The Global Economic Crisis in a Comprehensive Neo-Schumpeterian Perspective

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1. Introduction

Surely, we live in an insane, crazy world, not just since the beginning of the new millennium. Events come thick and fast, at least regarding the economical part of life. The Financial Crisis is going to be replaced by a "Crisis of the States". Grown institutional structures, arduously built over decades impend to collapse. The European monetary union and the bond between its member states seem to be more and more seriously endangered by Nationalism and political self-interest. Scenarios of an impending downfall have taken up exceeding space and broad attention in the media and public discussions. How could such a development occur over a relatively short time span, regardless of whether it happens in reality or if it is just a reflection in our minds? As we may know, sensed awareness often determines today's as well as future living.

So what has happened over the last twenty, thirty or forty years which led - unnoticed by most observers – the world close to a mood of doom and made people think more intensively than ever before on how to deal

with the plight that is showing on the horizon? Is it the scientists, the politicians, and the media who have failed to point out in a timely and urgent manner the dangers or even the possibility of a crash of the capitalistic system? Why did systemic control mechanisms not strike a bell and warn us that the modern way of living, working, consuming and investing would not only have ecological but also tremendous economical as well as political impacts.

The current financial and economic crisis which apparently starts to become a national crisis in some European countries, did not happen in an entirely surprising and unforeseeable way. It had its precursors in other countries such as Japan in the 1980s or in South-Eastern Asia in the middle of the 90s. Those crises had similar causes and a comparable evolution to the current one, even though its dimensions did not have such a global effect. This might be due mainly to the fact that globalization, which is the worldwide interconnection of economies, had not yet been as strong as it is today, and, additionally, to the fact that the USA, as the largest and most important economy in the world, had only been touched peripherally and did not play a central role or act as a global amplifier.

Those facts may also have been responsible for the evidence that economics as well as global politics and the media coverage did not take the resulting shocks seriously enough and only treated them rather superficially. Well, Japan had suffered more than a "lost decade" of relative economic decline in a time when other countries, such as the USA, Great Britain or Ireland were basking in their economic success.

2. It's a Schumpeterian crisis

Let me start answering the brought up questions by formulating a bold, rather unconventional and maybe also quite unpopular thesis, especially what academics is concerned:

Crises as we experienced them in the 1920s and afterwards on a regional level as well as now once again globally do not result from failures in the market economy or the capitalistic system. They are not systemic defaults but are much rather the result and product of an excessive and exaggerated success of this system. To put this rather bluntly: The capitalistic system will not collapse – if ever – because of its defaults but because of its success driven exaggerations.

Interpreting it this way the current crisis can be characterized as a typical Schumpeterian crisis. In any case, it is not a malicious development in the Keynesian sense, which would be based on price and allocation processes related to and determined by rigidities in a market economy or on a mismatch of aggregate supply and aggregate demand. Furthermore, we cannot recognize any classical or neo-classical market failures as triggers: failures in the supply of collective services or market imperfections connected with misleading competition. No, the current crisis is hardly reducible to shortcomings of such kind in the market economy or to exogenous shocks in the capitalistic system. It is much more the result and product of an excessive and exaggerated success of this system.

One of the first economists who recognized this correlation was Joseph Schumpeter. His insight shows a strong opposition to the common, Anglo-Saxon influenced neoclassical approach of economics. According to Schumpeter, the capitalistic system is defined in its dynamics and its development in a prominent way by forces largely ignored in the neoclassical theory. This includes creative entrepreneurs and bankers ready to assume risks, whose actions are future-oriented and aimed at replacing old forms of doing business by creating new ones; that means by "creative destruction".

Thus defined, capitalism becomes a system which is to a high degree linked to uncertainty and insecurity both in a positive and negative sense. Basically, everything can and will happen if the system is allowed to develop freely. It is capable of generating the most impressive performances and also of causing most painful collapses. It is, therefore, not a system of balance and harmony as the neoclassics supposes, but one which flutters between possible extremes of the highest success and the most deplorable decay. This is true for companies as well as regions, nations and global economic areas. Basically, it oscillates in a Schumpeterian cycle of "Boom and Bust".

It is this cyclical up and down which also holds much of the responsibility for the crisis we currently suffer. The true base of today's global crisis lies in the USA and in the enormous economic boom, starting there about twenty years ago and which was spurred by the coincidence of several economic and politicial factors that may be called Schumpeterian: first of all, the innovative key or general purpose base technology in the IT-sector which spread like wildfire; then, the readiness of creative entrepreneurs and the availability of sufficient risk capital that could be used to finance a future-oriented extraordinarily strong expansion. And, besides, governments provided the necessary framework by choosing a policy of low taxes and deregulation of economic processes. This expansion period proved to be so tremendously successful that it burst – not only in the IT-sector – all scales of evaluation of companies and it carried with it many other economic sectors to unseen heights.

Around the year 2000, the boom stumbled over its own hubris and the limitless optimism of the involved actors. But the central banks also held their share of responsibility. They suddenly focused on a tight monetary policy by raising the interest rates in order to fight a perceived inflation in consumer markets. In the run-up to the emerging crisis, however, they had carelessly ignored the inflation in assets that had been developing in the stock markets. However, it is this inflation in assets which is in a Schumpeterian context an essential cause for distortion and crises. The eventual burst of the inflated bubble in this field preceded the deep slump of the New Economy and the Dot-Net-World.

In such a situation the central banks had no other option but to react almost in panic, this time by lowering interest rates and therefore by adding even more new liquidity into the economic circular flow. The additional money searched for new opportunities of high profit and this is the point, where we find the shift in investment from the firms' industrial to the households' real estate sector. Here, the same unregulated interdependence of greed, short-term focus and exaggerated optimism surfaced. A new, incredibly large bubble formed, which crashed about three years ago in the US.

From there, international spillover effects occurred worldwide and spread into the financial sector. And here the bubble burst on a worldwide scale with a more and more audible noise. The central banks again were part of the trigger of this outpouring due to their policy of rapid increases in

the interest rate designed to tame the enormous volumes of liquidity. This culminated in a shambles, a global financial and economic crisis, which should consequently rather be called a "Schumpeterian crisis".

So, what can we do in such a crisis? Which tasks are reserved for the market and which ones are bound to the government as a knight in shining armor?

We think Schumpeter and also Austrian economics would take the easy way out of this argumen. They would probably reason that we should leave the capitalistic system more or less alone. There are enough selfhealing forces within it that will make sure that after a certain period of global downturn, we would return to a phase of common growth; meaning that it would start a development which will once again lead through a powerful, maybe technological incitation from a bust towards a boom situation. But, can and may we consider this option justifiable in economic or political terms after we have made the terrible experiences during the first world economic crisis and, in the subsequent years, in the devastating consequences of the Second World War? No, the political dangers that would arise are by far too unforeseeable and dramatic that such a strategy should not be tested under any circumstances because of consequences such as an increasing nationalism, social riots and possibly even wars. Therefore, the crisis needs the government and the central banks with their policies.

So, it does not seem controversial, even in traditional Schumpeterian thinking, that successful capitalistic economies cannot exist without a certain amount of regulation if we want them to generate an economic development which is sustainable and less erratic than the unregulated invisible hand could achieve. The government as a political actor can, and should, of course, make a contribution so that ups and downs in the

development process of an economy are more moderate and steady and that a smoother evolution can be attained. In this context, we propose a concept as an analytical framework which we have introduced earlier as Comprehensive Neo- Schumpeterian Economics (CNSE).

3. Comprehensive Neo-Schumpeterian Economics (CNSE)

CNSE is based on Neo-Schumpeterian economics. In that context the central actors under investigation are entrepreneurs and entrepreneurial firms, as we know. And the most important process to be analyzed is innovation and the underlying knowledge creation and diffusion processes. Here, in sharp contrast to neo-classical economics, the notion of innovation focuses less on the efficient utilization, but more on the removal and overcoming of limiting constraints and the setting of new ones.

However, Neo- Schumpeterian economics, in its present shape, is still far from offering an integral theory of economic development. Most of the research of the last decades has primarily concentrated on the real sphere of an economy. Technological innovations propelling industry dynamics and economic growth obviously are a major source of economic development. But technological innovations are not the only source, nor can industry development occur in a vacuum. Instead, development is accompanied and influenced by the monetary realms of an economy as well as the public sector. The degree of maturity which the Neo-Schumpeterian approach meanwhile has reached in the field of industrial dynamics admittedly does not hold when it is aiming at the future orientation of financial markets and the developments of the public sector.

Undoubtedly, the Neo-Schumpeterian approach has to be set on a broader conceptual basis. And for this purpose we suggest

Comprehensive Neo- Schumpeterian Economics (CNSE) as a theory composed of three pillars: one for the real side of the economy, one for its monetary side and one for the public sector. Economic development then takes place in a co- evolutionary manner, pushed, hindered or even eliminated within these three pillars.

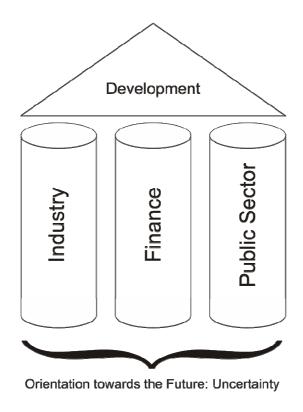


Figure 1: The 3 pillars of CNSE

In order to understand the crucial co-evolutionary relationship, one must explore the bracket accompanying all three pillars, namely their orientation towards the future which introduces uncertainty into the analysis. The fundamental importance of true uncertainty has to be seen as a characteristic concerning the single pillars as well as a phenomenon shaping the relationships between the three pillars and causing a high degree of complexity.

Such a CNSE approach, however, focusing on innovation driven qualitative development, should not only look at the co-evolutionary

aspects of economic life, it should also analyze the various issues of each of these pillars and work out their proper role in a theoretical and political context. Because each of the three sectors has to serve the future design of a society and an economy and assumes a corresponding role.

In such a concept, the task of the real economy will be to foster at all times through innovation and parallel investments the knowledge-oriented progress and the resulting wealth of a country or a region. To accomplish this task, it needs certain freedoms and the active support of the government.

The financial economy has an even closer, almost symbiotic relationship with the real economy. Its task is not – as it just happened – a short-term decoupling from the real economy spurred by speculation, but quite the opposite, namely the medium- and long-term oriented sustainable financial accompaniment and encouragement of innovative and successful companies and sectors.

The governmental and political responsibility lies, above all, in the monitoring of the future-oriented, long-term symbiosis of the real and the financial sectors as well as their co-evolutionary development. For that purpose it has to install an adequate intelligence and control system.

But, monitoring and controlling is only the one side of the same coin. If it is necessary, the government also has to support the co- evolutionary development of the system through specific budgetary and institutional instruments. On the revenue side of the budget, for instance, a growth and progress oriented tax system may be an effective instrument, on the expenditure side investments in education and research seem to be adequate measures and on the institutional side means like

standardization patterns and property rights as well as regulatory activities can be recommended.

4. Behavioural Distortions in a CNSE-Context: Determinants of Crisis

When and how can and will economic crises, like the one we currently experience, occur in an ideal framework of CNSE, as just described?

Probably the most relevant cause of a major crisis in terms of the CNSE is a severe dysfunction of the symbioses between the three pillars: industry, finance and public sector. Once the harmonic, balanced cooperation between the macroeconomic subsystems malfunctions for a longer period of time critical situations and even crashes will be inevitable. Generally, such crises will commence, first of all, in the real economy whereof very often some extraordinary economic success could pull the trigger. Starting from there, negative effects will spread out into the financial sector, they will gain more and more importance there and eventually touchdown in the state sector and its institutions.

The reasons for such a spread of crises, occurring as a process of certain phases, can finally be determined quite clearly, although the whole events seem to appear rather complex. Finally, they can be traced back to changes in the behavior of the relevant decision makers and, subsequently, to changes in the manner and shape of task fulfillment in the three pillars.

This very important thesis can be illustrated quite well, using the global crisis which we are still stuck in as a good example. As we saw, it started all out with the great success of the IT sector in the US during the 80s and 90s. Spreading out all across the globe, this huge success also was

responsible for the over dimensional scales of company evaluation known so far. At the end, fortunes were paid in the so called "New Economy" just for phony and rather unpromising ideas and projects. Because these were almost not based on real performance and future economic potential. Decisions and taken actions were more or less exclusively determined by great expectations, hoping for enormous future revenues. Normal commercial thinking turned rather quickly into speculative greed and dullness creating a delusive world, which was lacking any kind of a real economic basis. Thus, as a consequence, the real economy pillar had to falter sooner or later, which we all could witness at the end of the 90s.

Parallel to this development, a change in business conduct occurred as well in the financial pillar. Instead of accompanying real activities of firms critically and supervising them as symbiotic partners, banks also recognized the advantages which illusion and speculation granted. Instead, they focused more and more on mere financial transactions like derivatives and warrants. This way, the bankers' critical common sense was replaced by a rationality which concentrated primarily on short-term and speculative profit seeking, without making the necessary efforts in terms of conventional banking. So, the crisis on the stock market and the downfall of the "New Economy" was just a logical consequence caused by the behavioral changes of the economic actors.

How did things stand at that time as far as the state sector is concerned? Politics as well, especially in the US, recognized the new possibilities, disengaging itself from the duties connected with a prosperous relationship to the other pillars, which — as we know — should have focused on the control and regulation of the excessive events. On the contrary, politics pursued its own behavioral rationality which is, in democracies, mostly the maximization of votes. And, the easiest way to

gain votes in the political competition is by offering election gifts, especially granted to the social sector of an economy and based on public debts and financed by (private) banks.

Thus, a new and very particular symbiosis between the financial and the public sector arose almost unavoidably. However, this specific cooperation was not founded on one general principle of striving for social welfare, but, instead, on two separate and contrary objectives: maximization of speculative profit on the one hand and maximization of votes on the other. Especially in the US a scenario emerged, in which social policy – in the meaning of maximizing votes – was primarily meant to be the right of owning a house or a small real estate. And, this desire was easiest met by benevolently inspecting and controlling the required financing through the bank sector. The reason the latter was willing to do so is mainly due to some kind of implicit security guaranteed by the government to banks and insurance companies. Another reason might be the availability of cheap money the central bank was responsible for on behalf of the government. Furthermore, the efforts corporate finance made to replace the speculative sector of the "New Economy" with a new sector, which as well holds the possibility and sufficient potential for speculative transactions, played a crucial role. There is no need to describe what emerged from this infamous alliance between politics and corporate finance. We are still suffering the most severe crisis since the great depression, which could even extend to a national default in countries like Greece, Ireland, Portugal or even Spain with highly visible consequences for Europe and the rest of the world.

What Greece is concerned, it was just small potatoes in the described diversity of interests, a parasite which made itself quite comfortable in a

world of economic illusion, cheap money and the aggregation of public debt. Why should it behave differently to the US which served as a role model for so many countries and where speculation and debt played a much larger role than it was the case in Greece? Also, the other European countries did not really shine in selfless abdicating from gambling around the golden calf of public debt. So, is it really appropriate to blame it all on Greece? This country, and at the moment also Ireland, and maybe Portugal, was the unlucky fellow that attracted global financial speculation, because of being the weakest link in the chain of states belonging to the Euro zone.

5. The Neo-Schumpeterian Corridor: Theoretical and Political Aspects

Having CNSE in mind, an improved understanding of development processes in modern societies and an effective public policy governance, which should build on that, can only be expected, when the coevolutionary dimensions and the proper role of the three pillars are taken into account. This can be illustrated within a concept which we introduced earlier as the Neo-Schumpeterian Corridor.

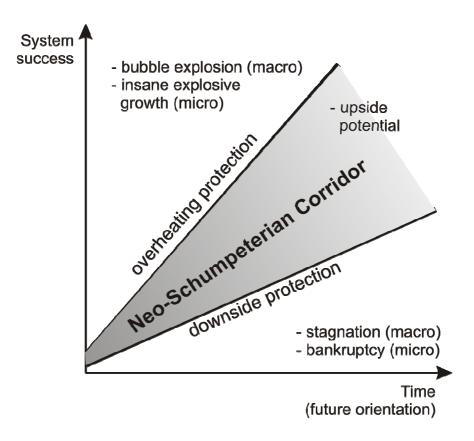


Figure 2: Neo-Schumpeterian Corridor

Such a corridor is designed in a future oriented way and represents an open space for development which runs acute-angled between two axes representing time and economic success and in which the innovation and firm driven dynamics of modern economies can be modeled. Within this corridor, economic entities, companies as well as economies, can move freely and can choose a success-based and promising position dependent on their specific preconditions. In this sense, the corridor also serves as an outline for possible developments that political actors in their governance have to respect as well.

Without doubt, the essential asset of this concept is its future oriented focus. It is of utmost importance for the long-term stability of the economic system that its progress is neither too large nor too small. Too little growth cannot establish an advancing dynamics, and the standard of living in an economic area would have to suffer. The increase in

investments would be insufficient both in the private and the public sector as well as with respect to physical, human, intellectual and social capital. The people will then adopt a negative view on the future development and, therefore, oppose and block the creative access to innovations and risk propensity. These two elements, however, sum up the driving forces of development in a capitalistic economy. At the end of a period of insufficient growth, the living conditions will inevitably decline on a relative basis. The relative recession may even be aggravated, if other regions, nations or economies achieve a higher growth and standard of living.

The same is true for the case of an economy that is too successful and attains growth rates far above average, rates which may be neither sustained nor stabilized. This success may very well create the positive and optimistic basic attitude in the economic agents necessary for future-oriented operations. But, rapid growth is also always linked to an accelerated process of change in the structures of an economy and in the behavioral attitudes of its agents.

Concerning the structure there are sectors which are readily expanding and others that do not grow as dynamically and so cannot keep up with the fast pace of development pushed upon them by the fast growing domains. The real development in such an economic system will then be determined by two velocities. The forces that impose and can bear the high speed will be found in the innovative and strongly growing sectors and companies, while the sluggish variables fall into the sectors of low growth. As long as the latter serve as a natural brake for an exuberant economic dynamics, the economy will continue to position itself within the corridor and quite possibly even at its upper boundary. From a theoretical point of view, this is the best and economically the most

successful situation for an economy. Admittedly, this case will empirically only occur in the rarest cases for a longer period of time.

For the structural conflict between the fast and the slowly developing industries in an economy can – even if it was limited to the real sector and therefore seems to follow the Schumpeterian ideal of "creative destruction" – lead to the complete breakdown of the entire system, because the inert sectors can no longer support the high pace of growth of the dynamic industries. This may happen when, for example, the infrastructure, the training of employees or the adaptation to customers' wants or suppliers' conditions cannot be altered and harmonized rapidly enough and will then work as a scotch block for all sectors.

Still, this case may also be seen as an exception, just as the "natural" adjustment of dynamic and retarding forces in an economy or an economic region. Empirical findings and the history of economics show that, in general, two spheres of action are responsible for the determination of the state and the position – within the corridor, the overheating or the stagnating zone – of an economic body. The causal factors are in the real sector on the first part and to a large degree in the financial sector of an economy on the succeeding part.

So, dynamic industries, such as the IT-sector in the 90s, will incite the attention and the interest of all those economic actors who desire to participate in the boom in fast growing domains as financial investors and who will want to also enjoy the high returns achievable. The technology driven expansion in the dynamic part of the industrial sector will then be spurred and artificially inflated in the asset part of the financial sector and might even be triggered to a boom by the greed and short-term focus of the financial investors.

It is this finance-based and behavior related overheating that can topple the whole economy into a severe crisis. This will always happen when we observe a situation where the market is full of fear of inflation and where the monetary policy is quickly shifted from an expansion to a contraction strategy. Just as we can see in the examples of Japan and the USA, this will lead in most cases to a panicking reaction of private investors in the financial markets. They suddenly see their return opportunities going down the drain and try to save all they can. Financial bubbles that had been built up in the time leading to this point will burst and in its wake will tear down the industrial part of the economy. The more important and faster a technology induced expansion of an economy changes the behavior of investors from a more or less rational, risk-aware pattern into a kind of irrational, risk-neglecting attitude, the more it will develop into a financial boom and bubble. And, the more interconnected an economy is in the worldwide sphere, the more global and dramatic the consequences and crises will appear.

The only sensible path for a future-integrated, continuous and sustainable development of an economy or of an economic system is, in my opinion, a political strategy of having monitored and moderate overall growth with a corresponding rate of development. Only then all structures, both in the real and the financial sectors, can advance within the Neo-Schumpeterian Corridor in a "healthy", co-evolutionary way. So it is the government and the central banks that bear the responsibility to generate an almost natural balancing between "Fast" and "Slow", between "Dynamics" and "Statics", between "New" and "Old". The fast growing industries must have the possibility to expand without risking having their dynamics devitalized by the more sluggish sectors. On the other hand, the latter are supposed to form a natural brake that prevent the development of an excessive dynamics, both in the industrial and in

the financial sector. It is the responsibility of the public sector to provide for a framework which is designed in a way that hardships in the present - such as can arise in regular cyclical recessions – can be shouldered and that successful developments in the future are stimulated. An economic system can achieve such a secure long-term strategy which minimizes the risks of a boom as well as those of a drastic crisis exclusively only, if it moves within the Neo-Schumpeterian Corridor, if possible at its upper end.

The idea of such a corridor however presupposes that the political sphere can actively decide on the framework and take the appropriate measures that can effectively and timely tame and dominate those forces in a capitalistic system which continuously try to go through the roof and risk exiting the corridor towards an excessive growth path. On the other hand, politicians have to make sure that an economy will not fall out of the corridor, and that it will not have to cope with economic stagnation. Probably the greatest challenge for academia and politics in the next years will be to bring this Neo-Schumpeterian Corridor to life by providing the economic and political content of implementing the right strategy. Let me give you a few proposing remarks on how this role could be assumed in a future-oriented way.

Let's start with an economy situated inside the Neo-Schumpeterian Corridor.

In order to judge the macroeconomic situation from a theoretical and political point of view, without doubt, we have to recur to the Schumpeterian Approach. In this part of the corridor, it certainly finds its truest meaning. I have listed the most prominent aspects of this approach earlier: We need innovative entrepreneurs and responsible bankers as *actors* in the economic sphere who can restart again and

again the dynamic process of change and progress which only they can achieve. Maybe, I should also point to the importance of "capabilities" at this point, meaning the ability of economic actors to generate innovation. For, those abilities have the power to secure the individual in a certain way against both the risk and the uncertainty which are necessarily connected with change in the future. Only those capabilities provide the courage and the heart to cope with uncertain events in a future-oriented way.

The first important goal for the public sector governance is therefore to strengthen the dynamics within the economic system. The main task is to recognize and maybe also support those sectors which hold the economic potential for the future. The process of "creative destruction" is closely linked to this and it is important to keep this process going if and as long as it works in a healthy way.

In this field of economic development, we find the true domain of modern economics of innovation or the concept of industrial dynamics. Both offer a score of instruments when it comes to preserving and supporting economic dynamics. They include education and R&D, patents and competition laws, measures to reduce risk or increase risk awards, for instance through the tax system, or direct support through public subsidies or consumption. I prefer to leave this thought here and focus on two other goals which are of importance while we find ourselves inside the corridor.

As a second goal, we should avoid an overheating of the system. The importance of this goal grows as an economy moves towards the upper border of the corridor. On such a development path, it bears in itself the high danger to break through the upper bound and that an exaggerated optimism spreads among the economic actors, which can then lead to

greed, ruthless behavior and as a consequence to a bubble creation in the financial sector, as well as maybe in other fields of the economy. Through increased observation, control and regulation, it is possible to recognize and counter such excesses in time.

In this respect, I would like to point explicitly to the danger arising from overly complex networks. A very good example is an uncontrolled interconnection between the financial and the real sector as it can easily arise in the real estate activities. But it can also refer to global conglomerates in the financial or the real sector which are above all present in successful, export oriented countries. In both cases, the whole economy risks an enormous dependence on these companies which can be described – in a modern way –as a systemic risk. The most important aspect of such a development, however, is that the process of "creative destruction" is virtually abolished. Because of huge external effects going along with a downfall of system relevant companies, the destructive part of economic development will overwhelm the creative one and risk the collapse of the entire economic system.

This leads me to the third goal within the corridor, dealing with avoiding a structural breakdown of the system. To reach this goal, it is important to closely watch and actively accompany the process of "creative destruction" for example through fostering education and R&D-activities which is the same as increasing the capabilities of the economic actors. This can certainly either avoid or at least slow down growing differences between sectors, for example between new and old industries.

Such a situation will occur mostly in those cases when diffusion dynamics of technology and innovation grow too large in one or even several economic sectors and when the danger of a bubble creation rises. In those cases, the most important task is to reduce risk and complexity for the slow growing domains of the system. The public sector has several measures at hand to achieve this: concerning the labor market, it should, for instance, work towards an order which combines the principles of flexibility with security, which is also called flexicurity. In the goods market, appropriate processes of standardization can work in this sense, while the financial markets and their effects can certainly be influenced through the insolvency laws for example.

But what happens if the public sector fails to hold the development within the corridor? Let's first consider the situation above the corridor and the consequences that result from it.

The first consequence, which we will have to accept, is a decreasing importance of the Schumpeterian Theory and an increase in those theoretical and analytical approaches which are linked to rather chaotic dynamics. On the one hand, in this case, the behavior of the economic actors changes just as we could observe often enough in the economic history. Regular conduct which may often be equaled to rational behavior is replaced by more and more irrational attitudes. We find ourselves in a world which is far away from any equilibrium idea and where we, accordingly, need far from equilibrium theories to explain it.

Three other goals seem to be predominant in such an unusual situation:

Firstly, it is in the interest of the public sector to return to a path characterized by sustainable dynamics. This refers, above all, to slowing down those sectors, which have sped up too fast to a supportable rate of change. This can be achieved through tax policies which influence the risk management or regulating intervention through legal standards for companies. I would not suggest central banks' measures such as rapid increases in interest rates since the recent history has shown what a sharp fall of the whole economic system these may induce.

As a second goal, I would like to propose that we should create new opportunities and preserve variety to breed future success. This goal is very important, for – even when a system lies at a point that can be considered as a boom or an expansion – we cannot afford to lose sight of the future. And the future will be shaped exactly by those new and emerging sectors, which can be supported by common and widely used measures.

Apart from the dynamic sectors, the public governance also has to keep an eye on the overstrained sectors and set the goal to keep them in the game. Those sectors can serve as a necessary counterpart to overheating dynamics. Furthermore, if the rate of change in the fast growing sectors is too high for those less flexible and less adaptive fields of economic activity, then the system risks falling apart. Therefore, supporting the slow-moving parts of the economy will increase their potential and therefore permit a higher dynamics for the entire system. This support could be achieved by reducing the complexity in their economic environment, by establishing better standards for them or by making risk more manageable and foreseeable.

The most important goal in this context, however, is in my view to avoid an explosion of the bubble. Two fields and their corresponding political instruments are the keys to reaching this goal: the fight against asset inflation and the introduction of stricter measures of control and regulation. In both fields, governments and central banks have unfortunately, as we have to recognize today, failed miserably during the last decade.

Last but not least, let me shortly consider the situation which marks our times today in such a dramatic way, the situation below the corridor. In this part, the demand-oriented Keynesian theory and policy certainly have a higher value, especially when it comes to alleviating and curing the deflationary consequences of serious crises in their intensity in a short- and medium-term perspective. Schumpeter and his theoretical work offer in that respect the first part of a "boom-bust" story, which concerns the core explanation of capitalistic development processes in the real economy.

Keynes and his politico-economic instruments focus more on the subsequent part, which has to deal with the financial repercussions concerning the demand for investment and consumption and avoiding the breakdown of the entire system by rescuing systematically relevant economic actors.

6. Political Governance in the Current Situation and Future Prospect

We certainly do not need to point out specifically, that fulfilling the mentioned goals is an extremely complex and difficult political challenge concerning the intelligence as well as the instruments to be used.

As substantial as this task may be, there are a few rough and avoidable mistakes in politics which we can already point out today. The political frame should by all means not be limited to singular, not deeply thought through, reactive measures such as have been discussed largely in Europe and worldwide for the financial and other sectors of the economy.

Due to the prevailing mind of the important makers and shakers in academia and politics, who consider the government to be a sort of repair garage of last resort, the people in charge are skating on thin ice and risk overreacting. They think that they have recognized some

defaults in the market system and are trying to eliminate them by very strong public involvement. Apparently, this provides the government with a role and responsibility that exceeds by far every so far accepted dimension. The currently discussed inventory of possible measures represents exhaustively the whole spectrum of public activity: intervention, regulation, control, and nationalization are the most frequently cited terms when it comes to using governmental help to cope with both the financial crisis and the developing economic crisis. This can be an extremely risky attitude, especially when it leads to a policy of partial "piecemeal engineering" and when the overall context that characterizes modern economies is not respected.

From a Comprehensive Neo- Schumpeterian perspective the focus should be much more on the dynamic overall performance of a capitalistic economy which is on the brink of transforming from an industrial into a knowledge-based system. This evolution is driven by the three most important pillars of its economic and social regime, which are, as we know, the real economy, the financial and the public sector. All three have to serve the future design of societies and economies and assume a corresponding role in the Neo-Schumpeterian Corridor.

As we saw, in the upper part of this corridor, politicians have to watch out for signals and possible developments typical for the supply-oriented Schumpeterian approach which can be systematically analyzed and cured in that context. In the lower part, the demand-oriented Keynesian theory and policy certainly have a higher value. The Keynesian therapy may take the edge off in times of a "Schumpeterian crisis", the sickness of a market economy in very grave and delicate situations, such as the current one. And, if not heal, at least it can bring some short-term, temporary relief and improvement.

Nevertheless, I would like to end with some warning and also some motivating words. Through all the enthusiasm for Keynes, which appears during the current economic crisis around the globe, we should not forget that the Keynesian approach only follows a short-term concept that focuses on the present situation. The present, however, is only a building block of the future towards which we are all moving together. Current political actions will not only address economic problems that are nowadays apparent. At the same time they create the basis and the limits for the future. Both sides of the coin have to be in the focus of a foresighted crisis policy for today.

This means that we should, on the one hand, watch and weigh closely the limits and risks which will be built up by an overshooting and excessive use of political instruments. Most importantly, my concern is here the enormous, almost unimaginable amount of money which the governments are willing nowadays to add up as public debt in order to rescue shabby yet apparently system relevant - or put more directly system risky economic actors. What it comes down to, however, is that the state authorities will probably not reach any other result than to turn private debt into a public one. This obviously leads to a new and dangerous trouble spot: the current policy measures which are meant to restore trust and economic courage in the market might in the end prove in a most likely and massive way to be most harmful for the future development of economies as well as societies and institutions. Let me put this even more bluntly, just as the German philosopher and unconventional thinker Peter Sloterdijk did it in a recent article in a major German newspaper: Today's present is obviously looting, maybe even in a reckless manner, from tomorrow's future!

On the other hand, we could just take this crisis not only as a huge danger, but also as an opportunity opening new paths in a recently unseen dimension for society and politics. We could, for example, use the readiness of our society to accept and support change and reforms, which has grown tremendously in all European countries during the crisis, to enter into something like an "Alliance for the Future". This would help addressing future-oriented problems largely neglected in the past., such as climate protection and alternative sources of energy or the redefinition of the intergenerational contract in the health and social system. A crisis policy following those ideas would not only mitigate or even overcome the current hot spots. It would at the same time create new possibilities and opportunities, or let me say, the necessary potential for the future.

Certainly, it would help to achieve a successful linkage of today and tomorrow, generally in politics and collective action, of statics and dynamics, especially in theory and practice and, last but not least, of Keynes and Schumpeter in economics and social sciences.

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