

## Is New Economic Research More Qualitative? (Treatment on Forecasting Methods)<sup>1</sup>

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### Abstract

*This paper concentrates on whether research in economics is more qualitative nowadays, and asks for use of additional qualitative methods, not only in the entire respective field of investigation, but also in the field of forecasting. The second step in developing this idea is enumeration of different qualitative approaches, which are typical for forecasting including methods resulting from those approaches.*

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### Introduction

If we want to deal with the future, we must think about what kind of research we can develop, what kind of certainty our investigation can increase – or what kind of uncertainty can it bring about as well.

The multidimensionality of overall reality, dictates that we need to use a special approach concerning how to investigate reality as such, because we need to accept not only future forecasts of investigated reality, but also its multidimensionality. It is not possible to achieve this without oscillation among different diversities in thinking as such, and of course between qualitative and quantitative methods.

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In exploring the future it is also necessary to find a balance concerning use of qualitative and quantitative methods. It is necessary to explain, how and when we use qualitative methods, and how and when we use quantitative methods. As such, there are two broad categories of forecasting techniques: quantitative methods and qualitative methods. Qualitative methods are based on educated guessing, while quantitative methods are based on algorithms of varying complexity. They come in two types: time series methods and explanatory methods. I wish to apply the use of qualitative and quantitative methods concerning the future overall, on real investigative cases concerning economic issues. Therefore, I will try to follow the logic of my investigation in that sense; that I will concentrate on the necessity of using qualitative methods in the area of economic investigation, and on the other hand use of qualitative methods in forecasting areas.

I start from applying the view that the use of qualitative methods in forecasting goes hand in hand with use of qualitative methods in the study of economy. This reality is consistent with the statement that economic research also changes in reality, and these changes of themselves indicate a shift to more “qualitative topics“. I will describe and depict some of the topics, which alter and change economic research significantly nowadays.

## **1. Application of Qualitative Topics on Economic Focus**

### ***First Topic: Development Strategy***

In the 1980s, the strategic focus on development shifted from microeconomic to macroeconomic policies and, in particular, to the adjustment of fiscal imbalances and monetary policies. Given the existing macroeconomic imbalances, it was impossible for markets to function, or at least function well. (Stiglitz, 2003, p. 76). There then followed great focus concerning investigation of economic development imbalances.

Now, the critical feature of each of these development imbalances was that development itself was a technical problem requiring technical solutions: better planning, algorithms, better trade, foreign direct investment (FDI), and pricing policies, and better macroeconomic frameworks. There was no attempt to focus on the economic, social, developmental or cultural substance of society, nor was there a belief in such a participatory approach (e.g. of civil society), as in the decision-making process itself not being considered necessary.

The laws of economics were assumed to be universal demand and supply curves, and the fundamental theorems of welfare economics were expected to apply as well in Africa and Asia as in Europe and North America. These scientific laws were not bound by space and time. Little attention was paid to insti-

tutional constraints or cross-cultural value differences. The situation is different in recent times, as the world economy is now inclined to more abrupt collisions and changes nowadays. Successful transformation of society depends also on *development strategy*. In this sense, it is necessary to concentrate not only on quantitative methods offering different comparisons of GDP in different countries, but to compare different tendencies and scenarios taking into account positive and negative impacts of globalization on the world economy. These scenarios can be regarded as investigative qualitative methods offering us a multidimensional and more accurate picture of reality. They ought to reveal the real interests of people and the background of events which influence development strategies, and abrupt collision and change as such.

### ***Second topic: Institutional Infrastructure***

The other reason for accepting the importance of qualitative methods concerning investigation of economic models, is the reality indicating equivalence between market socialism and capitalistic economies, which were both fundamentally misguided partly because they did not properly acknowledge the larger role of institutions, and partly because they did not grasp the importance of the interface between economic transactions narrowly defined and the broader goals and values of society. There is no broader acceptance of values.

Development strategy goes hand in hand with institutional infrastructure, and that is why modern economics needs an investigation of *institutional infrastructure*. Institutional elements are necessary for effective participation in decision making, and as an essential part of successful development in transformation of society.

It is very obvious that standard theorems of economics emphasize an economy, which needs private property, competition (Nemcová, 2006, p. 17), and appropriate legal infrastructure within which markets could perform their proper functions overall. All economic institutions could be important as a source of both macrostability and excessive government deficits.

### ***Third topic: Globalization and Regionalization***

We are entering an age of *global alliance capitalism* (Šarmír, 2005, p. 33), where to better advance their own economic objectives, individuals, enterprises, governments and other non-market institutions need to cooperate with each other in a wide variety of ways. We have witnessed a huge growth in all forms of inter-firm coalitions and inter-government agreements, etc.

New actors have emerged in the form of cross border businesses, led by organizations such as the International Business Leaders Forum and World Business Forum for Sustainable Development, as well as many at the national level to

forge collaboration in good practices. Inter-governmental organizations such as OECD, the United Nations through its UN Global Compact and the World Bank, have become a force to emphasize the value of corporate citizenship.

Regionalism in this sense does not mean a lack of ability to achieve independently, but on the other hand regionalism may undermine or enhance policy autonomy, depending on the context and on the policy area at issue (Beran, Dlask, Frková, Tománková, and Nivenová, 2004). (For instance a country suffering a loss of policy independency and hence state capacity as a consequence of deepening global neoliberalism, might be able to restore this capacity by forming a regional agreement.)

Comprehensive development strategies must identify the most important distortions in the economy – particularly about entrepreneurial background and in particular regarding full account of the social costs and distributional impacts of policies overall. Accordingly, the ingredients that make up economic management need to be both more comprehensive and more institutionally oriented than traditional plans, which focused largely on liberalization, privatization and macro-stability.

#### ***Fourth Topic: Regional and Municipal Problems***

Strategies at the regional level must go hand in hand with strategies at community levels. At each level, the strategy must be consistent with capabilities and needs of institutions in the economic environment, which is embedded with societal norms and values.

It is important to build economic openness in a country, which is in link with development strategy. The evidence suggests that opening up to the outside world leads to many changes in different economic factors, as for instance an improvement in the technology of production. We understand that under technology there is a broad, special concept – technology means anything that effects the way in which inputs are transformed into outputs, market and non market institutions and modes of organizing production (so called software and hardware of technology).

Trade is also one of the most important vehicles that reduce discrepancies in development.

In all cases, governments and international agencies should seek to construct not just good policies, but also a sense that the process by which policies are devised is in itself fair and open.

Economic development must be connected with political applications, and these applications go hand in hand with moral and ethical background, and qualitative methods.

## **2. Qualitative Methods in Forecasting**

Qualitative research in forecasting insists in the integrity of its work and variety of its strategies. These strategies reflect the contested and eclectic nature of qualitative research as an interdisciplinary research that spans a variety of methodological positions. Validity is attributed by audiences through a researcher's rhetorical evocation and satisfaction of normative standards.

The main idea "between certainty and uncertainty" means to find a balance for objective investigation and more subjective policy making, along with strategic acting and shaping of the future. In this way we can understand the use of quantitative methods as tools for objective modeling and qualitative methods, used especially in forecasting as fundamental for shaping a future with specialized areas and understandings of the globalizing economy, offering their own particular challenges, especially regional ones.

The geographic radius of the market place through such means as commerce, travel and internet is now covering institutions from more diverse ideologies, social structures and cultures than ever before. Secondly, the critical engine of wealth in today's economy is human capital, and not only as a primary source of innovation, entrepreneurship and upgrading of managerial and organizational expertise, but also of ideals and moral values (Stiglitz, 2003, p. 76).

### ***The Importance of Qualitative Methods for Forecasting***

Qualitative methods must reconstruct not only tendencies in the future development of a changing economic world or changing economic region, but also in the real status quo of problems investigated. In a globalizing new world, it is necessary to investigate problems through use of qualitative methods – without which we will lose the larger dimensions of reality.

Qualitative methods are very hard to capture via simplified indicators, or where such data are not available. In addition, various forms of creative thinking are encouraged by such qualitative approaches as brainstorming, utopian writing and science fiction. Methods for working systematically with qualitative data are becoming more widely available with the development of information technology – tools for mind mapping or conversation analysis etc. – which can also be helpful devices for facilitating new approaches.

For many years, the development of qualitative methodologies in social sciences as well as in forecasting has lagged behind that of quantitative approaches. There has thus been an explicit and implicit reliance on an expert figure to pull together the strands of qualitative analyses and come up with a synthesis by more or less intuitive means. In the last decade this situation improved considerably, and a great many tools, often computer based for capturing and analysing

qualitative data, and processing and representing results of such analyses, have become available.

***Qualitative Approaches also Involve some Quantitative Elements***

Statements about factors that need to be taken into account may be captured and grouped according to the frequency (for example in different types of scenarios or via the use of computer conferencing techniques). Equally, quantitative judgements will necessarily inform quantitative activities – the definition of parameter, the interpretation of quantitative activities, the interpretation of a questionnaire, etc. It is not possible to investigate the future without using quantitative methods – comparing certain sets of data, because without this we would lose fixed reality structures, which means investigations will depend on the collection of statistical data. If we want to deal for instance with regional economy, we must also rely on different types of data in regional subtexts.

*Quantitative Methods* place heavy reliance on numerical representation of development. They have considerable advantages, such as the ability to examine rates and scales of change, engagement in basic accountancy, certain types of testing, and consistency of different elements of the whole. They also have notable disadvantages: limited grasp of many important social and political variables, dangers of spurious precision, etc.

Quantitative methods come in two main types: time-series methods and explanatory methods. Time-series methods make forecasts based purely on historical patterns in data. Perhaps the most important issue differentiating the approaches is that qualitative methods still remain less documented than quantitative ones. This is particularly true of some newer computer based methods for group work. Expert based techniques are very important in this sense, as they seek to articulate views about the future, and of trends and contingences that may arise, as well as alternative futures. The approach may involve large scale surveys of opinion (such as Delphi), or much smaller and more detailed elaboration of vision (such as cross-impact analyses, scenario workshops, etc.).

Recent research has clearly shown that projects with higher levels of participation are more successful, probably partly because those projects make assumptions about the needs and capabilities of beneficiaries. One of the reasons is that policymakers can have better understanding of which incentives are necessary. Equally, institutions, incentives, participation and ownership can be viewed as complementary development tools.

***Validity of Forecasting Qualitative Methods***

Forecasting methods are extremely important for making decisions in policy making, in innovative areas, and for development strategies, etc. The main thematic areas of foresight are still technology trends on one hand, and market

trends on the other. We very often forget to use broader social, political or regional aspects, what are also necessary to forecast.

Special forms of classification concerning foresight activities are, in terms of broad coverage: a) holistic foresight concerned with the entire spectrum of science and society; b) macro-levels, such as foresight that covers a range of disciplines; c) meso-level, i.e. foresight relating to a single scientific field, technological area or product range, and d) micro-level, i.e. foresight for a specific research project or product (Becker, 2002).

### ***Reflections of Qualitative Topics in Qualitative Dimension, for Forecasting***

Qualitative methods offer a picture influenced by *development strategy*, because development strategies focus more on the broader vision, including entry into new technologies or new industries. The process of constructing a development strategy may itself serve a useful function in helping to build a consensus, not only about a broad vision of the country's future and key short and medium term objectives, but about some of the essential ingredients for achieving those goals as well. Consensus building is not only an important part of achieving political and social stability (and avoiding the economic disruption that comes when claims on a society's resources exceed the amount available), but also leads to credibility of policies and institutions, which in turn enhances the likelihood of their overall success. To be truly effective, any role for government in becoming a catalyst for overall development will need to embrace the much larger goal of encouraging society as a whole.

*The participatory attitude* is also very important for this approach (Gavigan and Scapolo, 2001). It means on one hand more objective validity and transparency, because it also reflects the interests of issues investigated and involvement of interested parties with problems being dealt with. Qualitative methods depend as well on discussion of interested parties, and are connected with the practical side of problems being investigated, including how such problems connect with their actual realization and decision making issues overall. Specifically, decision making problems are in line with above-mentioned ones overall, which is why there is more positive inclination for qualitative methods, meaning a more participatory approach and objective validity.

The participatory approach helps to guarantee integrity of the investigation in ways to make certain we apply such methods, as we must be sure how many people take part in this presentation. The integrity of participatory methods can be understood from two points of view: first, there is long-term investigation based on understanding of different trends in development, and second, the working out of strategy concerning previous development. The output of this participatory approach is in link with determination of different types of prob-

lems, as for instance in finding a strategy and working out an official statement. The other very important point helping to systematize knowledge resulting from the participatory approach, is sharing common values among all participants if such an approach is based on short-term investigation. If the participatory approach is used by an enormous number of people (using sincon methodology or charette methodology) (Potůček, 2006), the output of this participatory approach is also very interesting: the understanding of different values and interests shared by different participants.

For understanding the entire spectrum of economic development, it is especially important that there be a *holistic attitude*. This attitude influences the general view on problems being forecast. Different problems often look like they are identical from different aspects, but this is not so, because they are influenced by interests of different groups of people. In investigating such problems, we must take into account its multidimensionality, and the possibility of finding balance and truth in this multidimensionality.

Globalization and regionalization are also in link with the systematic approach (Norberg, 2006). This systematic approach helps to investigate all problems in a new perspective. In this way, it is necessary to accept the phenomenon of time and space, as all those processes are realized in a certain time and space and are influenced as well by time and space. This type of investigation is not objective, but subjective as such. Among different time series and space regions are created different types of relations, whereby this complexity is also connected with much variety. The substance of this approach reveals that it is not possible to come to a universal or general assessment very quickly. It is necessary to use different types of generalisation for comparison of different levels of investigations.

Behind this complexity, it is necessary to also see goals and interests of people who are actors in these complex processes. Without knowing the hidden interests or purposes of these processes, it is difficult to reveal the real dimensions of complexity of such systems. All those hidden purposes and interests need to interact during their entire period of existence with this system. Due to their interactions, we can identify relations among them.

In a way to identify different relations and factors, which are the most substantial in a system, it is necessary to identify basic boundaries of such a system. One very important phenomenon helping to identify those boundaries and relations within these systems are different types of models.

*Model of system dynamics* is one of the very widely used models, and the founder of this system, Jay W. Forrester developed this method to near great popularity. It is necessary to take into account all relevant factors, and try to find



different types of relations in these factors. Using this method, it is also very appropriate to use quantitative methods. By such assistance, we can reduce very often, many false interactions. On the other hand it can also help us to find more simple interactions in a system, and the possibility of all reduced elements interacting among themselves, and creating a dynamic system.

The other very important approach is in link with *mind mapping* – which is in link with building alternative scenarios. The approach called mind mapping is the substance of the futures wheel: a very important procedure trying to distinguish primary, secondary, tertiary etc. impacts of different systemic changes regarding the future, such as concerns for instance, different globalization trends.

Other very important procedural methods or approaches are *scenarios*, which are complex stories about possible and alternative futures. Those stories combine description of a certain future status with description of a real situation in a given investigated field, and concern different developmental and strategic relations, which illustrate political decisions and their results. Scenarios do not mean unambiguous future forecasts; instead they are more about ways to manage different alternatives about a future. Specifically, we use scenarios in that sense when past and present do not offer an unambiguous future. Scenarios help us systematically investigate, form and control long-term strategies, policies and plans. The important thing is to develop more scenarios in a way to concentrate on different conditions for creating a new future. Scenarios are very important for forecasting from methodological point of view, because they underpin different types of alternative realities developed in future-positive or negative ones. Behind such qualitative methods, there is always the possibility to use the outputs of these methods and approaches for working out strategies and decision making processes, including active participation of people in creating a new future – in this way also concerning and including economic problems.

### **Conclusion – Is a New Qualitative Approach in Research Linked More Closely with Certainty?**

The unique position and reputation of quantitative methods in scientific approaches as such is a little uncertain at this time in the sense that their unambiguous position in reaching objective certainty in science is modified, thus qualitative methods have the same ambition as to be more effective in depicting reality with great certainty

The dilemma that concerns certainty and uncertainty is in link with understanding certainty as an approach based on participatory, dynamic and systems qualification. We can follow how objective certainty is more solid with its so-

called subjective, participatory approach. This approach is guaranteed by a more ethical domain, as you can see and follow in many works of famous economists – as for instance Stiglitz (2003). These approaches are somehow in link with approaches in the field of forecasting, as in using qualitative methods there. My ambition was not to enumerate on all such qualitative methods, but to try and find in systemic thinking their importance for depicting and analyzing a future in economic research.

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