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Economic recovery – a few topical theoretical problems

With a GDP decline of around 7.5 percent compared to the previous level we have probably reached the bottom of the crisis. The time to be spent here may vary depending on the concrete situation, but this is out of the scope of this paper. This article focuses on getting through the crisis. It discusses several economic correlations, especially those that are topical and important for the current state of the Hungarian economy. The question has recently been raised again: What can put the Hungarian economy on the road to recovery, and what growth rate can be expected in the longer run? A lot of people think that the state should play a crucial role in recovery. Of course, the role of the state is not negligible, but likewise, the mechanism that spontaneously affects recovery and later economic growth is not immaterial either. What is more, we can say that the operation of this mechanism is the fundamental momentum of recovery.

There is currently great uncertainty about this topic. No wonder, since we have no experience about economic rejuvenation following the economic recession and the concurrent financial crisis. More rigorous studies have not been pursued, not even at theoretical level. This is, in part, due to the fact that the context was different earlier, under the socialist economic management, and also because after world war II recession was significantly smaller all over the world than in the current crisis. On top of that, in Hungary the study of civil economics was played down in the past forty years.

This article examines whether the state budget can do anything for recovery. How are the correlations being complicated by the role of multinational companies in Hungary, as well as by the situation of small and medium-sized companies? What can be the task of monetary politics? What developments can be expected in exports, and in this respect, what can we expect from the rejuvenation of the global economy? To what extent should government policies fostering recovery pay attention to the factors of long-term economic growth? What is the role of the spontaneous mechanism in the recovery? How do external and internal factors contribute to recovery, what will fundamentally determine the turnaround after the economic slump, and how this will in turn determine the applicable economic policy? On the basis of reality, how strong and how dynamic will the expected recovery and growth be, respectively? The study begins with the examination of the role of the state budget, since a lot of people think that this is indispensable for the turnaround and the start of recovery.

BUDGETARY EXPANSION AND RECOVERY FROM THE CRISIS

In line with the Keynesian economic theories, at times of crises, the governments usually pursue adverse budgetary policies, and the resulting deficit is usually growing. The objective then is to mitigate recession. Together with the factors having spontaneous effects this, in part, explains that at a given price level aggregate demand becomes greater than aggregate supply, which then boosts production. After that point the deficit of the state budget, and also the deficit of public finances shows a decreasing rather than an increasing trend. This is not because the state *deliberately* starts reducing its expenditures. To a great extent, what we face here is a spontaneous process: in the incipient recovery several expenditures drop automatically, like, for example, expenditures on unemployment benefits. On the other hand, tax revenues begin to rise, since greater production yields greater tax revenues with the same tax rates. However, it can be stated that after crises the governments do not strive to raise demand artificially, since it starts rising by itself.

Naturally, exceptions do exist, like the balance of the central budget of the US in the wake of the great depression of 1929–1933: its deficit equalled 2.3 percent of the GDP in 1933, but was higher, equalling 4 percent on average, in the period between 1934 and 1936. This crisis was followed only by a very weak recovery, and the Keynesian crisis therapy unfolded only gradually, with delay and mostly instinctively.¹ In addition, unemployment was extremely high even after the crisis. In the years mentioned above it reached almost 20 percent. If the situation is not so grave, and the affected country is not big (we will discuss this problem later on), the deliberate increase of the deficit is not justified. We can say that with the exception of special cases, the deficit of the state budget typically drops already during the recovery, and usually the rate of the deficit declines, too.

The situation of the Hungarian economy is unique both in terms of the crisis period and the expected time of recovery. When the economic recession unfolded, the public finance deficit did not grow. On the contrary, it decreased at a fast pace, faster than the GDP: the deficit ratio also declined. The decrease of the deficit was a necessary step, forced by the imminent financial collapse. Economic recession and the threat of state bankruptcy emerged at the same time. However, the latter requires a therapy opposite in nature to the remedy for the mitigation of recession: it requires the decrease of the public finance deficit. Since the financial collapse would trigger a much greater economic decline than recession itself, paradoxically, it is not the growth in public finance deficit, including, primarily, the deficit of the central budget, which becomes inevitable, but the curtailment thereof! It is true that it deepens recession, however to a much smaller extent than the one we could witness as a result of the financial collapse.

It can be stated without exaggeration that in such a situation it is actually the decrease of the deficit that allows for a smaller economic setback. When Keynes examined the possibility of mitigating the crisis, he kept in mind a situation very much different from the current state of the Hungarian economy: he focused on a situation determined by the severe threat of state bankruptcy and recession at the same time. The Hungarian example well illustrates how important it is to refrain from conventions. It can always and only be decided on the basis of the thorough analysis of the concrete circumstances what economic policy is recommended or necessary to be used. The automatic application of the Keynesian therapy or of any other theory can be labelled dogmatism in certain situations.

During an economic upswing the direction of the economic policy is often opposite to the direction of the economic policy applied at times of crises. Since in Hungary the economic policy was primarily restrictive due to the risk of financial collapse, *it is a question whether budgetary expansion is a justified move to promote recovery?* Such intentions and even

demands do exist! It is said that reducing the deficit ratio under 3 percent would put the country in bondage. The IMF must be encouraged to accept a strategy that would temporari*ly* allow raising the deficit to 6 or 7 percent. For example, if a significant tax reduction was introduced, it could provide an impetus for both the demand and supply sides of the economy. The latter would happen, for instance, when the performance of the small and medium-sized corporate sector was encouraged with a lax credit policy, including preferential loans financed significantly from state resources. This could trigger the start of growth sooner, or maybe this would be the only way to trigger growth. Therefore, we must come to terms with the thought that after experiencing a slump during the crisis, the public finance deficit is said to rise again.

I have already presented in a study of mine that *in small and open countries increasing the deficit with a view to mitigate the crisis implies more risks than in large and less open economies.*² This holds even more in the period of recovery from a crisis. What is more, this policy may have more pitfalls at the time of rejuvenation than when mitigation of the crisis is on the agenda.

Let us look at the reduction of tax burdens without a decrease in budgetary expenditures. The reason behind choosing this particular case is that now we examine the impact of growing deficits, and because the overwhelming majority of economists state that the growth of the economy cannot be made dynamic in the long run without significantly reducing the current tax rates. Consequently, let the public finance deficit grow like that, i.e. through tax reduction, *temporarily according to the intentions of politics.*

Most people disregard the following: in general production *should increase much more rapidly* than the rate of tax reduction to ensure that the deficit would grow only for a short time, i.e. for a year. This holds even more in case of larger scale tax reductions, and if the former level of taxation was small compared to the size of the GDP.

For example, if tax revenues as a percentage of the GDP were to be reduced from 40 percent to 30 percent, the GDP should be increased by 33 percent in order to avoid a growth in deficit. On the other hand, the reduction of tax burdens to the level of 35 percent, i.e. by 5 percent would require a GDP growth of 14.6 percent in a year. Of course, the required growth rate is smaller if we count with a longer grace period. Consequently, if we count with a tax reduction of 10 percent and a grace period of three years, an average growth rate of "only" 10 percent would be needed to make the deficit and the deficit increment disappear by the end of the third year. (In the case of a one-off tax reduction of 5 percent an annual growth rate of 4.6 would be needed). But this can only be achieved if state expenditures do not rise at all despite the growth. Naturally, a smaller growth rate would suffice if the tax-paying morale improved due to the tax reduction. However, the extent of such an improvement cannot be anticipated with certainty - and we cannot rely on it, at least not on its extent.3

On the other hand, it is true that during recovery following any crisis the growth rate of production can be significantly higher than the average, which seems to support the arguments of those recommending the temporary increase of the deficit. At times of crisis idle production capacities are generated both in terms of production equipment and labour. As a result, rapid and large-scale production growth can be achieved with relatively small investments and little lead time. This means that what is generally not possible during the growth process, may possibly be implemented during the recovery that takes place after the crisis. And in fact, this relatively fast boom can be observed almost everywhere after a crisis. This process is explained by the category of the income multi*plier*, on the basis of idle, but usable production capacities.⁴ Proposals relying on the beneficial effect of tax reduction are developed especially on the basis of this process.

The effect of the income multiplier can be twodirectional: it can restrain the drop in production at times of crisis, and can accelerate production growth during recovery after the crisis. Of course, the rate of the latter can be greater if the state starts to increase its budget deficit. In the former case, conscious actions almost always have a role, while in the latter, i.e. after the start of recovery, intentional deficit growth can be given a thought and can be implemented in order to support the recovery process, but is usually not recommended. This problem is very significant for the Hungarian economic policy practice.

It must be understood that especially after a crisis the actual size and ratio of idle but competitive production capacities is very uncertain. A crisis may always accelerate the process that makes the product structure obsolete year after year, and which deteriorates the marketability of a sizeable portion of goods distributed earlier. What could be sold before the crisis, can in part become unnecessary after the crisis. In other words: the composition of production can never be the same before and after a crisis. Recovery is not about the simple restoration of the former production level, since changes are always reinforced by the crisis. This also entails that after a crisis only a significantly smaller portion of the existing capacities are fully suitable for competitive production. Such "free" capacities are existent and non-existent at the same time!

Consequently, the rate of deficit increase designed to foster recovery cannot be of any size. Deficit always mitigates the severity of the crisis, independent of its actual size. However, the multiplier effect upwards is limited, in part, due to the size of idle and competitive capacities. If the demand, which increases as a result of the multiplier effect, starts to exceed this effect, it is inflation and not production that accelerates.⁵ Then the income multiplier has only a *nominal* effect. And in the absence of real growth of the economy one cannot count with the real growth of tax revenues either! Therefore, the end result will be *permanent rather than temporary* deficit increase.⁶

For the Hungarian economy this is a highly topical issue. If we disregard the activities of multinational companies, i.e. we take the output of Hungarian-owned companies, including the small and medium-sized corporate sector, as a basis, the production structure cannot be regarded modern. And we can hardly hope that it can rely on competitive production capacities, which are triggered, in part by the newly and significantly rising budget deficit, and can therefore satisfy accelerated aggregate demand. As a consequence, after the bitterly achieved significant decrease the public finance deficit would start growing again, which would be the worst piece of news for the international capital and money markets about the Hungarian economy. The achievements earned so far could easily vanish into thin air. The external financing required for the repayment of debts due can come to a halt, the exchange rate of the Hungarian Forint would be again and considerably devalued, and people with foreign currency debts would again get into a difficult situation. And the process of recovery would get stuck instead of becoming more dynamic. In addition, the conditions for long-term growth would significantly deteriorate.

Here, once again, one must count with the special role of the Hungarian subsidiaries of multinational companies: deficit increase designed to boost recovery is not justified because of such companies either. It holds true for every stage of the cycle that the economic policy of the government plays no crucial role in their decision-making process. Their decisions are affected by the government's economic policy, but only very indirectly. Just because of a rise in the public finance deficit, e.g. because of the reduction of the rate of contributions on wages, they would not increase their performance. Or, if their output grows, this happens not because of growing domestic demand. Only a small fraction of their production capacity is bound by the domestic market demand, the utilisation and expansion of their aggregate capacities mostly depend on changes in demand on the global market. In this respect, increasing the deficit would be a priori of no avail, wherefore we could save the related costs to ourselves. Of course, the general tax and contribution burdens, which affect these companies, too, do matter, but rather in their choice of countries to invest in. And this does not depend on whether tax reductions will be introduced to foster recovery after the crisis.

But let us assume that subsidiaries operating in Hungary increase their production due to the fact that, and when the government increases the budget deficit on purpose. This can have a beneficial effect if the share of Hungarian producers in supplying raw materials and semi-finished products to the subsidiaries of the multinational companies is large and growing. However, we are not in good shape in this respect, the supplier activity of the domestic companies is well below the desired level. Their share in the production of these subsidiaries is mostly realised within the framework of employment. The "yield" mostly comprises of the wages and wage contributions paid by the multinational companies rather than of the supply of materials, parts and semi-finished products. Unfortunately, multinational companies operating in Hungary usually exert only a moderate driving force on the national sector, and consequently, the internal growth effect expected from the acceleration of their activities is moderate, too.

On top of that we need to count with the specific conditions typical for small national economies, which trigger serious problems in countries that struggle with payment difficulties, too. Hungary happens to be such a country.

Small countries are usually much more open than for instance the US and the large Western European countries, and the openness of the Hungarian economy is above average even within this group of countries. In connection with the expansive budgetary policy, which aims to foster recovery, we can say the same thing that is known in connection with the deficitridden public finances that try to mitigate the depth of the crisis. The main point is the same: the expected impact of the deficit is weak here, too, since deficit spending in this country can mitigate the crisis to a much smaller extent than in the large countries, and its contribution to the recovery is also equally smaller. Production largely depends on exports, and demand generates imports on a large scale. Therefore, the problem is twofold: on the one hand the upward multiplier effect can work only to a limited extent, and on the other hand, a significant portion of the additional demand, multiplied by the multiplier, does not foster the domestic production sector! Therefore, the risk is high that instead of the faster recovery of the economy we will witness an unexpected, permanent rise in the public finance deficit.

This would have a detrimental effect on the Hungarian economy. If now, after reaching bottom low, the rate of the public finance deficit significantly grew again, Hungary would need to face another devaluation of the Forint and the threat of financial bankruptcy. We have no other choice but to abide by strict fiscal discipline. We must give up the premise that deficit increase can be a tool for starting recovery, because it generates demand. This is not a good argument that with this we would just do what many other countries do: since by today the deficit in many countries have grown to a higher level than what is currently experienced in Hungary. In said countries the deficit grew during the crisis, but by the time of recovery deficit reduction will be put on the agenda. During the crisis they could do what we could not; *they did not face the risk of financial collapse*. Like it or not, we cannot always do what others do. Their economies are much stronger than ours, *and they had not tested the patience of creditors earlier, before the crisis.*⁷

ECONOMIC AUTOMATISM IN STARTING THE RECOVERY PROCESS

If a deficit rise should be avoided from the deepest point of the crisis, or even from a time somewhat earlier, how can recovery start and how can we get on the road to growth again? This question is often raised, usually in tandem with the assumption that the turnaround itself would require budgetary expansion. As if nothing significant could happen without the conscious actions of the state, and in respect of the given issue, it seems as if spontaneous economic processes would not matter at all. However, these things are indispensable for understanding the crisis mechanism as a whole, as well as the occurrence of the deepest point and the turnaround itself. Since the turnaround does have an automatism!8

Turnaround occurs even if the state does not do anything. The most important thing here is to understand that *in any crisis, no matter what the triggering factor is, consumption eventually declines slower than production.* This holds true for closed and open economies alike. The key issue is the understanding of processes going on in closed economies. If crisis emerges, production decreases, and consequently the size of the produced and realised macroeconomic income decreases to the same extent. However, within the latter the saving rate drops, which means that the decline of consumption is slower than that of production.⁹

Let us mention a few of the concrete causes behind this slower decline. • Employment usually declines at a smaller rate than production, because companies are reluctant to make the most highly skilled and experienced workers and employees redundant. This restrains the reduction of wages paid at national level.

• The consumption of wage earners drops at a slower pace than real wages on the whole, since wage earners too can have accumulated savings, wherefore they cover the costs of their consumption in part by reducing their savings. They may also manage to get loans or rely on support from relatives.

• It is much more important that the better off layers of the society are not, or are only slightly forced to decrease their consumption. This is made possible by their high incomes and accumulated wealth. This finding is also supported by everyday experience. The demand for expensive commodities and services does not decline at all, or it declines much less than the demand for mass products.

• The income flexibility of certain commodities, and especially of certain services, is very low. However, by today the weight of services within the total demand has considerably grown. In fact, the purchase of services accounts for well over 50 percent of the total demand. In order to more or less sustain the level of service purchases, the population – and companies too – are willing to utilise some of their accumulated savings.

Already these correlations explain that the lower turning point is reached and recovery from the crisis occurs even if the state does not do anything to this end. At the given price level consumer demand will sooner or later exceed the supply of consumer services. Consequently, aggregate supply will soon grow, and recovery will start.

An important part of aggregate demand and supply is formed by the demand for and supply of investment goods. These, too, will necessarily experience a turning point, due to purely spontaneously economic processes.

At times of crisis the level of real interest rates declines, predominantly because scheduled investments drop faster than production. However, the reduction of the interest rates paves the way for the growth of investments *at a later stage.* This is all the more so, since, as we could witness, sooner or later a contrasting disproportion develops between the supply of and demand for consumer goods and services. The latter will exceed the former one. When making investment decisions, companies always compare the future income they can yield from the investments – or rather the value of such income discounted with the interest – with the current opportunity cost, which practically equals the current real interest rate.

Interest rates – even those of short and long term loans – necessarily drop at times of crisis. However, independent of the level of the expected future yield of investments, their current discounted value will sooner or later exceed the current opportunity cost, i.e. the size of the interest rate. The more the interest rate declines, the sooner this will happen. And since consumer demand starts to exceed the value of consumer supply, one should not fear that the amount of goods that will increase at a later stage due to investments, will not be marketable. Therefore, investments also start growing.

This means that each element of aggregate demand and supply grows, and consequently, production grows, too. We get over the lower turning point, we see the start of recovery, which can be a self-sustaining process for quite a long time.

Evidently, if for any reason, e.g. in fear of state bankruptcy, the state pursues a restrictive policy, this will affect the level and the occurrence of the lower turning point. If we assume to have a closed economy, due to the restriction the lower turning point will be deeper, and recovery will start with delay. Therefore, it is very important to give up restrictions as soon as possible! The timing depends on when the direct threat of state bankruptcy or financial collapse goes away.¹⁰

A good yardstick for this is the development of balance of public finances. Once we get close to a balanced budget, we can give up the restrictions! We must not necessarily strive for fully balanced public finances, since further restrictions would trigger another drop in production. We must not ignore the fact that at times of crisis public finances are in deficit in the overwhelming majority of the cases, and the public finance balance is reached as an average over time.11 This means that in a crisis a budget deficit is typical for those countries, too that formerly had a positive balance, i.e. they did not operate with permanent and large-scale budgetary deficits. In addition, once recovery starts, this will ab ovo improve the budget balance, provided the state does not start largescale spending again, in excess of revenue growth. Tax revenues will increase due to the growth in output. If the state does nothing but increase its expenditures at a lower rate than the revenue growth, it is guaranteed that the balance will restore within a short period of time.

However, in countries that were jeopardised by a direct financial collapse, it is life threatening to use an explicitly deficit increasing policy from the start of recovery; it would cause another blow to trust, which in turn could lead to actual financial collapse. It is best to forget about the idea of increasing the deficit to 7 percent, since now, at the bottom of the crisis, the average deficit of EU member states equals 7 percent of the GDP.

The examination of factors that occur spontaneously and trigger the turnaround cannot be regarded complete yet. From among these factors the strongest effect is exerted by foreign trade, which is more significant for Hungary than for countries with large internal markets. It is enough to refer to the fact that in Hungary the export/GDP ratio equals 80 percent, if we take the export of services into account, too. This ratio is two or three times higher than in the large Western European countries, and is almost sevenfold compared to the export ratio of the US. (Which also includes the export of services). This already means that the rate of export growth may contribute much more to recovery in Hungary than in the above countries with large economies. The openness of the economy, and the relatively small size of the national economy compared to other large economies *do not necessarily constitute a disadvantage* for economic development! What was considered a disadvantage during the crisis due to large-scale openness, may become an advantage during the recovery.

If economic rejuvenation begins in the global economy, the imports of partner countries will grow, and therefore Hungary's exports may increase. This fact alone can boost recovery in Hungary: the faster the exports grow, and the higher the export/GDP ratio becomes, the stronger this recovery will be. However, it must be emphasised: *this effect does not simply depend on the foreign trade balance!* It much more depends on changes in the volume of exports, and *on the export ratio.* However, we must have some reservations here too.

Exports could become a factor boosting the domestic market and production according to its full value and growth rate only if imports did not exist at all, and we would not need imports at all, or if imports included only items that support and enable domestic production, and that do not squeeze domestic products out from the domestic market. In other words, if they do not set domestic production back. Such items include machinery and production equipment that support domestic production, as well as the imports of raw materials that cannot be produced locally. In Hungary this includes the imports of energy resources and energy, certain food products that cannot be produced locally, durable consumer goods that can be obtained only abroad, as well as the imports of technology and know-how. In short, the imports of goods and services without which domestic production can be neither continued, nor expanded. These articles must be imported to enable the process of reproduction, and also to enable Hungary to export.

Last but not least, imports that pose competition to Hungarian products *can and, in fact, do have a stimulating effect.* Competition itself encourages economic growth, since it encourages cost-efficient production, forces technical development, learning and the adoption of the best production procedures. Therefore, it is difficult to determine how to quantify the effect of foreign trade, and also the openness of the economy on development, and – in this article – on recovery from the crisis. This cannot be judged merely on the basis of the export-import balance, or on the basis of the volume and dynamics of exports.

However, the effect is very strong. If we look at the turnover of exported/imported goods only, and disregard exported/imported services, we can see that in 2008 the exports of goods reached 69.4 percent of the GDP. The imports of goods were only slightly, by 0.3 percent higher. At the same time, at least half of imports consisted of goods that fundamentally contributed to the domestic re-production process. In fact, this process could not have been implemented without such imports. Earlier it was alluded that imports can hamper recovery, however, it may also support it by stimulating competition. It is now understandable that although not all, but a significant portion of exports have a beneficial effect on domestic development.

Just to be on the safe side, let us calculate with only half of the exports, although it would surely be justified to calculate with a higher ratio. This value corresponds to 35 percent of the GDP. If we calculate with the former growth rate of exports, which was around 12 percent per annum, and we weigh this with the 35 percent ratio we have just calculated, we come to the conclusion that exports, and foreign trade by itself, allow for a more than 4 percent annual growth rate *during the recovery from the crisis, practically on the basis of its impact on demand.*

Then the growth in demand actually triggers an expansion of production, since free producing capacities are available in the wake of the crisis. The rate of recovery may differ from this calculated 4 percent, it can probably be higher, depending on the actual size of exports after the recovery, and on what percentage of the exports should need to be taken into account. The pace of rejuvenation during recovery is also temporarily increased by the fact that due to the reverse disproportion that occurs between production and consumption during the crisis production must grow relatively fast, albeit only temporarily. Therefore, one need not worry that in the absence of an expansive state budget, i.e. when the state does not strive to boost demand in this way, rejuvenation of the economy cannot start at all.

The activities of the Hungarian subsidiaries of multinational companies must be mentioned separately. So far in this article it has been claimed that they decide on the basis of facts other than changes in the domestic market, they continuously react to changes in the global market, and are practically unaffected by the potential crisis-mitigating measures of the state. Neither tax reductions, nor increased state expenditures trigger any reaction from them, which can also make potential state decisions on crisis mitigation less effective. Of course, this constitutes a disadvantage in domestic crisis management, since both their production/GDP and exports/GDP ratios are above average by international comparison.

But what was a disadvantage in crisis management, turns into an advantage during recovery. We must admit that recovery for the Hungarian economy may come at the earliest after the start of rejuvenation of the global economy. The reasons behind this are the degree of openness, as well as the scarcity or even lack of resources available for rejuvenation. In fact, *the rejuvenation of any small national economy depends on the favourable turnaround of the global economy.* The tool that can be actually applied in Hungary for boosting the recovery is the improvement of the ability of the national economy to adopt and utilise the turnaround of the global economy. There are several, e.g. tax policy or monetary policy tools for this, however the increase of the deficit can in no way be regarded as such.

In addition, it is exactly the decisions of multinational companies that foster recovery, since they respond very flexibly to changes on the *global market*, both in terms of exports and investment activities! As a result of the growth of external demand, domestic production can react fast in conjunction with the *multinational companies*. Even without any actions or spending by the state.

The impacts of the decisions of multinational companies are always stronger on the performance of small countries than on the performance of large ones, especially because they have a greater than average share in exports and GDP as a whole. While Hungary has limited possibilities in influencing rejuvenation because of the vulnerability of the financial balance, foreign trade, including exports, and largely the exports of multinational companies based in Hungary, makes fast expansion possible, during the recovery period as well as during the period of economic growth following rejuvenation. It is a very bad and unfortunate idea to expulse multinational companies from the country.

A lot depends on the intensity of production and market relations between the multinational companies and the domestic small and medium-sized corporate sector. The larger the supplier activity of domestic companies towards the local subsidiaries of multinational companies, the stronger the related propagation effect can be, and the larger the growth rate of production be during the rejuvenation process. *In the years to come the development of the small and medium-sized corporate sector must constitute a key part of the economic policy strategy*, as well as of a system of tools that will enable this sector to improve its production cooperation with the subsidiaries of multinational companies, and to improve the export ability of these companies in general. Unfortunately, by the time of the currently needed recovery this can be implemented to a limited extent only.

It is not wise to temporally extrapolate the fast production growth experienced during recovery and rejuvenation, as well as the rate of this growth! At such times the rate of production growth does not express the long-term growth potential of the economy! Then the speed of production growth is determined by the increase in demand, as well as the income multiplier based on competitive capacity reserves behind it. As soon as free capacities are exhausted, the rate of production growth declines. From this moment on the average growth rate can only equal the rate that can be derived from the long-term growth factors. This must be pointed out, since the members of the governments in power are always inclined to fall into euphoria. The economy has embarked on a higher growth path - they say. However, the fast production growth experienced in the period of rejuvenation has nothing to do with the growth path.

WHAT CAN BE DONE FOR THE ACCELERATION OF REJUVENATION?

Resources required for recovery and rejuvenation, facilitation of the utilisation of resources

This does not mean that the government cannot do anything to facilitate recovery and accelerate rejuvenation. A lot depends on the intensity of the responding ability of small and medium-sized companies accounting for over half of the total employment, the responding ability of larger state-owned companies, as well as on the conditions under which such companies may receive resources. Since these are needed as early as during recovery from the crisis, and also when fast production expansion is mostly based on the improved utilisation of existing and competitive production capacities.

We must refer back to the statement according to which after a crisis the production structure can never be exactly the same as before the crisis. At times of crisis the (moral) degradation of a certain portion of products and services, and the tear and wear of production equipment, machinery and tools come to light. During a crisis – and in part during recovery – a larger than usual portion of goods and services can be sold with difficulty or only at a lower price. Since the process of rejuvenation is not restricted to the mere restoration of the former level of production, structural changes must accelerate, too. This leads to serious problems.

Accelerating changes in the product structure go together with a relative increase in credit demand, while the volume of investments grows. In theory, a significant portion of the latter can be financed from the replacement fund, but this is not an easy task to do. It is not sure that depreciations provide real coverage for renewal everywhere; this can be explained by the necessary changes in the structure of demand.

Naturally, the amount that can be used for renewal always appears in the books of the companies as depreciation, however, it is a problem whether such funds can be mobilised.¹² Due to the accelerating structural changes and the accompanying changes in the price ratio, in certain areas sales revenues *ab ovo exclude* the possibility of renewal financing. Especially in areas where the demand ratio is smaller than what it used to be. In such areas the replacement fund exists on paper only.

Goods and services must be first sold at a satisfactory price in order to gain access to depreciation resources. This is what cannot, or can only partially be implemented during a crisis, and for some time during recovery. In declining areas one could not spend amounts equalling deprecation on investments, or could not place part of this amount non-available for investments in banks, even if they wanted to. In such areas actual renewal is significantly smaller than before, just like the resources actually available for renewal. In other areas the demand for investments above the renewal extremely increases. Since nothing guarantees that the companies in emerging sectors will yield sufficient extra revenues, the significance of loans, including that of money generating loans, will grow. Consequently, changes in the interest rates become also very important.

This sets strict requirements on the budgetary and monetary policies. In the case of public finances it concretely means that once recovery has started, public finance deficit should not grow, but instead it should significantly decrease! On the other hand, monetary policy is required to refrain from a restrictive policy, and instead of raising the interest rate it should strive for the reduction thereof.

The development of the level of interest rates is important in the case of credits and deposits alike. Interest rates on deposits cannot be too low, since this would hinder the growth of credit supply. Therefore, during rejuvenation the banking sector and also the central bank can best support recovery and rejuvenation by decreasing or at least freezing the interest rates on loans, while ensuring that the interest rates on deposits decrease to a smaller extent, i.e. by reducing the interest margin. This can be supported by the competition among banks, and the banking supervisory authority. In Hungary it causes a problem especially on the market of household deposits that the interest rates on household deposits do not really encourage people to save.¹³

In the first place, changes in the public finance balance play a crucial role. Here the deficit always influences the size and "price" (i.e. the interest rates) of loans available for companies. As a result of the increasing utilisation of free capacities, the "crowding-out effect" can be felt stronger when the state is compelled to take out a loan. Consequently, loans available to companies shrink and become more expensive. This situation can and must be improved by reducing the public finance deficit, and deficit growth may in no way be permitted.

The current problems of the interest and exchange rate policy

Monetary management may play a crucial role in the encouragement of recovery. In Hungary interest rates have for a long time been considerably higher than in most countries with which we maintain close economic ties. Earlier the underlying reason was the fact that by international comparison inflation was considerably higher, and the National Bank of Hungary (NBH) strived to curb inflation alone, without the involvement of budgetary and income policies. Later the interest rates were kept higher because after the emergence of the international financial crisis the central bank pursued an interest-raising policy to avoid external insolvency.

The NBH has had a double cause to pursue an interest reducing policy *after* the imminent danger of financial bankruptcy disappears. With a basic interest rate of 11.5 percent (which has been the highest so far) and even higher market interest rates recovery and rejuvenation cannot be expected. This is all the more so, since the inflation rate has begun to sink for several reasons, and both nominal and real interest rates have become too high on all deposits but most household deposits. This makes recovery uncertain even if the global economy starts to rejuvenate.

However, there are two unique conditions that hinder the implementation of an interest reducing policy in Hungary. The first one is that although the risk premium going with the loans that Hungary can take on the international money and capital market to finance external debt repayment is decreasing, it is still relatively high. It is already a result that at least part of our external debts due can be covered by external loans. Due to the still relatively high risk premium the internal interest rate must be relatively high, too: in conditions of the free flow of capital interest rates correlate. The NBH can reduce the basic interest rate - and then, using its own means, the market interest rate, depending on how much the risk premium expected from the external creditors can be reduced.

However, the latter raises another problem, too, *under the current conditions:* debtors who took out foreign currency denominated loans earlier are not at all indifferent to changes in the interest rates. And here comes the other complicating circumstance!

In the medium run there is a correlation between changes in the internal interest rate and the exchange rate of the Hungarian currency. The correlation is linear, however, the exchange rate is influenced not exclusively by the interest rate. Especially in the short and medium run the exchange rate depends on many other factors, too, out of which the interest rate can be regarded as one of the most important. It must be taken into account that the exchange rate of the Hungarian currency may drop – even to a larger extent – due to a decrease in the interest rate.¹⁴

This has a mixed impact on the internal economy. It basically has a beneficial effect on small and medium-sized companies, since it encourages their exports, decreases the competition of foreign companies on the Hungarian market, and production and employment can be increased more easily. It has an almost indifferent impact on the business activity of multinational companies, since they mostly calculate in foreign currencies, and they can avoid the problems implied in the changes of the exchange rate of the Hungarian currency. The drop in the exchange rate of the Forint has an inflationary impact, too. This partially explains why the central bank is so careful when making interest rate policy decisions.

The items listed are correlations that can be observed in each country. However, one thing is almost unique to Hungary. *In international comparison, the ratio of foreign currency denominated loans is extremely large both in the household and the corporate sectors.* For the time being such loans account for nearly 70 percent of their loans.

If the central bank reduces the basic interest rate, it examines whether this will have an inflationary effect, or not. For the time being this effect is not very big for several reasons. First, in a crisis - as long as until the start of rejuvenation - the commodity market is characterised by oversupply. Second, due to the dominance of foreign currency loans in Hungary, the decisions of the central bank can still only moderately influence the demand for and supply of the Hungarian currency, and consequently the inflationary effect is weak. Third, for the lack of trust there is no such thing as negligible risk premium. Foreign money investors must be given this premium, too, otherwise they are not willing to finance the repayment of the external debts due. This means that a drastic interest rate reduction, which would cause inflation, is of little threat. Fourth, it is not sure that the interest rate, which also contains the otherwise falling risk premium, will be linked to a HUF exchange rate that is not detrimental to companies and individuals having foreign currency debts. They pay the instalments due in Forint, through the mediation of the banks. And if the HUF exchange rate is low, the size of the

instalment can be much higher. This is another reason why interest rate cuts must be moderate. For Hungary the latter is extremely important.

Currently, the really important problem with the interest rate cuts is that the interests of households burdened with foreign currency denominated loans are contrary to the reduction of the HUF exchange rate. If the exchange rate falls significantly, too many foreign-currency debtors may get into trouble, because the formerly high and non-decreasing HUF exchange rate, together with the high Forint interest rates, misoriented the population due to the relatively low interest rates on loans denominated in euro, Swiss franc, US dollar and Japanese yen! Households took out, relatively cheaply, too much foreign currency loans implying significantly smaller interest burdens.

In fact, borrowings were so extensive that they mean excessive burden for a great portion of debtors even with a high HUF exchange rate in place. And if the HUF exchange rate falls, this would put an unbearable burden on many foreign-currency debtors. This actually happened when the HUF exchange rate began to dive as a result of the international financial crisis. Naturally, foreign currency debtors are not happy about the fall of the HUF exchange rate. This has also become a source of political tension by now.

Yet, both a falling HUF exchange rate and further interest rate cuts are indispensable for recovery and rejuvenation. The economic turnaround will become obvious and self-propellant when investments start growing, mostly as a result of the interest rate reduction.¹⁵

If we do not count with the multinational companies operating in the domestic market, the overvalued Forint is a serious competitive disadvantage for domestic producers. Producers often refer to their competitive disadvantage. This may be explained not only by the great tax burden, but also by the overvalued exchange rate. Up until the second half of 2008 the nominal HUF exchange rate grew (and not decreased) despite the fact that inflation was significantly higher than in the other countries. In 2008 the exchange rate continued to grow again by nearly 10 percent for a few months.

Averaged out in the longer run, the Hungarian currency must not be overvalued. In relation to the marketed goods and services, the exchange rate must get close to the purchasing-power parity of the same goods and services. This is how comparative advantages can prevail, this is how economic automatism can best enforce the economical utilisation of resources, this is how the production structure best approaches a state that ensures a good position for the domestic companies, including mostly small and medium-sized companies, in the international competition for markets. In small and open economies this requirements is much more important than in larger countries with more closed economies than ours.

Taking into account the development of consumer prices on the internal and external markets, as well as the different factors associated with price hikes (for example the special role of services in price-forming, as well as the relatively small share in exports) the optimum exchange rate should be in the HUF 280-290 band against the euro.¹⁶ Of course, this is not good news for those burdened with foreign currency debts, but it is favourable for small and medium-sized companies, the expected development of employment, as well as the competitiveness and export potentials of Hungarian-owned companies. Consequently, it is favourable for recovery from the crisis, the rejuvenation of the economy, as well as the expected development of employment.

The exchange rate policy should not be the number one tool for curbing inflation. A more important role should be given to budgetary and income policies in this respect. The currency exchange rate should depend on the different changes in price levels in international comparison, and not vice versa. It would be the worst economic policy if in the monetary policy, and in the interest rate policy within that, Hungary would strive for an overvalued HUF exchange rate, in line with the interests of foreign currency debtors. This would mean another grave mistake on top of the former economic and monetary policy mistakes. *The former economic policy has created a difficult situation for entities with foreign currency loans. It would be an even greater mistake to add to the deficiencies by making recovery from the crisis significantly more difficult with the interest and exchange rate policies.*¹⁷

A special loan scheme, rescheduling, or the temporary suspension of loan repayment is needed. Or the SME sector must be offered credit conditions that are designed to offset large companies' vantage point, which is apparent in borrowing, too. However, schemes that are designed to offset disadvantages arising from artificially high market interest rates are not needed. Similarly, there is no need for a scheme that would deter the adverse consequences of an overvalued HUF exchange rate accompanying the high interest rates for the SME sector. And finally, such a scheme is not needed, because as a result of such a scheme and possibly other decisions, too - the already complicated regulatory system would become overcomplicated and even more intransparent.

Downsizing and reform, the reaction ability of companies

I have already referred to the fact that tax cuts would have a fermenting effect on the economy, even if it would not lead to the further swelling of the already swollen public finance deficit. We could also see that in recession tax cuts are not advisable, not even if they are accompanied by a similar reduction in expenditures: at such times this too will lead to a drop in production. And due to the latter, tax revenues will drop again, and the end result is not only a drop in production, but also a further rise in the deficit. However, the situation is changing if the economy begins to rejuvenate!

During the recovery, i.e. at the beginning of rejuvenation, optimism becomes dominant. One can do things that have to be avoided during recession. Taxes and budgetary expenditures can be decreased concurrently, and practically to the same extent! This would no longer decrease aggregate demand. The amount of deliberate savings, which resulted from the tax cuts, would be offset by the deliberate investments, which would grow, too. The balance would be achieved not subsequently, as a result of the decline in deliberate savings caused by the drop in production, but in parallel with growing production, on a continuous basis, with increasing savings! Output can grow fast both in the shorter and longer run, due to more favourable investments and of course due to increasing exports.18

State redistribution, *as well as* the curtailment of utilisation by the state increase the private sector's share in income, which manifests in the growth of the rate of private – individual and corporate – savings, albeit to a smaller extent than the drop in the rate of centralisation: since due to the reduction of state roles the costs of the private sector must somewhat grow. It is not correct to exaggerate the growth rate of savings. At national level it can be maximum 2–3 percent, which may ensure a growth rate surplus of maximum 0.5 percent based on the current investment efficiency of Hungary. Of course, this counts, too.

As a result of streamlining, the share of the private sector will grow within total savings. The share of corporate investments may rise, which has a more direct influence on the growth process. Resources that lay the foundations for production growth can be bigger and

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more efficient at national level, too, as a result of reducing non-useful state consumption, and growing private resources.

Among other things this explains why the reform fever spread so quickly especially during the recession; everybody was looking for the missing resources required for crisis management and faster growth. The statement, according to which *smaller-scale* – but of course not any times smaller – *resource utilisation by the state makes faster growth possible, if in the meantime the rate of private investments increases.*

However, the rejuvenation of the economy would require not only the reduction of the rate of income centralisation compared to the GDP. Although this would improve the economy's reaction ability to external impulses, but not to a sufficient rate. Structural changes are at least of equally important: How should tax revenues and state expenditures be structured? There is consensus about the reduction of the costs of state bureaucracy, but not about the rate of reduction. It cannot be known in advance what savings and what redundancies reduction would bring about. In addition, it cannot lead to a decline in the quality of state and community services. It is sure that the curtailment of state bureaucracy is far from being able to yield revenues necessary for the reduction of the aggregate tax burden by around 5 percent compared to the GDP.

The trouble is that expenditures can be recognisably decreased only if this affects consumption by low-income people more than consumption by rich people. This comes from the fact that in Hungary, just like anywhere else in the world, it is rather the expenditure than the revenue structure of public finances that reduces income disparities among the different layers of the society.¹⁹ Expenditures mostly include wage-like expenditures and transfers, as well as social security payments and services. Any growth in such payments and services are taken by the population with ease and pleasure, while any reduction thereof is received with indignation. The lesson is: one must never start the groundless increase of expenditures, and any such offer is a grave mistake. Such a policy will backfire at its makers, especially when they happen to be in power.

However, *tax burdens and expenditures must be reduced concurrently and synchronously.* Today politics is inclined to announce large-scale contribution cuts, but this should be accompanied by the reduction of healthcare and pension expenditures if we do not want to violate the principle of insurance, and if we do not wish to increase the deficit either. This has not been very much publicised lately (or if yes, only implicitly, with reference to the Swedish example). On the other hand, a lot has been said about unilateral contribution and tax reductions.

Together with the required institutional reforms, the detailed description of which is beyond the scope of this article, enterprise friendly taxation and expenditure structure, much smaller public finances than today, as well as more cheaper resources available to the private sector -especially for small and medium-sized companies – would be most of all important to enable the economy to adjust flexibly, and to make economic recovery stronger, and the subsequent economic rejuvenation more dynamic.

Stability, direct capital import, recovery, growth dynamics

For a temporary period economic performance may grow much faster if the rise in investments is supported by direct capital import, too. Loan capital imports, which make the debts grow, are ignored here on purpose; the debt stock in Hungary is already too high, and the international money and capital market reacts to its changes sensitively and to the detriment of our country. However, direct capital import may play an important role in the recovery process, too. This can happen through the reinvestment of the profits of foreign companies operating in Hungary, as well as through brand new foreign direct investments.

From among the several motivating factors of direct capital import primarily two can come into play in the next years. The first one is the extent to which economic stability can be ensured in the near future. The other is political stability. Important and determining factors, such as the condition of the infrastructure, the level of qualification, the quality of education and training, as well as the determination thereof by the needs of the economy should not and cannot be significantly changed within a short period of time. Although political stability is a very important factor, its analysis is beyond the scope of this article. Therefore, only the significance of economic stability is discussed here.

Economic stability partially assumes the existence of price stability. Therefore, bringing the inflation down and keeping it at a low level is an unavoidable task. This includes the near-balance state of public finances, too, which also means that if the balance is negative, it should not show an excessively deteriorating trend. An important accessory of stability is the foreign economic balance, and consequently the balance of trade and payments, as well as the direction of changes in the balance of payments. The latter are closely related to the external debt stock of the country, and to the changes thereof. In other words: stability assumes that the economy is only slightly vulnerable, since the smaller the internal and external imbalance, the smaller the possible problems caused by the shocks arising from vulnerability.

Such economies can expect strong direct capital import, which is a great advantage in the recovery from the crisis, too. For example, because apart from its own resources the country can also rely on growing investment resources that do not directly increase its external debts. Of course, this holds if direct capital import is not hindered by other internal economic – as well as political – factors.

The economic stability criteria lend even more weight to the statements made in this article so far. If the price stability is an indispensable part of the economic stability, and this is favourable for direct capital import, the country should not pursue a deficit policy in public finances, and should not pass decisions that will increase the deficit – albeit temporarily according to the intentions. As we could see, deficit can easily become permanent and much larger than planned.

For maintaining the price stability it is risky to pursue a monetary policy that relies on high nominal and real interest rates, on the high real exchange rate of the Hungarian currency, and maybe its rising nominal interest rate, too despite the fact that inflation is faster than abroad. This can easily lead to the overvaluation of the Hungarian currency. The latter does not help exports, especially the exports of Hungarian-owned companies, including primarily small and medium-sized companies. It deteriorates the willingness to invest, hinders the growth in performance, may aggravate the business conditions of these companies against competitors, i.e. hampers recovery from the crisis. It counts a lot what tools the government and the monetary management use to ensure price stability. It counts even after the worst is over: it is significant how strong recovery proves to be.

Vulnerability is greater when not only public finances, or the balance of payments is in deficit, but both at the same time. This is the so called "twin deficit". There is no major problem with the balance of the economy when there is a deficit on the current accounts side, however, there is a surplus on the side of public finances. Since this can be the consequence of rapid economic growth, let's say during a strong rejuvenation process. Rapid growth itself increases the public finance revenues, and state expenditures do not necessarily grow at the same rate. Then the current accounts balance can become negative, because rapid growth can have a very strong suction effect on imports. This means that a surplus in public finances can be accompanied by a deficit in current accounts. The reverse of the situation may also happen. Internal and external balances having opposite signs can be often observed in developed economies, usually for a temporary period. This leaves the international flow of direct capital practically unaffected.

But when economic growth or rejuvenation is attempted to be boosted by an increase in public expenditures, or unilateral tax reductions, the deficit of public finances soars again, and due to its impact on demand imports grow faster than exports, and as a result, both the internal and the external balance become negative. The greater the efforts are for accelerating the performance growth of the economy without the existence of the required preconditions, the higher the deficit rate is. The "twin deficit" is not the result of the self-propelling nature of the economy, but that of an economy overstretched especially by the given economic policy. The reaction to the resulting balance problems is the slow-down of the direct capital import, and in line with this, and eventually, the weakening of rejuvenation.

Economic stability first of all depends on the economic policy of the government. The basic requirement is that public finances must always be near the state of equilibrium, and changes in the balance must reflect the smaller and bigger fluctuations that occur mostly spontaneously in the economy. This means that the public finance system should be solid, it should not spend on the basis of ungrounded expectations, and should not strive for popularity at any rate. In this sense its position is similar to that of private households. However, the behaviour of public finances, and in the background that of politics, especially that of the government, and the parties behind is often less solid than that of private households.

If public finances start lavish spending, stability is severely threatened. The central bank, i.e. the monetary government is unable to solve this problem by itself. The task of monetary management is rather fine-tuning, the continuous performance of which requires great attention. Yet, it is unable to change the basic proportions. This also means that if public finances insist on pursuing a profuse policy, and this is accompanied by a too fast rise in nominal incomes, the central bank cannot even ensure price stability, at least not without other serious consequences. Public finances and the central bank must cooperate on the basis of the exact knowledge of objective economic correlations, they cannot strive for contradictory objectives. Of course, the monetary policy can be expansive temporarily with public finances being restrictive, but this always serves the management of occasional shocks, disturbances, and of the temporary imbalance, which is considered to be unique in a certain sense.

In the past decade we could learn in Hungary how much it matters what policies the public finances and the central bank pursue, and what damage can be caused by the lack of cooperation between them. The current grave situation cannot be understood without it. And neither can the growth perspectives. This question has not been concretely and sufficiently analysed domestically to date. Exploration of this issue is very much needed, but this will be a subject of another paper.

OBJECTIVES, MEANS, REALITIES

How vivid can recovery be, and how dynamic can the subsequent economic growth be? This question is raised because the expectations are often exaggerated, although they are definitely more modest since the emergence of the crisis.

In connection with recovery we must count with three important influencing factors. Being a small country, the determining factor both globally, and especially in Europe is the intensity of the economic rejuvenation to come. Exports account for 80 percent of Hungary's GDP, and as much as 70 percent of all exports are generated by multinational and other foreign companies operating in Hungary. Decisions of the latter are primarily determined by external boom.

The signs show that in Europe rejuvenation will not be strong, in part, due to the production structure related factors, and in part, due to the fact that the public finance deficit has grown big in most Western European countries. This must be diminished after the end of the crisis. Not only because this is required by the European Union, but also because permanently high deficits restrict the growth potential. If deficit was reduced right now, this would cause a slump in demand already during the period of recovery. And if deficit reduction was postponed, the growth potential of the European economic block would decrease. Both are disadvantageous for the Hungarian economy.

It is considered to be a second influencing factor that despite a given external boom the rate of the rejuvenation and then long-term growth of the Hungarian economy can vary, *in part due to factors manifesting in internal, quantitative indicators.* Here we can concurrently count with favourable and unfavourable factors. It is an advantage that by now the public finance deficit has become significantly smaller than it was before the evolution of the crisis. During the period of rejuvenation we can only rely on the fact that despite the given tax burdens the balance of the budget can improve due to the growth in production, provided that the government will not go on a spending spree again. Having a smaller initial deficit without ongoing restrictions is a significant advantage. But the quantity side contains risk factors, too! To what extent will the monetary policy encourage investments, and how will the exchange rate of the Hungarian forint develop? As we could see, uncertainty is significant in this respect, too.

The third restricting factor is *quality-related*, it cannot be described with quantitative indicators. If the institutional system remains unchanged, and so does the economic environment determined by the economic regulators, as well as the extent of incentives to save, we can also expect more modest dynamics. Restrictions that have been used in the crisis to date have been subordinated more to the improvement of the budget balance than to a comprehensive strategy that influences austerity, entrepreneurship and the willingness for employment, and that forces the continuous maintenance of the balance. The entire institutional and regulatory system must be consistent, since the individual elements are correlated with one another.

For example, if the size of the contributions payable is decreased, the composition of the contributions does matter, and a decision must be made about the system regulating pension and healthcare costs, too. Since balance must be maintained here, too, even for compliance with the principle of insurance. If the personal income tax rates are drastically decreased in order to improve entrepreneurship and the willingness for employment, or if at the same time a flat rate tax is introduced, the expenditure side must not be ignored, and equally, it must not be ignored what changes must be made for the protection of low income people. Can a principle be enforced according to which the personal income tax, the corporate profit tax and the value added tax would be the same rate, and the value added tax would be flat rate, too? How will these changes affect prices temporarily and

permanently, and what will happen to monetary regulation in the transitional period?

The critical mass of the reforms is often mentioned. If this means that the individual elements of the economy are organically interrelated, wherefore the reform must be comprehensive, and the individual parts must fit one another, the concept of "critical mass" catches the essence well. However, a lot of reform steps can be implemented very badly too, therefore the emphasis is not at all on the quantity of reform steps. *I find the use of the term "critical mass of the reforms" misleading*.

The lack of consistent quality change first of all deteriorates the dynamics of long-term growth, and jeopardises the maintenance of the balance, too. It is not favourable for the imminent recovery process either. It is not known what the next government will do. Based on the declarations it cannot be excluded, in fact, it is rather probable that temporarily it will pursue a deficit increasing policy, which would be a grave mistake. This means that economic policy can do a lot for accelerating recovery and long-term development. Success does not simply depend on how many financial resources can be spent on the acceleration of rejuvenation either from own resources, or from loans. A lot more depends on whether governance is carried out understanding and relying on the laws of economics, including the self-propelling nature of the economy, and not driven by preconceptions or desires, in the belief that we must just want it hard, and the situation will surely improve.

If we increased public finance deficit to make rejuvenation and economic growth more dynamic by giving the "first boost", we would experience the opposite of the expected result. We have already proved that being a small and extremely open economy, even if capacity reserves do exist, production, and consequently the size of tax revenues, could grow only moderately due to the budgetary deficit. Consequently, the public finance deficit would continue to grow, which would definitely deteriorate the conditions for longer-term economic growth.

In the process of economic growth the multiplier effect has no more role to play, therefore not a single growth theory deals with it. Instead of the improved utilisation of idle capacity reserves such factors come into play like the size and ratio of savings and investments, the rate of technological development, the quality of importable technology and know-how, and the national level of willingness and ability to introduce developed technologies. It is equally important how suitable the trade structure is for the reception of new technologies, which is fundamentally determined by workforce training, education, the quality of schools and education, and even scientific research. It is a separate condition how primary, secondary and higher education meets the needs of the labour market, what is the weight of skilled worker education programmes, just like the composition and quality of higher education, etc. Neither the public finance deficit, nor the multiplier has any positive influence on these conditions, and the impact of the deficit can only be detrimental.

The fact that the public deficit affects the growth dynamics very adversely is *explained separately* by a few growth correlations, as well as the increasing problem of environment protection all over the world, and the impacts thereof on growth.

As far as growth correlations are concerned: it is of key importance to understand that dynamic economic growth almost always requires increasing saving and investment rates. The sequence is important: the size and ratio of the necessary investments can be understood *starting out* from the requirements of faster growth.

The fundamental and direct factor of faster pace economic growth is faster technological development. However, this requires a higher replacement ratio, because then the process of moral degradation is faster, too. But the ratio of net investments must be higher, too, since technological development itself usually frees workforce up. As a result, a given output can be achieved by a smaller staff, wherefore, the employment of a given staff requires greater output. The faster the technological development the greater the output. In the case of a given capital efficiency this assumes a proportionately faster capital growth, i.e. a growing net investment ratio. Thus we have come to the faster growth/higher investment ratio correlation, which is called "inverse correlation" in modern economic literature.²⁰

In Hungary everybody dreams about fast economic growth. Some people believe that this can be achieved by a first boost generated by a growth in expenditures. However, neither the theory on economic growth, nor any school of economics within that knows about a deficitbased boosting effect. The growth decelerating effect would be a more relevant category linked to the deficit. Since – in reality – what effects does the increased public finance deficit have?

The public finance deficit is a *deduction* from the national saving rate. In other words:

National level savings = household savings + corporate savings + public finance balance + investment funded from public finances

The formula shows: *national level savings drop if the public finances are in deficit.* Public finances as a whole decrease savings, too, if the size of investments funded therefrom is smaller than the public finance deficit itself. Statistics show that these investments almost always fall short of the size of the public finance deficit. The larger the deficit, the greater the difference. Consequently, the only conclusion can be the following: since faster growth usually assumes a greater investment rate, and because the source of investments – if we ignore external loans – comes from savings, *increasing the deficit can only lead to the deceleration of growth dynamics.*²¹ In this case, due to a growth in deficit, only a smaller investment ratio can be achieved, although faster growth would require an increasing investment.²²

What can be expected, not in the distant future, in terms of capital efficiency, as well as the development of production and productivity in Hungary and in the entire world economy?

In Hungary's economy - just like in most other countries - capital intensiveness will grow, and it will do so for a relatively long period of time. One reason behind this is, for instance, the relative underdevelopment of the infrastructure. This is an outstandingly capital intensive area, and its development can be followed by production growth only with a great delay. A similar effect will be caused by environment protection, which requires considerable investments in many areas, without any immediate, and often without a later effect on output growth. What is more, it assumes the application of technologies that increase the current production costs. In both cases increased capital intensiveness is a must, which decelerates output even if the investment rate does not drop, or only slowly grows at national level. At the same time, increasing the deficit will reduce the investment and saving rate at national level.

Now let us see the global economic processes and the impacts thereof on the Hungarian economy. Europe is more likely to experience protracted growth, because environment protection, which is getting more and more important, is a hindering factor here, too. Also, because the existing production structure needs to be transformed. This will require large investments for quite a long time, and can lead to any considerable growth in economic performance only slowly, with a time lag. It is another question whether restructuring will take place, and whether it will go in the right direction. For years, performance growth in Europe will also be slowed by the fact that public finances in many Western European economies, which earlier operated with balanced budgets, have incurred significant debts. If the deficit is not decreased in the coming years, investments will be subdued, and growth will not take place. If deficit is reduced, this can only be done by keeping the aggregate demand back, and this is why growth will be slow in the first years.

Hungary's main foreign trade partner is Western Europe, however a strong demand impulse capable of making Hungary's economic development dynamic cannot be expected from there. It would be appropriate to increase as much as possible, but at least modestly, the share of other regions. The possibilities here are restricted, wherefore they cannot be utilised without investments. It would be a great disadvantage if the resurging public finance deficit would deteriorate the chance for the increase of investments.

If we look into the more distant future, we can see serious problems in connection with the dynamics of growth and the capital intensity of production everywhere: in Hungary, in Europe and in the entire global economy. The protection of the natural environment is a crucial issue, environment protection may become a number one priority, which can change the nature of economic development. So far technological development has obviously most often been linked to a growth in productivity, i.e. better performance both at the micro- and macroeconomic level. However, technological development can be subordinated to environment protection. Probably this would increasingly mean that the same performance can be achieved by using less energy and materials, and by causing much smaller environmental degradation.

Then GDP growth will remain in the background, and possibly it will not occur at all in many places. On the other hand, the proportion of environmental investments will continuously grow. *Capital efficiency in the traditional sense will deteriorate, and will receive a new content.* Capital intensity will grow even faster, and so will the significance of savings. It is highly possible that the investment rate will rise despite constant GDP. Public finance balance will be much more significant.

This is not a problem of the distant future, but that of tomorrow. For the author of this article the concept – which is unsupportable in terms of economic considerations, too – seems to be mere anachronistic that public finance deficit should be increased to start rejuvenation and future growth, and to give a boost to economic growth like that. These notions have become completely obsolete and irrelevant for the current economic condition of Hungary. It is absurd to respond to the new challenges by the deliberately increasing the deficit.

When making international comparisons one must understand what happens and why. If a national economy starts to grow markedly fast, at a rate of nearly 10 percent, it is not at all sure that it has stepped on a path of permanent growth of around 8 to 10 percent. This may be a transitional consequence of a sudden rise in direct capital imports for a certain reason. Soon we will witness a spectacular drop in the growth rate. It is possible that the fast rise in production is merely a transitional consequence of economic opening in a country that is otherwise suffering from a relative technological backlog. It is also possible that labour reserves are plentiful, and growth is extensive in nature on the basis of a simple increase of investments, and dynamics will drop in the not too distant future. It is also possible that the price of fast growth is that too much of the GDP is spent on investments, exports and export surpluses, and the majority of the population does not enjoy the benefits of fast growth.23

Therefore, we must look behind the process-

es. It must be known whether the process is permanent or temporary, what the recent successes can be attributed to, what opportunities we can have, and whether we are ready to assume the costs of results experienced elsewhere. And the most important thing for the topic of this article: we must have a good understanding of objective correlations valid during economic crises and in the process of economic growth. This is not only the researchers' responsibility; the citizens of the country expect the same from the decision-makers and politicians speaking on the topic. In this respect, Hungary is doing not at all well.

NOTES

¹ Brown, E. C . (1956)

² Erdős (2009)

- ³ This means that the average tax burden can and must be decreased on the basis of the improving tax-paying morale. However, this should rather be done subsequently, after the actual improvement of the taxpaying morale. Until then other tools must be used. For example: state expenditures that increase at a slower pace than the growth rate of the economy entail an improving balance in public finances with the same tax burdens. On the other hand, the improving balance makes it possible to decrease the tax burdens without risking a deficit growth. If tax burdens are reduced in this manner, this may improve the tax-paying morale, which can improve the budget balance, and tax reduction may again be included in the agenda. In addition, we can mention tax reductions made possible by decreased expenditures: this means that public finances can be streamlined risk-free.
- ⁴ The multiplier shows the extent of the change growth or reduction - in output triggered by a change in autonomous spending - such as the growth or reduction in budgetary expenditures. Since any rise - or drop - in autonomous spending affects demand both directly and indirectly. If for example public finances increase their purchases by 100 units with the same revenues, in case of sufficient reserve capacities the output can adjust to this in a flexible manner, i.e. this will grow, too, by 100 units, albeit with a relatively short time delay. A growth in income equalling the latter creates more demand, depending on the level of the marginal propensity to consume. If this is 2/3, purchases will again grow at a rate equalling 2/3 of the income increment. Output will again grow, but this time only by 67 units. With a certain marginal propensity to consume this process continues according to a declining geometric series, in a regular pattern, and in

the given example the maximum numerical value of the multiplier will be 1/1-0.67, i.e. 3. This means that in this particular case the total demand and output increment equals 300 units.

The multiplier is influenced by several factors, such as the ratio of taxes imposed on incomes. If this tax equals 20 percent, the multiplier will be smaller, and will equal $1/1-(0.67\times0.8)$, that is 2.15. In this case a growth in state demand by 100 units can generate only slightly more than 200 units of demand and output growth. Other influencing factors need not be mentioned here. In relation to the subject of this study the only thing that matters is that the concept of income multiplier expresses a real correlation. Its numerical value depends on concrete conditions, and is valid until there are free and marketable production capacities. The latter must be emphasised: this is how we can understand that the income multiplier has nothing to do with the growth potential of the economy. It is also important to know that it is easier to interpret the multiplier effect in theory than to determine its size in practice. The "multiplier uncertainty" is a concept well known concept from literature. Lucas, R. E., (1981)

⁵ The multiplier effect was first noticed by Keynes and his colleagues. They also noticed that as soon as the economy achieves the state of full employment, it does not make any sense to increase state expenditures. On the contrary, this would cause serious problems. As Keynes put it: "When full employment is reached, any attempt to increase investment still further will set up a tendency in money-prices to rise without limit, irrespective of the marginal propensity to consume; i.e. we shall have reached a state of true inflation. Keynes, J. M., 1965 This also shows that Keynes found it important that the increase of state deficit should not lead to inflation, and he thought that deficit spending was not always applicable. This was taken so seriously by Keynes and his colleagues that from the very beginning they regarded it an issue to be clarified whether during a crisis

the increase of state expenditures would cause an unlimited growth in demand. Since when they realised the existence of the multiplier effect, first they feared that the re-spending of income generated on the basis of state expenditures, and then the spending of income so earned, etc. would have an infinite multiplier effect. First they just thought that this could not be true, but they did not know why. It was Keynes's colleague, R. F. Kahn, who discovered that it must have been a convergent geometric series, if the re-spending ratio was between 0 and 1. From that point it was only one step to the recognition that the marginal propensity to consume determines the re-spending ratio, and this is really a value between 0 and 1. These contemplations of Keynes can serve as a lesson to all who would be willing to increase - even significantly - the public finance deficit even in the current situation of Hungary. Baumol, W. J. - Blinder, A. S., (1979) wrote an excellent analysis about the process of the birth and development of the Keynesian theory.

- ⁶ The significance of the existence of marketable and idle production capacities is also shown by the fact that the neoclassical school of economics found and still finds the multiplier effect unworthy of examination. According to its representatives, the economy always strives for the state of full employment, and with the exception of a few periods of time this is actually characteristic of the capitalist market economy. According to this, it is not justified to analyse the multiplier effect, which assumes that capacity reserves exist a priori. The income multiplier fits into the Keynesian theoretical system, but it is incompatible with the theoretical system of the neoclassical and the monetary schools. Baumol, W. J. – Blinder, A. S. (1979)
- ⁷ This is convincingly proved by statistical data, especially by those that can be studied in a separate publication on the basis of the revenue and expenditure structure of public finances, on the basis of the development of the public finance balance over a longer period of time, and on the basis of international comparison. Eurostat (1/2009); European Central Bank (2009).
- ⁸ An indepth analysis of the issue is provided by Barro, R. J. (1989)
- ⁹ The decline in the saving rate can be well seen in the statistical figures. By the first quarter of 2009, in the countries of the eurozone aggregate net savings dropped by around 67 percent, i.e. to one third of the level experienced in the first quarter of the preceding

year. In contrast with this, consumption declined only by 0.5–1 percent in the same period despite the fact that the disposable income of the population decreased by 5.2 percent. The sharp difference is explained by the strong decline in net savings. This is also the reason behind the fact that the consumption/GDP ratio increased by 1 percent during a year. Naturally, the GDP fell, by a little over 3 percent, wherefore the ratio of consumption, which declines only slowly, increased compared to the faster decreasing GDP, ECB (2009)

It is not easy to follow the development of this process. For example, the drop in consumption cannot be accurately determined on the basis of retail turnover or household purchases. The latter always decrease to a much greater extent, than the decline of consumption itself. Well over 50 percent of household purchases are service purchases, most of which must be paid for no matter what. These purchases are not included in the retail turnover. What is more, it can be stated that in part it is especially the income inflexibility of expenditures spent on services that is responsible for the relatively fast decline in retail turnover. And this is what causes that aggregate household consumption decreases much more moderately than the GDP at times of crisis.

¹⁰ It is difficult to determine when to switch to a new economic policy. This depends on many factors, including the one that we must take into account that the economy always responds to decisions with delay. First of all we must realise when the time has come for action. This requires the accurate and upto-date knowledge of facts, however statistics show the facts with delay. The more recent the changes, the less accurate the statistical materials are. The time needed for decision-making is also an important factor. Fiscal decisions usually require much longer time than monetary policy related decisions. The response of the economy to the decisions of the government and the monetary authorities comes with even greater delay. For example, if the central bank decreases the basic rate of interest, the banks need time to respond and encourage the reduction of the general market interest rates. An even longer period of time passes before households and companies will increase their consumption and investment expenditures. Lower interest rates, as we know, provide an incentive for investments. But not right away! Investment decisions are preceded by corporate considerations. The expected yield is compared with the costs, the expected market changes are taken into account and a plan is developed for the given investment. This may take up to a year, or occasionally even longer. The implementation of a process started also takes time. For example, it requires at least one year for the income multiplier to take full effect. The problem of timing is always there: too early or too late decisions by the government are equally detrimental. Similarly, the application of inappropriate dosage also makes matters worse. Kareken, J. – Solow, R, 1963; Case, K. E. – Fair, R. C. (1996)

- ¹¹ Modern civil economics emphasises: public finance deficit does not always reflect deliberate deficit spending. Changes in production and cyclical fluctuations also affect the balance of public finances. At times of crisis it may also happen that a budgetary deficit occurs exclusively due to a drop in production. "Full employment deficit" is especially a related category. Among other things it warns about the fact that restriction should not always be used for the purpose of deficit reduction. This term was first used by Brown, E. C. Today it is regarded as a widely used argument category in the analyses of crises and business cycles. Brown, E. C. (1956)
- ¹² Here I do not count with the correlation according to which the replacement fund is also unable to cover the costs of actual replacement when production becomes more capital intensive. In such cases the same level of production can be ensured only with larger investments. The method of discussion of this issue also depends on how we define the content of replacement. It would lead to many complications, the discussion of which would divert attention from important correlations directly linked to the crisis and rejuvenation.
- 13 It is difficult to follow the correlations here. There has been no end of attractive promotional offers in the interbank competition for depositors' funds. Within these schemes the banks generally offer a very high annual interest rate for a period of two months, but they drastically reduce the interest rates after the two months pass. The average household deposit interest rates are much lower than the promotional interest rates. On top of that, due to the 20 percent interest tax the real net interest rate often falls short of the inflation rate. Then, in the case of household deposits, the interest tax burdens formerly accumulated savings, i.e. capital, instead of the income earned. This is always the case when the real interest rate is negative. Earlier, for some time, there was a rule in effect, according to which no interest tax can be levied on a negative interest rate. However, this rule has fallen into oblivion. Imposing taxes on negative real interest rates is expressly detrimental, it weakens the willingness to

save, and together with this the growth of corporate investments, and eventually it hampers economic growth.

¹⁴ The correlation is easy to understand. If the internal interest rate rises, money investors become more interested in securities denominated in the Hungarian currency. Ownership of such securities provides a higher yield than earlier, and together with the demand for securities the demand for the Forint grows, too. Therefore, the Forint exchange rate will be higher. If the yield remains high for a longer period of time, the Forint exchange rate will also remain high permanently. (Naturally, it must always be kept in mind that the risks associated with money investments into different currencies differ from currency to currency, wherefore the yields must also contain different risk premiums.). It must always be kept in mind that the yields may be different even if we disregard the risk premium, and may change to varying extents, and the currency exchange rate rises or drops depending on these latter changes.

This correlation is not easy to present. Exchange rates often change in the same direction within an entire region, if the judgement of money investors about the entire region changes in the same manner. Therefore, it is possible that the interest rate of a country within this region grows, yet the exchange rate of its currency decreases: for some time pessimistic judgement will prevail about the entire region. Or judgement about other regions and other and large countries suddenly improves, wherefore investors with larger money capitals and who hunt for larger and sure profits go to these countries, and at the same time money capital flows out of the aforementioned region.

From among the many complicating factors two must be highlighted, which can be regarded extremely important for the exchange rate of the Hungarian currency. The first is: money capital does not always hunt for larger yields (interest rates). It also hunts for the spread profit that can be gained from the changes in the exchange rates of securities. For example, if the central bank considerably reduces the basic interest rate, general interest rates may soon follow this trend, but of course, not the amount of interest actually paid on the existing securities portfolio. Most of the existing securities portfolio consists of fixed-interest bearing securities. Yields drop when the exchange rate of the securities rises, and the expected yield drops relative to the price of the securities. The exchange rate of the securities may increase significantly. If a speculative trader buys securities right at the beginning of the

rise in the exchange rate, he can later sell said securities with a great profit. In the beginning such purchases may dominate, wherefore an interest rate cut may paradoxically be followed by the rise in the exchange rate of the currency of the given country, e.g. that of the Hungarian Forint! As if it was not true that interest rate cuts are accompanied by the drop in the exchange rate of the currency of the given country. Yet, the correlation is true! We do not have to wait long before the exchange rate of the currency drops, too. As soon as growth in the prices of the given securities loses its momentum, fall occurs instead rise, securities and the Hungarian forint are being sold by the speculative traders, and the exchange rate of the Forint drops.

The other correlation: especially in a small country it must always be kept in mind that the currency exchange rate cannot be independent of the internal purchasing power thereof. This has always been emphasised by the purchasing-power parity value. Of course, the purchasing-power ratio does not tightly determine the exchange rate. But the factors, on the basis of which bank and stock exchange analysts assess the given, expected daily, and weekly, i.e. short-term changes of the exchange rate of the Hungarian currency are fully inadequate to explain why the euro is worth 270 times more than the Hungarian Forint. The comparison of the interest rates leads us nowhere; it can, at best, explain a relatively long-term deviation compared to the purchasing-power parity, similarly to other factors that can provide temporary explanations for a shorter or longer time. Not even in relation to large countries! And this is very significant in practical terms!

For example, if we want to know how much the exchange rate of the Hungarian Forint will improve compared to the lowest rate of HUF 315 = EUR 1, and if we do not cherish illusions, we cannot expect it to increase to the level of HUF 250 = EUR 1 (or even HUF 230). Not even if the interest rate cut will temporarily be accompanied by an increase in the exchange rate of the Hungarian Forint. The HUF 250 = EUR 1 exchange rate is not realistic. The exchange rate will be significantly smaller, since the effect of the purchasing power will eventually albeit with difficulties - prevail. No matter how hard some would like to throw it out of the window. A valuable discussion about the changes in the exchange rates of the currencies of small and large countries is provided by Hall, R. E. - Taylor, J. B. (2003)

¹⁵ Earlier we referred to the problem of delay. Naturally, this problem occurs here too, but rejuvenation sooner or later follows the interest rate cut, and the subsequent drop in the HUF exchange rate, which occurs on the same basis.

The reduction of the HUF exchange rate would be of special importance in Hungary. Before the emergence of the economic and financial crisis the Hungarian currency became rather overvalued. Since 2000–2001, consumer prices in Hungary have grown nearly 30 percent faster than in the euro zone. The most important factor behind the rapid growth of internal prices was inflation. If the Forint was not extremely undervalued in 2000–2001, it has definitely become overvalued by today. If this process continues, it would keep back the exports of small and medium-sized companies, and will hinder rejuvenation.

- ¹⁶ In 2000–2001 the exchange rate was around HUF 250–255 for EUR 1. Since then, by 2008, the consumer price level in the eurozone and in Hungary grew by 20 percent and 58 percent, respectively. This means that the growth of the price level in Hungary was 32 percent faster mostly due to the permanently large public finance deficit, and the quick rise in nominal wages. Even if only half of this 32 percent difference is attributed to inflation, one euro should be worth at least HUF 290. The HUF 280–290/EUR band can be regarded neither exaggerated nor pessimistic.
- ¹⁷ If the central bank refrained from cutting the interest rate, even if this would be made possible by the decreasing risk premium, a very unfavourable situation would emerge. The SME sector would get into a disadvantageous situation, and this could only be eased by means of preferential loan conditions. The related coverage should be provided by public finances, which would deteriorate the balance, or resources would have to be withdrawn from other important tasks, including investments. Once producers are granted state subsidies, such subsidies always prove to be insufficient. The cost-efficient utilisation of subsidies is difficult if not impossible to ensure. Allocation of the subsidies causes another serious problem. Supervision would use resources, too, and would imply large administrative costs. Manual control is always costly, because it is sluggish, too complicated, biased, and wittingly, unwittingly it gives room for corruption. Inefficient companies, ones that would rather need liquidation, would also receive subsidies.
- ¹⁸ There is a continuous adjustment process among output, investments, savings and exports, which plays an important role not only during recession. Let us look at the period when economic growth is

more or less evenly paced, since completely even, balanced economic growth does not exist. There always exist deliberate savings the ratio of which compared to the GDP is never constant. If the economy is on a kind of growth path, the absolute size of deliberate savings grows. The same holds for changes in deliberate investments and exports. At the same time, adjustment between deliberate savings and investments is the really important process! If the economy is on a growth path, both savings and deliberate investments increase, wherefore no big trouble may hit. If these two are in equilibrium, balance is reached right away in a closed economy, since then at the given price level aggregate demand must equal aggregate supply. This would hold true both ex ante and ex post! Yet, these two sides are never exactly equal. If the amount of deliberate savings is larger, smaller marketing difficulties may occur, and therefore production will grow somewhat slower, or the price level will augment at a slower pace, and exports will increase faster. This is the process of adjustment. This can manifest in the deceleration or acceleration of economic growth, on a temporary basis. When deliberate investments happen to be larger, aggregate demand starts growing faster, inflation may speed up. On the other hand, if there are free reserves, growth may temporarily be faster. The real interest rate may rise, and the growth of investments may slow down at a later stage. This means that fluctuations always exist, and the rate of investments and savings change continuously too, in line with the pace of economic growth. However, in the temporal average, at times outside recession, investments and savings reach a balance - ex post -, without causing economic performance decline in absolute terms. The constant short-term production fluctuations can in part be explained with this adjustment process.

The situation is different in recession! Then the willingness to invest is very low. If deliberate savings increase significantly at such a time, e.g. the growth in investments does not take place because of the tax cuts carried out concurrently with the cuts in expenditures, and in a global recession exports cannot be increased either, a further drop in production is inevitable. Then disproportion has become rather sizeable! And then expectations are pessimistic! The curtailment of public finances is not possible without further deepening the crisis. Finally, investments and savings do reach a balance, but only at the expense of a significant drop in production! But what is true during recession, is not valid in the period of rejuvenation. This is the time when streamlining of public finances can or should be started.

- ¹⁹ A lively description of this was given by Musgrave, R. A. and Musgrave, P. B. (1987) upon examining the economy of the US
- ²⁰ "In the neoclassical growth model developed for closed economies the saving rate is the exogenous variable, and equals the input/output ratio. A higher saving rate increases the output per worker steady state level, and hence increases the growth rate compared to a given initial value of the GDP. (...) However, it is probable that a reverse cause and effect relation is of significance here." Barro, R. J. – Sala-I-Martin, X. (1997) pp. 32–33
- ²¹ Of course, those believing in the significance of the "first boost" may say: deficit will decrease with time, and consequently the growth potential will not diminish. However, a decreasing deficit is also a hindering factor, and hinders as much as can be gained from the first boost through the multiplier effect. This means that there is no point in starting to increase the deficit. What is more, it is always difficult to turn in the budgetary policy. We are greatly tempted not to hold expenditure growth back, or not to increase them at a slower pace than revenue growth. It is always easier to increase the deficit than to reduce a swollen deficit later on.
- 22 We must add here that the investment rate can also be increased by means of forced savings. Even in this case savings grow as much as investments simply because of the following: let us say that investments are encouraged by very cheap loans, by permitting the wide-scale and liberal use of accelerated depreciation, and by investment tax loans. Therefore investments grow quickly, and aggregate demand also grows faster than aggregate supply, if we count at constant prices. However, inflation begins to accelerate, too, and grows at a faster pace than nominal wages. This means that the growth of real wages slows down, or it may come to a halt, or wages may even decrease. Therefore the rate of corporate profits begins to rise, and they, as well as cheap loans granted at the beginning of the process, as well as the preferential interest rates can be used to finance larger investment projects. Eventually, larger corporate profits alone can be sufficient to finance increasing investments: larger profits lead to larger corporate savings. However, these are not deliberate, but forced savings, achieved mostly among household savings, but also among companies. In fact, the household sector is the saving sector, since household consumption is forced to drop. The

uniqueness is implied in the fact that savings appear at the companies, and not where consumption was forced to drop.

However, the method of forced savings described above cannot be applied if the reduction of the inflation is a top priority task. This is the situation that Hungary, and practically Europe will experience in the coming years.

²³ Here, as an example we can cite China, where the growth rate has been higher than in any other countries for a long time now. In China fixed capital spending alone has equalled 40–40 percent of the GDP for years. The export surplus has been 2–3 percent of the GDP for years. Fixed capital spending does not include stockbuilding. Huge sums are spent on defence and space research. All in all, only

maximum 50 percent of the GDP can be spent on consumption, including consumption by the rich. If we also count with the strong income polarisation, it can be calculated how much is allocated to the majority of the population where - at comparable prices - the per capita GDP equals 28 percent of the per capita GDP in Hungary, and per capita consumption is 18-19 percent of that in Hungary. However, on the positive side there is the current fast growth in China. The question is whether we would undertake the "costs" of this 8-10 percent growth, knowing that this growth rate will sooner or later drop to a fraction, just like it has dropped in Ireland in Europe, or in Japan on the Far East. Data source: OECD. A concrete analysis can be read about the fast economic growth of China in: Csaba L. (2006)

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