

*Alojzy Z. Nowak**

Out of the Crisis – But How? Post-Crisis Scenarios of Economic Growth

Abstract: *This text examines the post-crisis scenarios of economic growth. In order to explain the possible variants of future developments, it first provides an account of the crisis and describes the diverse types of state interventions used to control the crisis, and their immediate effects. Next the various possible scenarios of economic growth are considered, taking into account their probabilities, e.g. low likelihood of a consumer boom, possible increase in investments, but reasons as well for its possible decrease. Further on the article assesses the dynamics of the growth factors presented and the role of global co-operation in handling the crisis. The Author concludes that in order to avert a repeat financial meltdown, a mix of strategies and approaches needs to be adopted.*

Introduction

The question whether the present economic crisis is already nearing its end is answered differently by different experts. Some argue that the large-scale intervention by ultimate creditors (governments and central banks) will put an end to further loss of liquidity by the principal economic and financial entities (commercial banks, investment funds, insurance funds, etc.) and that this injects optimism into the real economy, which should soon translate into economic growth and to incrementally pulling out of the crisis. Others point out that, firstly, due to the volume and diversity of financial instruments still in circulation (including the so-called toxic assets), the present crisis has only slowed down and that the worst is still ahead. Secondly, in their opinion serious prob-

* Prof. **Alojzy Z. Nowak**, Ph.D. – Professor of Economics, Dean of Warsaw University School of Management and the President of the Research Board of the National Bank of Poland.

lems still remain, including a worsening in consumer confidence, lack of faith in the future, lack of strategies for development of the global economy, of the economies of leading countries, and of the economic-political organizations, as well as deteriorating moral and ethical principles in business.¹

It seems that such a substantial difference of opinions stems from the fact that the present crisis is not like previous cases of sudden breakdowns of business prosperity.² Thousands of detailed, often mutually contradictory pieces of information flowing from various countries blur the image of changes occurring in the global economy even further.³ We have to deal with a staggering mix of information, both positive and negative, which may mislead experts into incorrect conclusions.⁴ This is especially the case in the 'mixed' economies of Poland and other countries of Central and Eastern Europe, where the free market has not yet taken hold completely and sectors of the old planned economy work alongside the modern economy. In addition, as relatively new member states of the EU they are expected to develop innovation and entrepreneurship.⁵

1. The account of the crisis

The bursting of the bubble in the real estate market and the resulting crisis in the banking sector and slump in capital markets caused a general decrease of prices, both of financial and material assets. In consequence, a strong effect followed relative to properties – that of a serious decrease in aggregated demand, bringing about a reduction in their value. This, in turn, led to shrinking income on savings and on investments. In many cases this downfall reached double-digit levels, with declines in values and income as high even as 30 percent or more.

Countries hit by the crisis experienced a decrease in private consumption, in overall investment volume, and as the crisis spread to most of the world, also in the volume of exports. In this manner, the financial crisis infected the sphere of the real economy as well.⁶

¹ See generally: P. Krugman, *The Return of Depression Economics and the Crisis of 2008*, W.W. Norton & Company Inc., December 2008.

² *Great Depressions of the Twentieth Century*, ed. T.J. Kehoe, E.C. Prescott, Federal Reserve Bank of Minneapolis, 2007.

³ J. Stiglitz, *Capitalistic Fools*, "Vanity Fair", January 2009.

⁴ See: http://wapedia.mobi/pl/Kryzys_finansowy_2007-2009

⁵ See: <http://globaleconomy.pl>

⁶ W. Nawrot, *Globalny kryzys finansowy XXI wieku (The 21st Century Global Financial Crisis)*, Warszawa 2009; G. Soros, *The New Paradigm for Financial Markets: The Credit Crisis of 2008 and What It Means*, "Public Affairs" Vol./May 2008.

The crisis in the real economic sphere may be illustrated using directions of changes in the streams that compose the gross domestic product (GDP). Accordingly, there was a fall in private consumption (C), investments (I) and in foreign trade volume, thus also affecting net export (X). On the other hand, governmental expenses (G) increased in most countries, including the USA and the European Union.⁷

In consequence, in many countries budget deficits were seriously exceeded in relation to the accepted reference level (3 percent of the GDP). In countries particularly strongly affected and usually heavily indebted, governmental expenses not only did not diminish in proportion to reduction in private demand, but on the contrary increased. The trends that accompanied these changes may be expressed in the following way:

$$\text{GDP} = \text{C} \downarrow + \text{I} \downarrow + \text{G} \uparrow + \text{X} \downarrow$$

Perceived threats stemming from the crisis (such as an abrupt increase in unemployment, drops in production and investments, weakened consumption, or increase in budget deficits and greater public debt), as well as the negative experiences of previous economic slumps, including in particular memories of the symptoms and consequences of the Great Depression of 1929–1933, prompted most States to undertake intervention to control the crisis.⁸

Expansive fiscal and monetary policy, expressed in the GDP equation above as ‘G’, means an increase in governmental expenses. This, however, should not be regarded in a Keynesian way as a demand-creating mechanism, using a multiplier. It seems that it wouldn’t be correct to treat it in such a way, since if the Keynesian understanding of ‘G’ expenses was applied, then they would actually open a way out of the crisis and would also allow the process to accelerate, and in so doing would probably assist in controlling the rise in unemployment. In reality, however, a different, more complex path was chosen – to act indirectly upon private demand. It seems that this idea was mainly targeted at preventing banks from a wave of bankruptcies, as this could have entailed further bankruptcies of companies in the real economic sphere, leading to a domino effect. Therefore, the combined actions of governments and central banks were targeted at both controlling the wave of bank bankruptcies and maintaining private demand.⁹

⁷ J. Davis, 2009, *Managed by the Markets: How Finance Re-Shaped America*, Oxford 2009.

⁸ J. Godłów-Lebieź, *Strukturalistyczna teoria zatrudnienia Edmunda Phelps’a (Edmund Phelps’s Structural Theory of Employment)*, “Gospodarka Narodowa” Vol. 9/2008; T.J. Kehoe, E.C. Prescott, op.cit.

⁹ J. Stiglitz, *The Triumphant Return of John Maynard Keynes*, “Guatemala Times”, 5.12.2008.

2. The intervention to control the crisis

The intervention was carried out through two separate channels: fiscal and monetary ones, both serving the same objective: i.e. first and foremost to maintain the financial liquidity of principal financial institutions, in particular the commercial (deposit/credit and investment) banks, at adequate levels. Technically, the intervention consisted either in the purchase of threatened financial assets by the ultimate creditors, or purchase of shares in threatened financial institutions, mainly by the government, which meant their de facto nationalisation. In consequence, most advanced and some emerging economies experienced a massive issue of public debt, aimed at maintaining, on the one hand, the liquidity of the financial system underlying individual economies, and on the other hand at financing fixed expenditures as well as new expenses, in an attempt to keep aggregated demand at previous levels. Expenses related with granting governmental subsidies and guarantees to banks and other financial institutions also increased. All these efforts took place in a time of decreasing budgetary income, caused by the worsening of the business outlook. The growth in expenses combined with decreasing income made it necessary for many governments to take on added public debt, by among other things issuing debt instruments.

These operations were carried out in different ways and with different effects from one country to another. The most effective, and relatively cheap in terms of costs, was the action undertaken in the USA in the form of issuing bonds and treasury bills.¹⁰ In the old established free market European Union countries (such as Germany and France) it took some more time and involved higher interest rates. However, new EU Member States encountered difficulties in selling their debt instruments, perhaps with the exception of Poland – one of the few developed countries worldwide to record a positive rate of economic growth throughout (even at the very peak of the crisis) and to enjoy good prospects for future growth.¹¹ It remains to be seen how other (non-emergent) markets have fared.

Central banks, for their part, loosened their monetary policy, offering relatively cheap and readily available credit to commercial banks. Some of them, including the Bank of England, issued some extra money. Basic interest rates have been lowered significantly (this mainly relates to the USA and most EU

¹⁰ N. Ferguson, *Amerykańska Nemezis – czy kryzys gospodarczy zwiastuje koniec hegemonii?* (*American Nemesis – Does the Economic Crisis Herald the End of Hegemony?*), "Europa", 27–28.09.2008; J. Davies, op.cit.

¹¹ W.R. Mead, *Dobroczynny wpływ kryzysu? (Beneficial Influence of the Crisis?)*, "Europa", 24–25.01.2009.

countries, including the Economic and Monetary Union and the European Central Bank), as have the level of mandatory reserves required.

Altogether, governmental spending and monetary expansions (especially those by the U.S. Federal Reserve (Fed) and Bank of England) have prevented the present crisis – at least insofar as the real economy is concerned – from becoming a total disaster. It is possible to argue that the decrease in GDP was limited to 5 percent instead of 20 percent, the latter being the scale experienced during the Great Depression, while the increase in unemployment was only half that of the Depression period. This is not meant as reassurance, suggesting there's nothing to fear for the future, but rather to justify, to a certain degree at least, the methods applied by individual governments and central banks to counteract both the causes and the symptoms of the crisis.

3. The immediate effects of the intervention

Prompt intervention on the part of governments and central banks made it possible, firstly, to maintain the financial liquidity of many commercial banks and financial institutions, in practice offering a number of them a life-line to rescue them from the prospect of imminent bankruptcy. Secondly, the intervention managed to retain demand, thanks to governmental expenses on collective consumption, personal services, and investments in infrastructure (e.g. construction of roads). In doing this, the intervention managed to maintain aggregated demand at a certain level, despite a serious drop in demand in the private sector. Thirdly, consistent action on the part of governments and central banks managed to maintain credit, thus preventing a drop in business activity, by ensuring financing in the real economic sphere without major obstacles. Guaranteeing the security of bank deposits, the buyout of 'toxic' assets from banks, reduction of central banks' interest rates, and the more generous credit offered by commercial banks are all aimed, as mentioned above, at supporting business activity, aggregating demand, and maintaining production and employment.

In effect, the declines in production, employment, consumption and investments, especially in areas financed from public funds, were less serious than they would have been had not such a strong and determined State intervention been implemented. As a result of the resolute intervention on the part of governments and central banks, it was possible to avoid a crisis probably as devastating as the Great Depression (1929–1933). A deep recession has in fact remained, but even if the present condition may be described (as this author posits) as a crisis, it needs to be noted that disaster has been averted.

Having said that however, a crisis unsolved, controlled at an enormous expense, mainly at the cost of public resources via a massive injection of money pumped into the economy by both governments and central banks, still poses serious problems related with efforts to improve the situation and rebuild the process of growth. Many economists and politicians remember with anxiety the crisis in Japan at the turn of the 1980s–1990s. Although it was contained by strong monetary and fiscal interventions by Japan's central bank and government, the country was plunged into inertia for most of the subsequent decade, ending three decades of dynamic growth.

4. Possible variants of economic growth

While it is not very likely that the Japanese scenario will be repeated, either in the USA or in Europe, if only due to different tendencies towards savings and different traditions in forming aggregated demand, it nevertheless seems worthwhile to analyze several possible variants of economic growth.

First we shall consider the growth potential of Gross Domestic Product from the demand side separately, in terms of its basic components: private consumption (C), investments (I) and net export (X) in conditions when an 'extra drive' in the form of public expenses (G) comes to an end and monetary policy becomes more stringent again, or even restrictive.

To begin with, the private consumption (C) and economic growth that has survived in certain countries despite the economic crisis – China and India being notable examples – has been stimulated by a growth in internal consumer and investment demand. In Poland too domestic demand, and in particular consumer demand, along with maintaining exports, has managed to stave off a decline in production and made it possible to maintain a positive rate of GDP growth, both in 2008 and 2009. In most countries suffering from the crisis, especially those where households were heavily indebted, the slump in consumption contributed to a profound recession (Ireland, England, USA and others). A very serious slump in consumer demand also occurred in the Baltic countries (Estonia, Lithuania and Latvia).

Signs of recovery, coming from industrial companies which have already started to rebuild their resources in many countries, and in particular signs of recovery on stock exchanges and in general on capital markets, also seem to provide evidence of a gradual reconstruction of consumer demand. But our optimism in this area remains muted. It is still an open question whether the billions of dollars and euros pumped into the financial system will bring about an increase in consumer demand, or in the best case scenario even generate a consumption boom. This, unfortunately, cannot be given an unconditional

positive answer. In any case we are probably not facing an imminent and direct threat of inflation (although one hears about it now and then), which theoretically could arise from an increasing demand on the one hand, and on the other from an excessive amount of money having been pumped into the economy in the form of financial aid and, in some cases, the printing of too much money. Instead, it seems there are at least a couple of reasons why the likelihood is small that a consumer boom will follow in the near future, causing inflation.

4.1. Low likelihood of a consumer boom

Firstly, in rich countries, and in particular in the United States, in the years preceding the present crisis earnings were increasing very slowly and the growth in average pay was largely due to the dynamic growth in earnings of people belonging to highest-income groups, including in particular members of managing boards of banks, investment funds, insurance institutions, high-level investment advisers, members of managing boards and experts of counselling companies and so on.¹² Pay increases offered to regular employees were in general minimal or none at all. This led to a larger stratification of earnings and income, which resulted in decreased effective demand. No acceleration in earnings growth should be expected soon, due to, among other things, a high and ever-increasing rate of unemployment (at present, in November 2009, *circa* 10.5 percent).

Secondly, household indebtedness, i.e. spending, on consumption is not going to rise to the high levels it was at before the crisis. In the first place, consumers still have to cope with debts they incurred during the period of unbridled optimism. In short, they have to pay them back, together with interest, before deciding to take on new credit, and all the circumstances indicate this is what is taking place. Secondly, banks will probably examine potential debtors more carefully and apply more stringent rules in order to avoid lending to persons unable to repay their debts. In addition, the price of credit will probably rise as a result of lowering the level of leveraging bank assets and in consequence of banks' new cautionary procedures aimed at providing better security for credit granted.

Thirdly, it is almost certain that even a renewed increase in the values of material and financial assets (e.g. in relation to a significant boom on the stock exchanges) will not constitute a strong impulse property-wise for consumption, at least in the short-term. If anything, such an effect will probably be asymmetrical – i.e. the impact of decreasing prices upon financial and mate-

¹² Stiglitz J., 2006, *Making Globalization Work*, USA, W.W. Norton & Company Inc., September, 2006

rial assets being stronger than the impact of increasing prices upon such assets brought about by an increase resulting from prosperity. Therefore, it doesn't seem right to expect that extra income from capital investments, appearing in the asset calculations of households, will translate into any additional increase in consumer demand. Households are more likely to want to first rebuild their savings, partially eroded by the crisis, and only then become interested in consumer purchases. In fact the Piegou effect seems to work in such situations almost without exception, which is easily confirmed by observing consumer behaviour after similar economic crises in the past. The depth of the present crisis suggests it may be the same way this time and that it will take a long time to rebuild aggregated demand.

4.2. Reasons for a possible increase in investments

If the impact of intensified public expenditures ceases, in other words, the engine driving private consumption (subsidies added to the private purchase of cars being a good example) is turned off, then consumer demand may decrease once more. This may mean that the process of recovery from the crisis will look more like the letter 'W' than a 'V' (at least with respect to consumption). Such a situation could translate not only into a lack of significant improvement in the rates of economic growth, income growth, consumption growth, or job growth, but even lead into economic stagnation or, worse still, stagflation (economic stagnation accompanied by inflation), in consequence of too much money being pumped into circulation by ultimate creditors.

In terms of business cycles, we know from the past that recovery following the stage of depression always seems to start with an increase in investments (I). This is due to a number of reasons, of which the following are the most important:

- a) due to the large number of bankruptcies, many companies and other business entities are no longer able to compete, either due to the lack of funds or to general chaos on the market during a crisis. This process usually serves to 'cleanse the market' and, in effect, leads to improved opportunities for healthy businesses, strong enough to survive the period of hardship;
- b) a need emerges for renewal of productive capacities as they become obsolete, even during times of depression. This results, on the one hand, in increasing demand for investment goods – machinery, equipment, new technologies – and on the other hand, for renewal or replacement of inventories;
- c) new opportunities to implement innovation are created or made public during depression. Usually a period of crisis prompts universities and research institutes to intensify their activities, often subsidized by

central or local budgets, in order to absorb the unused potential of talented, jobless young people and/or to improve the skills of its employees. Experience shows that this process, combined with the stimulation of business-like attitudes among enterprises and their staff, tends to promote innovation and to create and implement new technologies and leads to greater patenting activity.

4.3. Reasons for a possible decrease in investments

In the present, not yet solved, crisis, largely held in control by the interventions on the part of the governments and central banks of many affected countries, the impulses listed above which encourage an increase in investments may become much weaker, leading to a decrease in investments. This could stem from the following reasons:

Firstly, there still remains a large unused productive potential. Its only-partial utilization is the result, among other things, of the significant rate of its growth and development during the period prior to the crisis. Prosperity on financial markets, combined with a relatively high rate of economic growth and a globalizing world economy, motivated many investors to create and renew productive scientific parks, implement innovation, and apply technological changes. This was very apparent in both the United States and in the European Union, in the latter spurred by attempts to meet the Lisbon Strategy requirements, which called for the acceleration of technological changes with a view towards increasing the innovativeness of the EU member states' economies, improving environmental protection, and decreasing the level of utilization of energy resources. Other European and Asian countries undergoing systemic transformation modernized their economies as well. Hence the productive capacity of many countries has not yet become obsolete, in part also because the present stage of depression is still relatively short.

Secondly, prospects for sales of many finished goods are poor. This is especially evident in the real estate market and in the market for durable consumer goods, including, in particular, the automotive market. In many countries sales of houses, apartments and cars dropped by more than 10 percent and in some areas even more than 30 percent. This trend has been well documented both in the USA and the European Union, and even in some Asian countries. Due to the moderate forecasts for growth in consumer demand, many companies are limiting their production and large distributors are holding mass sell-outs at reduced prices. These phenomena clearly discourage the raising of production and, in consequence, an increase in investments. Worse still, this may become even more evident once consumers, impoverished by the crisis, start choosing cheaper goods offered by foreign manufacturers – in particular Asian ones (from China, India, Malaysia, Indonesia, Vietnam, etc.).

Thirdly, in the consumption sphere, and therefore also indirectly in the GDP structure, a relatively large share goes to services. Services, obviously, do not demand very high outlays in terms of fixed assets, except in the case of IT or other highly specialized types of services requiring state-of-the-art equipment, technologies, and organization. This latter type of services however, whilst very important to the economy, still hasn't achieved a significant share in the area of services as a whole.

Fourthly and finally, it seems that a boom on global capital markets, which can be observed recently, will not stimulate investments in new production capacities since it is neither reliable in the long-term, nor does it result from reasons fundamental to particular economies, except for some countries of rather minor importance on the economic and financial map of the world. Also, as is increasingly pointed out, discussed and seriously feared, the boom in question may in fact be the result of new machinations in financial markets, which may lead once again to another speculative bubble.

4.4. A dynamic combination of growth factors

As has been pointed out, there is much evidence suggesting that material investments (in productive capacity) are not going to substitute for public expenses (G) in the role of a motor driving economic recovery, unless financial markets again witness the emergence of a new speculative bubble, however, one similar to those seen in the past (in real estate or in the IT sectors), rather than – or perhaps together with – a financial one. Such a phenomenon could contribute to a growth in investments. However, considering the consequences of the financial crisis and attitudes assumed by regulators and governments in individual countries, which seem to be focused upon dynamic development relying on fundamental premises for growth, such a scenario seems quite unlikely.

Looked at in this light, all that remains is to count on further stimulation of economic growth through the influencing of the economy by the governments of individual countries i.e. through increasing (G). We are well aware that this is neither an easy solution nor – even less so – a universally accepted one. Nonetheless, the scenarios sketched above seem to leave no room for any other viable solution, at least in the short-term perspective.

Another factor that may play an important role in increasing gross domestic product is net export (X).

If, however, most countries in the world are affected by the crisis – the situation we actually have to deal with at present – the ultimate export balance can only be neutral and thus would fail to stimulate the global economy. While we know only too well that foreign trade contributes to economic growth and, indirectly, to improvement of general welfare, this only happens

in conditions of a stable positive rate of growth in the global economy. Under conditions of crisis, and in particular during a stage of depression, we rather have to deal with the so-called Keynes's situation. Generally speaking, this occurs when export really becomes export of unemployment and import becomes import of unemployment.

It is, accordingly, quite evident that even if the world manages to avoid protectionism during the present crisis – protectionism being judged so detrimental by many economists and, verbally at least, by as many politicians dealing with economy – then it would be next to unreasonable to expect that export will be capable of pulling the world out of depression, especially if we consider the present lack of financial balance, both internal (budget deficits in many countries) and external (balance sheets on current and capital accounts).

In conclusion, it should be made clear that none of the components of potential growth, taken separately, seems able to guarantee prompt recovery. Neither private consumption, nor investments, nor exports seem able to alone stimulate a recovery. If there is a chance therefore, it must be in all those components operating in concert.

The fundamental problem is whether it would be desirable or possible to achieve such a dynamic combination of growth factors in each individual country, or whether it would be more effective and necessary to organize this sort of combination on an international basis, aiming at some specific distribution of tasks or perhaps division of roles for particular countries. Further development of the global economy may thus follow along one of two different paths. It may enter another period of protectionism, as was the case in the times of the Great Depression. This time though it would certainly be a different type of protectionism than in the 1930s. What we have in mind is rather protectionism exercised by large countries and their coalitions as well as international organizations of countries, both formal, such as the European Union and less formal, like, for example, G-8, G-20, or even potentially a G-2 (China – USA).

5. The significance of global co-operation

Under present conditions, small economies have little opportunities for development by themselves. Above all, they have no effective means of protecting their markets from all sorts of economic turbulence and of defending their currencies against potential speculative attacks. This particularly relates to situations of protectionism, where there is an additional factor that has to be taken into account, i.e. that of distribution of access to resources, or, more

specifically, participation in the distribution of limited resources, fixed *a priori* under either bilateral or multilateral arrangements.

It may be assumed that this path will not be chosen as a viable way to get out of the crisis. At the same time however, it will not be possible to carry on the present path – that of unlimited liberalization of flows of capital, goods and services, as this has led to a profound imbalance in the global economy, thus becoming a serious source of tension, some of them underlying the present crisis. Global organizations and international institutions (IMF, World Bank, EBRD etc.) as well as various groupings of countries, such as G-20, G-7, G-2, are in search of common solutions. In this way, many different bodies on various planes are making a great effort to discuss and think about the proper regulation of global flows and how to reinstitute, insofar as possible, a state of balance. Unfortunately, endeavours to achieve global balance are not just about regulating the streams of goods, capital and technologies. It is also about changes in the way people behave, including consumers, producers, creditors and debtors, governments and citizens.

For example, in order to achieve a state of balance in material terms, the Chinese, Indians, Japanese and most Asians from the Far East have to consume more. The same seems to hold true in reverse with respect to Germans, Americans, Irish, Britons and especially Balts, who should produce more and save more. What can be concluded from this is that the U.S. Dollar and Pound Sterling should be weak in order to promote export, and the Euro, due to the Germans, should be strong, as should the Japanese Yen and Chinese Yuan. The Euro seems to be a troublesome case as it really should be weak and strong at the same time (the Irish – Germans). Or perhaps it would be advisable to introduce deficit limits in current accounts or surpluses in the same way in specific countries? Some economists and politicians will need to take such solutions into consideration.

However, before any adequate international order is developed the global economy is going to have to gradually get out of the crisis, even assuming a potential repeated slump in business conditions (i.e. in the case of the curve assuming the 'W' shape). Considering the still persistent high rate of unemployment, governments of individual countries will discipline their budgetary outlays very cautiously and make their monetary policies more restrictive. The vast amounts of money pumped into the economy at the peak of monetary intervention will remain in the market, and here the question arises about the threat of inflation. Owing to the reasons mentioned above relating to the chances of an increase in consumer demand, inflation seems less of a threat than does a new speculative bubble on the financial assets market. Cheap money and low central bank interest rates on the one hand, and on the other corporate shares, overvalued as a result of the crisis, present an extraordinary opportunity for strong

stock exchange players, especially for banks involved in investment activities. In fact, those big and strong entities that survived the crisis – thanks to State aid, by the way – enjoy easy access to credit. A boom stimulated by capital market tycoons will attract other investors, both big and small players. According to a pessimistic scenario, it is possible that the large investors, i.e. those driving the boom, will manage to get out in time, while small players will pay dearly for their illusions, contributing – in a certain sense – their premiums to consolidate the tycoons' fortunes even further. Therefore, this is another possibility with no happy ending. Indeed, not every symptom of recovery in the economy should be welcomed as something good.

The question of whether the Anglo-Saxon (AS), European, Asian, or some other form of capitalism works best is now being actively discussed. By and large, the prevailing opinion seems to be that the AS model has been shown to be deficient and even downright disastrous. It is true, of course, that much of the toxicity in financial assets originated in mortgage loans and securities made in the United States. Much of the process of financial engineering slipped under the 'regulatory radar', met with the approval of numerous experts in macroeconomics and financial economics, was popular with shareholders, and so on. It might appear that one needs above all to address loopholes that have now become obvious (e.g. the subprime mortgage loan), clamp down on the hedging products offered, limit systemic risk, and so on in order to prevent a repeat of the collapse of 2008. As evidence that such a tight monitoring regime would be effective, one might point to countries like China and India, which have to some degree insulated themselves from the turmoil that has rocked financial institutions elsewhere. By picking and choosing what they will permit, these countries appear to have found a magic formula for financial stability. But the growth of Asian economies has been inextricably tied to investments, technologies, and instruments from abroad. If China and India become more consumption-driven, they might well have to develop innovations (including financial) to sustain or accelerate economic growth. While it is true that, as Santayana famously wrote, those who fail to learn the lessons of history are condemned to repeat them, it is probably equally true that those who learn the wrong lessons are condemned to make other mistakes that could prove even more disastrous.

6. Concluding remarks

If we concluded that the origins of the crisis facing financial institutions and economies worldwide lie solely in the lack of sufficient regulation, or with any one segment of industry, that be a clear indicator that we have not

learnt the right lessons. In my estimation, in order to avert a repeat financial meltdown, a mix of strategies and approaches needs to be adopted. Combining regulation (both intra- and transnational), promoting ethical awareness and actions based on values (avoiding moral hazard and cowardice), the incorporation of diversity and independence in decisions of financial institutions, incorporating checks and balances in corporate governance, bringing greater pressure on fund managers to hold corporations to account, and achieving a balance of product/service and financial innovation, and much more needs to be implemented in tandem, with the appropriate amalgam depending on a particular society's context and needs.

So, fortunately, an optimistic scenario is also a possibility. Let us assume that the growth of production, recorded in the third quarter of 2009 in a number of countries, marks the beginning of the process of getting out of the crisis. This may turn into a new stage of recovery leading to a renewed prosperity, even if not as spectacular as it was before.

Such a scenario requires dealing with the multiplier effect of intervention undertaken by governments and central banks. The credit given by central banks managed to stabilize the financial liquidity of commercial banks, and governmental spending, by generating income, stimulated the growth of private consumption. In this way, the business cycle influenced by intervention applied by ultimate creditors would become V-shaped. And for the mainstream of macroeconomic theorists, including, in particular, neoclassic, this would signify pure defeat. John Maynard Keynes, believed to have been buried 30 years ago, would rise again from the dead and prove that State intervention brought desired effects. If this scenario comes to pass, one will be tempted to say that the intellectual heritage of neoclassic economic theory in recent decades really comes down to attempts to draw a map of virtual mountains.