings of a certain sector are transmitted into higher investment is still unsolved. It should be clear, however, that the existence of the Ricardian equivalence and an influence of government on interest rates is contradictory.

Even more convincing is the other way round: If the government saves more (reduces its deficits) it may be plausible to assume that private households save less even if there is no full compensation. But the company sector will react differently. With a first round cut in profits it is not plausible at all that firms will increase their investment in fixed capital. If they reduce investment and employment private households may reduce their savings rate in an attempt to stabilize their level of consumption. The outcome of this complex process in terms of national saving is not predictable. But whatever the outcome will be, it is more speculation than theory to interpret the result as being in conformity with the implied causality of the Ricardian equivalence. The normal causality should be the other way round: Due to a certain exogenous shock private agents save and invest less than before. The public budget deficit increases automatically due to the effect of built-in-stabilizers, the empirical observation is a fall in overall saving (investment) and an increase in the deficit. To interpret this as evidence for the Ricardian equivalence is obviously nonsense. But again, the cases under consideration cannot be separated out by empirical methods.

Given these reservations it is hard to understand that the IMF comes to similar conclusions as Ball/Mankiw by stating that ...,the empirical evidence suggests that there is less than a one-for-one increase in private saving when governments dissave, so overall national saving and

⁵ This was definitely the case during the German unification. Deficit spending of the central government led to a boom in investment in West Germany despite restrictive monetary policy.

world saving decline when governments run higher budget deficits" (IMF, p.85). But if this is right then the meager statement that ...,increased levels of government debt are generally associated with higher real interest rates" (IMF, p.85) definitively leads into the wrong direction. Why should the increase of a certain sectors demand for capital lead to an increase of real interest rates if the overall saving declines? How can we conclude that interest rates rise before we know what has happened in the other sectors and thus for the demand for capital as a whole? Again, imagine the supply of capital falls for whatever reason. Higher interest rates may induce an increase in the saving ratio of private households. But the opportunity costs of investment have increased and the profit situation may have worsened due to falling demand. Is it serious to conclude that higher real interest rates will necessarily be associated with higher saving, given the fact that falling income is - necessarily - the "equilibrator, in this case?

At this stage of the proceedings we have to introduce the monetary sphere of the economy. The equation of distribution deals only with the real side. Without money any change in I,DF, DG or S is accompanied by diminished or increased supply or demand on the capital market at least as far as the first round effects are concerned. If governments raise their deficits they demand more capital which may, without a perfect Ricardian compensation, increase the long term interest rate and profits. If private households raise the amount they save out of a given income they provide the capital market with more supply lowering the long term interest rate but diminishing profits. The counteracting forces on the capital and the goods market leave the question of the effects on investment, at least at the theoretical level, unanswered. Thus, supply side policy without money is faced with a striking paradox. Assume the company sector "decides,, to increase investment (I) due to the governments decision to offer additional tax cuts or simply due to increased "confidence". This will bring about exactly the same repercussions from the capital market side as we usually impute to interventions of governments or an exogenous fall of private savings. Additional demand for capital by entrepreneurs will definitely improve the profit situation, but only at the expense of higher interest rates. If we are not able to discriminate quantitatively, that is to say by empirical investigations, the effects of the capital and the goods market, we will not even be able to decide, on a theoretical level, whether a market economy can ever leave the circular flow and create additional income or higher income growth.

Obviously, this is a very uncomfortable situation for economic theory, given the fact that the world economy grows. At a very early stage of economics as a science, however, this problem was addressed and a preliminary solution was found: The only way to finance additional investment and growth of the overall economy is the artificial creation of additional money. Additional money, so many early writers, including Schumpeter (1912) and von Hayek (1933), would allow to increase investment without negative repercussions from the capital market. This idea found its expression in the phrase of "forced saving" which had occupied many economists in the 30s of this century. Keynes flatly rejected the idea as he could not see how to make sense of it despite in the case of full employment where additional money - via inflation - may be necessary to shift resources from consumptive purposes to investment. "But an attempt to extend this perfectly clear notion to conditions of less than full employment involves difficulties" (Keynes, 1935, p.81). To Keynes the idea of forced saving cannot explain why ..., the savings which result from this decision (The decision of a bank to grant a credit to an entrepreneur, H.F.) are just as genuine as any other savings,, (p.83). This is undeniable but the term "forced,, is not the crucial point. Keynes misses this point by stating that ...,,these tendencies... (which characterize the state of increasing output, H.F.) will occur just as much if the increase in output has been initiated otherwise than by an increase in bankcredit, (p.83). There may be no "otherwise". Then the notion of forced saving or better, about the role of money in the process of the creation of saving, gets an overwhelming importance.

The importance of money had been clearly recognized at the beginning of this century by J.A. Schumpeter in his "Theory of Economic Development" (1912). Hayek (1933) joined his view that only abundant money will allow high growth rates and a quick development of nations. For Schumpeter it is explicitly a *potentially* inflationary policy which spurs economic development. Monetary policy has to "prefinance" the process of development without knowing with certainty that the additional money will be used for real growth. This explains why catching-up processes are usually endangered by inflationary acceleration. The whole process is potentially inflationary without becoming inflationary in the least analysis.

Why is it that a thorough analysis of world saving and investment like the one of the IMF not even mentions the role of monetary policy? This shift in emphasis compared to former writers, obviously, is due to the fact that in the course of the rational expectations revolution of the 80s it has become a general conviction that monetary policy overshooting a "warranted" growth rate of money will induce inflationary expectations and inflation only. This idea says that the average economic agent has the expectation that the future inflation rate p* will always be determined by the following equation:

 $P^* = mw - m^*$,

where mw is the warranted non-inflationary growth rate of (effective⁶) money (m) and m* is the expected growth rate of m. The warranted growth rate of m equals the expected and warranted growth rate of real income or output. In a non-inflationary environment mw equals m*. If money growth exceeds mw inflation is expected to accelerate to p* and adjustment of wages and other items which are inflation-prone quickly takes place. The acceleration of the growth rate of money has, if any, only temporary effects on the real economy but lasting effects on the price level.

As we are talking about economic dynamics the implications of this theory concerning the assumed knowledge of the average economic agent are of the utmost importance. The theory assumes that everybody knows the warranted growth rate of the economy in which he lives. Why should that be a feasible assumption in an open economy and society? For example, nobody had forecast that Europe as a whole will in the 90s fall much behind the United States and its own historical performance in terms of the average growth rate. Who would assert that an increase in real growth in Europe in the next decade is not possible? If this information is not available the whole theory falls apart. Nothing is left but a file without contents.

The fact that we have to live up with is the increase of short rates in conjunction with long rates since the beginning of the 80s. If there were real reasons for the rise in long rates like capital scarcity or increased demand for capital, short rates could have followed a different pattern. Short rates are determined by monetary policy and nothing else⁷. If monetary policy

⁶ Effective means including the relevant development of money demand, which is to say that effective money equals nominal output.

⁷ There is a lot of irritation around the way in which money is supplied by the central bank. But it should be clear that the state owned monopoly central bank has no supply schedule but determines a certain point on the money demand schedule so that all the argument about a market process in the money market is useless. Additionally, the empirical evidence is overwhelming.

increases short rates beyond the point which is determined by the time preference of asset holders it creates incentives to substitute long against short assets. The supply of long term assets falls, compared with what would have been offered without the central bank intervention, leading to rising interest rates on the long side of the market too⁸ and vice versa.

Thus, monetary policy destroys or creates capital by setting the short rate beyond or below the rate which reflects the undistorted portfolio selection of the average supplier of capital. Monetary policy shifts the supply curve of capital. It is important to note that this happens without any compensating repercussion on the real side of the economy. If monetary policy reduces the money supply in an attempt to stop inflation and asset holders switch to the short side of the market, shifting the supply curve to the left, there is no expansionary effect on the real side as in a case in which private households reduce their saving rate and increase consumption. This is due to the unique role the central bank holds among policy makers: Only the money supply or the short rate are exogenous, all the other instruments have to bear the burden of being endogenous, being an integral part of the economic system.

5. Some Empirical Observations on Money and Interest Rates

If we look at monetary policy in the after-war history it is useful to separate out three different phases. In the first two decades after the war monetary policy was hardly ever restrictive, taken long over short rates or the spread (long minus short) as a reliable measure of monetary effects. Whenever the spread becomes negative monetary policy exerts a restrictive influence on the economy as the normal time preference is no longer reflected in market rates. In the 50s and 60s for which, due to insufficient data, cross country evidence is not available, in the United States, for example, the spread never was negative.

⁸ There is one argument usually brought forward at this stage. Holders of long assets could perceive the move of the central bank as bringing inflation down quickly. Then they would stay with the long market and not shift into short assets. The validity of this argument affords the same information implications as the general argument in the rational expectations debate with which we have dealt above. This is not to deny that such a speculation may happen time and again for very short periods. To use it as a general assertion about the behavior of the capital market involves, as we will see, a fundamental error.

Interest Rate Spreads in the USA and Europe



In Germany there was only a very short period during the Korean War at the beginning of the 50s where short rates exceeded long rates. After that short rates only touched long rates immediately before the small recession in the mid of the 60s. The evidence of the IMF is striking too (see IMF 1995, chart 33, p.84), the positive gap between long and short (real) rates was stable at 1½-2% from the beginning of the 60s up until the first oil price explosion for a group of important industrial countries⁹.

During and after the negative supply shock of the oil price explosions the role of monetary policy is subject to dramatic changes in two biggest regions of the world, Europe and the United States, representing even recently (1994) more than half of the global real income. Chart 2 depicts the nominal short and long term interest rates of Europe and of the United States.

In the mid of the 70s in both regions of the world monetary policy became restrictive over an extended period for the first time in modern history. In Europe the spread was negative in 6 quarters (from the second quarter of 1973 to the third of 1974). In the United States the yield curve was inverted for 7 quarters, ranging from the first quarter of 1973 to the end of 1974. The second prolonged phase of monetary restriction started in the aftermath of the second oil price explosion in the States at the end of 1978 (3.quarter) and lasted till the second quarter of 1982 (in 16 Quarters, including a short break, the spread was negative). In Europe the spread turned negative a bit later this time than in the USA (2.quarter of 1979). But, given the data for 15 European countries and the GDP weights of 1994, the average European spread was negative without any break up until the third quarter of 1987. This amounts to 33 quarters of restriction from the monetary side.

But the story of monetary constraint doesn't stop at that point of time in Europe. Whereas the United States, after 1982, experience only a very short period of restriction (4 quarters in

⁹ The IMF chart includes, representing the "world": USA, Japan, Germany, United Kingdom, Canada, Belgium, the Netherlands and Switzerland.

1989) up until today, Europe is far worse off. The period of a normal yield curve is extremely short: Only six quarters in 1987 and 1988 can be counted in which monetary policy stimulates the supply of capital. From the first quarter of 1989 to the first quarter of 1994 (20 quarters with a four quarter interruption in which the spread was close to zero) the restriction this time lasts.

It is justified to conclude from this evidence that a dramatic shift in monetary policy explains the increase in interest rates all over the world since the 80s. Even more striking is the deviation between the two big blocks in the 90s. Whereas in Europe, mainly due to the German Unification, monetary policy remained restrictive up until October 1992, the Federal Reserve System was cutting short rates since the third quarter of 1990. The result was the largest gap (more than 6 percentage points) ever to emerge between short rates over the Atlantic (see chart 1). Long rates in both regions moved between the two extremes. They started falling soon after the Fed's first cuts, but the pace of the fall accelerated only after the turnaround in monetary policy in Europe. Again, seen from a limited European perspective, the fall in long rates despite rising short rates could only be explained by the orthodoxy only with the markets confidence in the central banks (Bundesbanks) determinedness to fight inflation, thus reducing the inflation premium. Seen from the US-perspective the early fall in long rates would mean that the confidence of monetary policy in subdued inflationary dangers was justified or, as has been very often argued, that the fall in US-government deficits is the main reason for the fall in long rates. These interpretations are not tenable. The global perspective clearly shows that monetary policy - on a global scale - and not much else is responsible for the fall and rise in long rates.

The most misleading explanation is the government-deficit theory. The IMF "finds, empirical evidence that the shift in government debt from 45% of world GDP in the 1960-1972 period to over 55% in 1981-93 ending in 1994 at over 70% ...,seems to explain roughly 200 of the 250-basis-point increase in the real short-term interest rates between the two periods..., (IMF, p.85). Firstly, it is difficult to understand theoretically, how the government, having neither direct influence on the nominal short rate nor on the inflation rate, can determine the real short rate. To test empirically theoretical nonsense cannot bring about reasonable results. Even the thesis that the government has a direct influence on the long rate which dominates the influence of other sectors is, as we have seen, not easy to understand.

If governments increase their deficits we are unable to decide a priori whether the increase is merely a reflex of the weakening of the overall economic situation or of determined government action. Thus, the IMF should have tested first alternative explanations, namely those including exogenous variables. The result would have been simple. Nominal short rates clearly determine long rates on the world level. This is true for real rates too. Only if, what seems to be the case for the IMF, there is a sophisticated differentiation between the relevant inflation rates for the short and the long end we may be stuck in confusion. But even then there is no explanation of the governments influence on the nominal short rate or the "short term inflation rate,...

The interpretation of the facts by the IMF is highly questionable. If government deficit spending should have a direct influence on the long rate or the short rate, this influence should show up at the time at which the deficit is run. According to the IMF's own figures the bulk of the public budget deficits has emerged since 1980 with a huge renewed increase in the 90s. But real long rates, again according to the IMF's own data, have permanently fallen since the mid of the 80s. Extremely striking the case of Germany again. The government deficits

exploded in the course of the unification process since 1990 form a slight surplus in 1989 to 5% of GDP in 1994. Real long interest rates fell from 6% at the beginning of 1990 to less than 2% at the end of 1993, rising back to 5% in 1995 when the deficits had been down to $3\frac{1}{2}\%$ and the government was determined to cut the deficit to reach the Maastricht "reference point,, of 3%.

6. Some Evidence for Small Open Economies

Other evidence, brought forward by the IMF, is inconclusive too. Stanley Fischer, for example, argues that: "In the mid-80s there was growing support for the view that fiscal contraction was expansionary: This conclusion was based on the fact that in Ireland and Denmark budget deficit cutting had very positive impacts on economic growth; and somehow this conclusion was generalized to be true in all circumstances, the argument being that by tightening the budget you increase confidence in the economy, and then there is more investment"(Fischer 1999). Fischer obviously has some reservations using the argument as it is and seems to blame others to have generalized these examples. But the fact that "evidence" like this is taken as a reliable argument for making the case of tight budgets, given the interdependence of the actor's balances, clearly reveals an ideological bias. As has been shown above arguments to defend deficit cutting are confused with arguments about efficiency of state intervention and thus, the debate about macroeconomics, unfortunately, becomes a part of the ever lasting fight between government intervention and free market solutions.¹⁰

If it were true, tightening fiscal policy and getting more confidence and more investment at the same time would be a wonderfull solution for most of our economic policy problems. Unfortunately however, things are not that simple. The weakness of the argument, is a priori, revealed by the fact that mostly the experience of very small open economies is brought forward to "prove" the case. For Europe as a whole in the 90s, despite its big achievements in budget cutting, there is no miraculous increase in investment. The opposite is closer to truth: Investment was extremely sluggish all over the 90s and unemployment rose. But let us look at the experiences of some small countries like Denmark and Ireland, Sweden and the Netherlands which are frequently taken as role models for much bigger economies.

To use **Ireland** as an example of a successfull orthodox strategy is close to an absurdity. Due to its membership in the European Union and the fact that Ireland was the poorest country for a long time Ireland received huge amounts of money from Brussels year by year. The top net contribution of the European Union was close to 4 % of Irelands GDP. In addition to that, Ireland "beggared" its neighbours in two different ways: Firstly, they pursued a strategy of undervaluation of their currency in the European Monetary System. After the tripartite agreement in the mid of the 80s, overall unit labour cost up to today fell in absolute terms or at least in relation to the other members of the single currency. The real depreciation vis a vis the members of the EU accumulated from 1987 to today to something like 25 % (EC Economic Data Pocket Book, No. 12/1998, p.59). Irelands current account balance swung from huge deficits at the beginnings of the 80s to large surpluses all over the 90s. This permanent real depreciation of the Irish Punt was tolerated by the other members of the EU as

¹⁰ Kalecki, obviously, had to fight similar ideological biases, in his "Political Aspects of Full Employment" (Kalecki, 1971, 138-145) he cites arguments of the "leaders of industry" which are, word by word, used in today's ideologically overheated economic policy debate in Germany.

Irelands total GDP only amounts to less than 1 % of EU's GDP. Secondly, Ireland has attracted and still attracts capital from other countries by heavily subsidizing foreign direct investment.

Denmark is a quite conclusive example too. This is true for the 80s as well as for the 90s. Due to a lack of data for the 80s I will demonstrate the case with the experience of the $90s^{11}$. Up to1992 Denmark was in a very bad shape. Unemployment reached the peak level of 10 % in 1993, the year of a general recession in Europe. But then, in 1994, Denmark jump startet out of the recession with a growth rate of 5,8 % in 1994. What had happened? The data are very conclusive: Real private consumption rose in 1994 by 7.1 %. That is the highest growth rate of this demand component that any of the bigger industrialized countries (with one exemption¹²)during the 80s and the 90s has reached. This jump in private consumption was the result of a dramatic decline in the saving rate of private households, it fell from 9,2 % in 1993 to 5,0 % in 1994. This was definitively not the result of a Ricardian equivalence effect because the government reacted much later to the consumption stimulated boom by cutting overall deficits. In 1996, two years after the boom had startet, which at that time was still fuelled by high consumption rates, the government deficit dropped to 0,9 % from 2,2 % a year earlier (the maximum had been 2,8 % in 1993).

In these days in discussions in Europe **Sweden** is seen as a new example of successfull policy of fiscal tightness which led to more growth and more investment. Sweden started with extremely high budget deficits in the 90s (more than 10 % in 1994) and has achieved a surplus in 1998. But here too, the story is a bit more complicated. Sweden, which is not yet member of the monetary union, saw a large depreciation of its currency throughout the 90s leading to a real depreciation of more than 10 % vis a vis the EU members and even more against the rest of the world. Sweden's current account, which had been in deficit for many years before (maximum: 3,5 % in 1992), moved to a surplus of 2,8 % in 1997. At the same time, despite a large drop in employment and very rigid nominal and real wages, the saving rate of private household plummeted to 0,8 % in 1997, compared with 8,3 % in 1993, thus stabilizing real consumption expenditure and domestic demand.

The most striking example of a country with successful supply side policy seem to be the **Netherlands**. But the Netherlands are, at the same time, the best example for the achievements of a small open economy which cannot be copied by large, more closed economies. From the beginning of the 80s up to the mid of the 90s the Netherlands pursued a policy of permanent real undervaluation of their currency which was fixed all the time to the D-Mark as anchor currency. For the 80s the Netherlands achieved by far the highest real depreciation of all EU member states. Their real effective exchange rate depreciated at that time annually by nearly 2 % (EC Economic Data Pocket, p. 59). This policy was continued into the 90s with a turnaround only in 1997/1998 as the improved labour market conditions led to a rise in nominal wages relative to the rest of the EU. The current account was in surplus all over the 80s and reached a maximum of 6,1 % of GDP in 1997. In addition to that, the household savings rate, which is low by any standard, has fallen to zero at the end of the 90s thus giving stimuli to the economy from the domestic side too.

¹¹ All the data I use are from OECD Economic Outlook, December 1998, if not otherwise indicated.

¹² The exemption is the UK in 1988, when, in the course of the famous Thatcher-Boom, even 7,6 % had been possible for the same reasons as in Denmark.

All these examples show the opposite of what could be expected by a naive orthodox view and they clearly support the Keynesian or Kaleckian view that an explanation of investment decisions and high growth rates has to take into acount all the relevant variables, the government deficit, the current account balance and the private households saving rate. The Ricardian equivalence doesn't hold in the above mentioned cases as well as in many other cases which have not been discussed in detail. The most striking ones in the 90s are **Germany** and **Italy**. Both countries successfully reduced their budget deficits despite huge burdens of the past. But in both countries the result was not as expected by the Ricardian theory. The outcome in terms of growth was negative as private households didn't react with a compensatory reduction of their savings rate. If the equivalence theorem would be a general law of economics it should be applicable to all cases and thus create a reliable rule for economic policy. Even in case of a visible correlation between government deficit and household savings rate like in the United States in the 90s the question of causality is not yet solved.

The even more important implication of the experiences in the 80s and the 90s is the differentiation betwen small open and big closed economies. Small and open economies may try a policy of belt tightening (on the wage side as well as on the government expenditure side) as they may be able to successfully "beggar-their-neighbours" in terms of a real devaluation of their currency. For big closed economies this is no option as the negative effects on domestic demand outweigh the positive ones on the external demand side. Germany since the mid of the 90s has tried a Netherland like approach and has clearly failed to reach the dutch results (Flassbeck/Spiecker, 1998)¹³. For the world as a whole it is anyway clear that Kalecki's and not the IMF's analysis holds.

7. Money and Investment

There can be no doubt that monetary policy dominates the development of the nominal and the real long term interest rate on the world level. Thus, the riddle of high rates and low world savings since the beginning of the 80s has to be discussed under a new heading. It was indeed a shift of the supply curve of capital to the left which has brought about the global rise in interest rates. But the shift was induced by monetary policy in its attempt to fight inflation after the two oil price explosions in an environment of rigid nominal wages. And monetary policy was successful. Inflation in the OECD as a whole has come down year by year from 15 percent in 1980 to 4 percent in 1994. Given the fact that prices do react only with a lagged

¹³ Kalecki in "Class Struggle and Distribution of National Income" (in Kalecki, 1971, 156-164) comes to grips with the problem of a fall in wages and its - perverse - results on employment in a closed economy. This piece is a clear refutation of the neoclassical theory of employment but nevertheless, up to now, the latter has dominated the economic debate. That may be due to a very simple but overlooked fact. Kalecki in his analysis usually assumes that investment and consumption of the entrepreneurs is given in the first round and not changed, say, by rising taxes or rising wages. This seems to be a very strong assumption and makes the analysis vulnerable to critical comments from the orthodoxy. But there is a rationale behind this assumption that Kalecki - at least in the papers which I read - doesn't mention. As profits are the residual they cannot be treated as being - in economic dynamics at least – already known at the beginning of the period. As entrepreneurs cannot know the effects of a rise in taxes or in wages, if we do not assume the existence of artificial worlds like the one which is described by "rational" expectations, they will not react immediately in a way that is expected by economic orthodoxy but only at a later stage when the outcome on the residual becomes visible. This again can be clearly proved in the German wage cutting case since 1996. See Flassbeck/Spiecker (1998).

adjustment even to such fundamental changes in the course of monetary policy, the bulk of the burden had to be born by the most vulnerable element of overall demand and supply, namely investment. Thus, the whole story of saving, investment and interest rates in the world has to be rewritten in a manner which had been known long before but seems to be forgotten by modern writers.

The fall in the world savings rate and the rise in short and long rates is perfectly compatible. The switch of monetary policy from accommodation in the 50s and 60s to restriction since the mid of the 70s, which has mainly fallen on Europe, explains the fall in investment in the industrialized world. The fall in investment is the mirror picture of the fall in world saving. But to talk about saving without investment easily leads to confusion. Neither an "act of individual saving" (J. M. Keynes) nor the saving of the whole group of private households or of governments, which we usually tend to associate with the word "saving", is a phenomenon leading, quasi automatically, to an increase of saving of the economy as a whole. The repercussions of an increase of saving of these groups on the saving of the entrepreneurial part of the economy must not be overlooked. If private households and/or governments plan to save more (dissave less) out of a given income this will be detrimal to the target of increasing the sum of saving and investment if the planned increase in the supply of capital (diminished demand of capital) is not going to induce a fall of the long term interest rate (nominal and real as a rule). This is definitely not the case if monetary policy at the same time restricts the supply of capital by giving incentives to restructure portfolios and to switch into short term assets.

Given the irrefutable fact that monetary policy, mainly in Europe, acted in this way since the mid of the 70s over longer periods than ever before, the fall in the growth rate of real income (output) in the world as well as the fall of the rate saved (invested) out of that income has, to a very large extent, to be attributed to this dramatic change in the role of monetary policy. Whether this change was justified or not is a question that has to be answered separately. But as it is irrefutable too that the spread explains much of the fall in the growth rate and the growth rates of real income and employment are highly correlated with fluctuations in investment(see Flassbeck /Spiecker, 1998) we cannot escape the logic of the evidence.

The causality runs from (exogenous) short to long rates and from long rates to investment of the company sector of the world economy. Investment, being the main source of income creation and prone to the most grave fluctuations during the trade cycle, determines real income as a whole and thus consumption and saving of the other sectors. Take the case of a monetary shock induced by monetary restriction on the world level. Falling investment will be the initial result inducing a fall of expected real income due to falling employment and falling tax revenues of the government. The reaction of these sectors - increasing or decreasing their saving rate - is crucial for the ultimate outcome. If they smooth their consumption or expenditure by reducing the saving rate or increasing their demand for capital (increasing their dissaving) this will help to stabilize profits which otherwise fall as investment falls.

It would be absurd, for the world as a whole, to expect an absorption of a monetary shock by other sectors of the economy. If a market remedy for monetary shocks could be expected it would be more and more difficult for monetary policy to stabilize prices as markets would over extended periods learn how to deal with a monetary restriction and to avoid it by nominal adjustment. But there is no evidence for this. As we "simply do not know,, much about the future, monetary restriction or expansion still works on the real economy. If the trade cycle, as can be supposed by simply looking at the cyclicality of the interest rate spread consists of a

series of alternating monetary shocks the average duration of restriction or expansion from the monetary side will not only determine the short run performance of the world or a certain country but the long run performance too. A country or a region which is not able to recover for a sufficiently long time after a negative monetary shock has occurred, will not be able to exploit its economic potentials as much as a region which has the time. The story of Europe and the United States in the last two decades consists mostly of stuff like this.

8. Conclusions

The simple lessons to be learned from this investigation concern monetary and fiscal policy. Any national monetary policy is in danger of misinterpreting the data if their view is restricted to a national or regional point of view. With a world capital market the monetary policy of nations or even big global players has only limited influence on the long rate. But error creeps in any analysis concluding from this fact that the "markets, play a role of their own in the determination of the long rate. The extremely close relationship between the long rate and the short rate on the world level proves that it is the influence of the other central banks and not the markets who limit the influence of a single central bank. A coherent view of the determination of long rates in a globalized world will not be found if central banks, like the German Bundesbank are time and again led to perceive deviations of the long rate in German from the movement of short rates by "inflationary, expectations or "confidence, in her ability to stabilize prices.

Something quite similar is true for fiscal policy. To impute changes of the long (real) rate in a single country to changes in the public debt of that country is a priori misleading and usually wrong. Even the world public indebtedness is not decisive for the world level of long interest rates as other sectors may, as a result, be less indebted and the interference of monetary policy into the process of capital creation or destruction is much more important.

The more complicated lesson to be learned from these considerations concerns the role of saving and investment in industrial and developing countries. Remember the IMF's prescription for an economically healthy future. The IMF concludes its paper with observations about the 60s of this century: "*Firm and committed actions are necessary to reverse the current pressures on saving. The 1960s started out with a high ratio of world government debt to GDP. But as the decade progressed and as governments enjoyed strong growth, they used the opportunity to run fiscal surpluses, cut the ratio of government debt to GDP sharply, and saw the world saving rate increase steadily. That is because government budget deficits <u>do</u> (italics in the original) matter for overall national and world saving... it probably was no coincidence that the strong fiscal positions in the 1960s were associated with relative affordable investment funds, a high ratio of investment to GDP and good macroeconomic performance,, (IMF, p.89).*

All in all it is just the other way round. The IMF is right by saying that governments in the 60s ,,used the opportunity,, to cut deficits. But about the circumstances that created the opportunity the IMF is silent. Without monetary policy neither the opportunities of the 60s nor the problems of the 80s and the 90s can be explained. The world investment rate increased throughout the 50s and the 60s because monetary policy, with short rates always below long rates, was expansionary without any exemption and thus gave way to the creation of ,,forced savings,, or the prefinancing of economic progress which had been recognized by former writers to be the necessary condition for a sound overall economic development. With

monetary policy being, definitely in Europe but to a much lesser extent in the States, nearly permanently on a restrictive course, fiscal policy in the 80s and the 90s had no alternative but to compensate for the lack of profits and investment opportunities which, in the least analysis, was the result of the long lasting conflict between monetary policy and money-wage policy¹⁴.

Thus, the policy lesson is a simple one. To restrict the dynamic development of a market economy from the demand side, namely by monetary policy, will, as a rule, force governments to expand on the demand side, that is to increase public budget deficits. This may for a single country, by increasing the company sectors profits, temporarily help to overcome the fall in investment which is the necessary concomitant of the monetary restriction if the country is large enough (the Reagan-boom is the best example) and not faced (as France in the first years of the 80s) with a severe external constraint. For the world as a whole there is no solution but to change the course of monetary policy. This is, given the reasonable target of price stability, only possible if the danger of a quick acceleration of prices after the revival of investment and demand can be avoided from the supply side. This is where wages, wage policy or some form of incomes policy enter the stage. With wages being by far the most important cost component for the overall (vertically integrated) economy money-wage restraint is the only way out of the monetary policy trap in which Europe was caught in the last twenty years.

These considerations are of the utmost importance for the developing countries and the transforming countries of the east too. The usually given recommendations to these countries are based on the orthodox theory of saving and investment as represented by the analysis of the IMF. The recipes range from fiscal soundness to the explicit recommendation to keep the real interest rate sufficiently high to induce the increase of the saving rate of domestic private households or the inflow of savings from foreign countries. But austerity is not the way to prosperity. Has China, to cite the most striking example of a successful transformation (without the assistance of the IMF!), achieved a saving and investment rate of 35 percent because the Chinese people one day decided to tighten their belts? China had, according to figures of the BIS, in the last ten years with the exception of 1990 always negative real short interest rates, since the beginning of 1993 in the range of 10 percent.

Even if fiscal and monetary austerity may induce a bit higher saving rates of private households it will undermine the most important source of saving and investment, namely the increase of company profits. But monetary and fiscal laxity, so the argument at this stage, will quickly lead to renewed inflationary acceleration, once the phase of hyperinflation has been overcome. Nevertheless, there is no alternative. Sooner or later the phase of restriction, as in the industrial countries, must come to an end and give way to a policy which allows an increase of investment and real income for everybody. Then the test on monetary stability *without* monetary restriction is unavoidable. Either a developing country has successfully created the institutional arrangements which are necessary to allow the potentially inflationary process without leading to inflation or it has not. To keep it, by means of macroeconomic restriction, in a stage of stagnation is no solution at all.

But Schumpeter's phrase of the potential inflationary dangers of any kind of successful development highlights why it has been in the past so difficult to achieve the status of a NIC, a country catching up with the western world. And it may highlight why the Asian countries,

¹⁴ In the first round the result of monetary restriction was a lack of profits, in the second round in most countries in Europe there was a remarkable fall of the wage ratio, i.e., a redistribution of income from wage-earners to entrepreneurs. But this redistribution could obviously not compensate the negative effects of an overly restrictive monetary policy.

as a rule, have been more successful to achieve this status than countries in Africa or South America or - in the years after the war - Germany more than the United Kingdom. Strong governments and the traditional search for consensus may have been the most important ingredients of their success. Only governments which are able to contain a priori the aspirations and claims of all the different groups of society to a level compatible with the potential production of the society and groups sticking to such an implicit contract, are able to combine the unavoidable macroeconomic laxity with stability of the price level.

References

- Ball, L./Mankiw, N.G.(1995): What Do Budget Deficits Do?, NBER Reprint No.2046

- Barro, Robert, J. (1994): What the Fed Can't Do, Wall Street Journal, August 22, 1994

- European Commission: Economic Data Pocket Book, No. 12/1998

- Fischer, S. (1999): Statement in: Fehler! Textmarke nicht definiert.)

- Flassbeck, H. (1996): Die Weltwirtschaft zu Beginn des 21.Jahrhunderts und die Herausforderungen für den Westen, in: Lutz/Hartmann/Kreinsen (eds.): Produzieren im 21. Jahrhundert, München (Campus)

- Flassbeck, H./Spiecker, F.(1998): Löhne und Arbeitslosigkeit, Wirtschaftspolitische Diskurse der Friedrich-Ebert-Stiftung, Nr.118

- Hayek, F.A. (1933): Monetary Theory and the Trade Cycle, London

- Horioka, C./Feldstein, M. (1979): Domestic Saving and International Capital Flows, The Economic Journal, 90 (June 1980), 314-329

- International Monetary Fund (IMF) (1995): World Economic Outlook (Spring), 67-89

- Kalecki, M. (1944): Three Ways to Full Employment, in M.Kalecki: The Economics of Full Employment: Six Studies on Applied Economics, Oxford (Blackwell)

- Kalecki, M. (1971): Selected Essays on the Dynamics of the Capitalist Economy, Cambridge (University Press)

- Keynes, J.M.(1935): The General Theory of Employment, Interest and Money, in: The Collected Writings of John Maynard Keynes, Volume VII, The Royal Economic Society 1973

- Obstfeld, M./Rogoff, K. (1996): Foundations of International Macroeconomics, MIT Press, Cambridge, Mass.

- OECD (1998), Economic Outlook, December 1998

- Schumpeter, J.A. (1912): Theorie der wirtschaftlichen Entwicklung, Leipzig (Duncker&Humblot)