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QUALITY OF LIFE IN THREE EUROPEAN REGIONS - ASSESSMENT WITH OBJECTIVE GAP ANALYSIS[1]

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1 Introduction

In conventional economic and social analysis quality of life is equated with standard of living. Standard of living is usually measured in terms of growth in gross domestic product (GDP), which equals the total value of final goods and services produced in the market economy. Much economic research and many economics inspired policy recommendations build on the implicit assumptions that 'economic growth = progress' and 'consumption = quality of life'. Early confidence in the value of economic growth as an engine of overall development faded in the post-1960s period, as the living conditions of the world's poorest people failed to advance at the expected pace.[4] Conventional GDP is focused only on economy. However, globally only 16% of economic growth can be attributed to physical capital (buildings and equipment), 20% to natural resources and 64% to human and social resources.[5] Much of the current growth in GDP derives from three things:[6] fixing blunders and social decay from the past; irreversible borrowing resources from the future; or shifting functions from the traditional realm of household and community to the realm of the monetised economy.

Income inequality has increased among countries, generations and within them in nineties.[7] Although economic growth - reinforced by globalisation - has allowed some countries to reduce the proportion of people in poverty, marginalisation has increased for others.[8] Benefits of globalisation are privatised, while irreversible damages to global commons[9] are socialised or shifted to the future generation. Trends in GDP and social well-being, once moving together, have diverged since about the mid-1970s in all countries for which they have been constructed.

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[1] This study was partly supported by European environmental agency (Project EEA/SEI: *Quality of life in the EU candidate countries and differences with Member States - indicators update*; Reference: 3473/B2004.EEA.51971; contract No 5200104-1) and for the needs of preparation of the European State of the Environment Report for 2005. I am grateful to Tjaša Bole for her research assistance; previous version of the draft was commented by Andrus Meiner (European environmental agency), Helen Poltimäe (Stockholm environmental institute), Jana Javornik (Institute for macroeconomic analysis and development, Ljubljana), Peter Novak (Energotech, Lj.).

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[4] Fahey T., B. Nolan, C.T. Whelan. 2003. Monitoring quality of life in Europe. Economic and Social Research Institute, Dublin, prepared for European Foundation for the Improvement of Living and Working Conditions, http://www.eurofound.eu.int/publications/files/EF02108EN.pdf

[5] UNDP. 1998. Human Development Report 1998. United Nations Development Programme, Oxford, Oxford University Press.

[6] Wackernagel M., C. Monfreda, D. Deumling. 2002. Ecological footprint of nations - November 2002 update: How much nature do they use? How much nature do they have? Sustainability issue brief, November 2002, p. 4, www.RedefiningProgress.org.

[7] UNGA. Programme for the further implementation of Agenda 21; United Nations - Special Session of the General Assembly 23-27 June 1997, p. 3.

[8] UNGA, ibid.

[9] Klamer A. Homo moralis versus *homo economicus*, or: the economy of the common goods. Erasmus University, www.klamer.nl; Daly, H.E., Cobb, J. 1989 For the Common Good: Redirecting the Economy Towards Community, the Environment and a Sustainable Future, Boston: Beacon Press.

Income inequality has increased among countries and also within them, unemployment has worsened in many countries, and the gap between the least developed countries and other countries has grown rapidly in recent years. There is ***accumulating social deficit***[10] caused by unfettered global markets, insufficient global provision for elementary social justice and too weak non-income objectives of economic growth, social interventions and environmental protection.[11]

In early sixties the consumption of natural resources and disposition of wastes were for 20% smaller than Earth's capacity to create new resources and absorb emissions, in 2000 this capacity is exceeded by 20%.[12] The world has lost nearly a third of its natural wealth between 1970 and 1995.[13] World Wildlife Fund estimates that, globally, the impact of people on natural ecosystems is increasing by about 5% a year; at this rate the pressure will double in about 15 years.[14] We are currently liquidating natural capital to support current resource use, reducing the Earth's ability to support future life.[15]

By the highly visible deficits caused by unfettered global markets, the mood of resistance to globalisation has been spurred on.[16] The present pattern of one sided, profit driven globalisation is not planetary or infinitely reproducible. Social capital is dependent on the renewability and condition of natural capital.[17] The one-sided market process acts as ideological, it serves particular interests whilst excluding or diminishing others.[18] The six-sevenths of humanity which had not been benefiting from market ideology are decreasingly ready to accept quietly their fate as oppressed and unfulfilled human beings.[19] Reducing current inequalities in the distribution of wealth among private and social, more equitable access to resources and to economic opportunities, both within and among countries, are of the most serious challenges facing humankind.[20]

One of the main processes of economic globalisation in the nineties has been market transition.[21] Post-transition national states seem to lack any other choice today but to abide strictly by the rules and prescriptions of global markets.[22]

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[10] Globalisation bypasses and undermines popular decision-making, democratic institutions, and sovereign states responsible for the general interest (Houtard F., F. Polet, ed. 2000. The Other Davos: Globalisation of resistance and struggle. Thiruvalla: Christava Sahitya Samithy, p. 101).

[11] Drache, D. ed. 2001. The Market and the Public Domain: Global Governance & the Asymmetry of Power. London and New York: Routledge, p. 2.

[12] Wackernagel et al, 2002.

[13] World Wide Fund for Nature's Living Planet Index' in Eckersley, 1999, p. 10.

[14] Eckersley, 1999, p. 10

[15] Ibid.

[16] Went in EAEPE, 2003. Annual Conferences of European Association for Evolutionary Political Economy; http://eaepe.tuwien.ac.at/conference2002.

[17] Homer-Dixon T.F., J.H. Boutwell, G.W. Rathjens. Environmental Change and Violent Conflicts. Scientific American 268 (Feb. 1993), pp. 38-45.

[18] Hutton A., D. Donald. 2002. Globalism and Ideology: Towards "Progressive Conservatism?" in EAEPE, 2002.

[19] Wallerstein I. 1997. States? Sovereignty? The Dilemmas of Capitalists in an Age of Transition, keynote address at conference on State and Sovereignty in the World Economy, University of California, Irvine, Feb. 21-23, 1997, p. 23.

[20] UNGA, ibid.

[21] Aiginger K., P. Havlik, Y. Wolfmayr-Schnitzer. 1998. The world economy, economic growth and restructuring in transition countries, p. 2; in The competitiveness of Transition Economies, OECD Proceedings, Austrian Institute of Economic Research, Vienna Institute for Comparative Economic Studies, Organisation for Economic Co-operation and Development.

[22] Friedman, 1999 in EAEPE, 2003.

National policies many times were not all equally successful to introduce sufficiently complex reforms to improve all aspects of QL equally during transition. Lipsey - Lancaster[23] showed that market reform by the means of liberalisation on imperfect markets need to be implemented with complex policy reforms. Under imperfect competition non-price and non-monetary factors of competitiveness, such as poor environmental or social standards, become decisive element of commercial performance.[24] This condition was not implemented equally successfully in transition countries, which caused several negative effects of market transition, such as depressed social development (in social security, cohesion and formation of social capital). Rhodes and Apledoorn[25] revealed that after the collapse of the socialism in Eastern Europe, different types of capitalism have been implemented in transition countries: Anglo Saxon neo-liberal model, continental welfare model and developmental model, hence, market transition was not an unequivocal process. Which effects of market transition dominated, those which improve welfare or others that increase social injustice and environmental degradation, depended largely on country-specific, non-market circumstances: law, enforcement capacity, etc. Schumpeter had considered that different patterns of national growth *derive from* 'local capabilities', i.e. local spillovers of knowledge,[26] social inclusion, plurality of economic institutions and other non-commercial factors. Soros is categorically worrying about the global spread of laissez-faire capitalism which could replace communism as the main threat to open democratic society.[27]

The challenges arising from social exclusion, an ageing population, changing family structures and gender roles, and enlargement, have pushed quality of life issues to the fore also in the EU policy debate. Their impact is direct on people's everyday lives, families, communities and society.[28] The Treaty of Rome stated (in Article 2) that "the Community shall have as its task, […] a harmonious and *balanced development* of economic activities, sustainable and non-inflationary growth respecting the environment". In 1992 the Maastricht Treaty on the European Union explicitly added the environment to what is supposed it should be balanced. The Treaty of Amsterdam in 1998 went even further by adopting a commitment to 'balanced and sustainable development' (Article 2). In spite of these arrangements, the present development strategy of the EU (Lisbon strategy, 2000) prioritises income growth and national competitiveness as general development medium term goals (in particular since its reform in March 2005). Empirical evidence hardly justifies such direction of development. Benchmarking of indicators of all three aspects of QL shows that at least EurW and EUCE need mainly improvement in social and inter-generational component of QL. This suggests that the present overarching development strategy of the EU might be misdirected.

As a matter of fact, post-transitional disappointment is reported in EUCE at the time of accession to the EU. Populations in EUCE seem to enjoy lower subjective well-being than it is

[23] Lipsey R., K. Lancaster. The general theory of the second best. Review of Economic Studies, December 1956 in Ormerod P. 1994. The Death of Economics. London: Faber and Faber, p. 83-4.

[24] Porter E. M. 1998. The competitive advantage of nations. London: Macmillan Press, 855 pp.

[25] Cernat L. 2001. Institutions and Economic Growth: What Model of Capitalism for Central and Eastern Europe?; paper prepared for the Conference on Institutions in Transition; Ljubljana: Institute of macroeconomic analysis and development, July , p. 22, http://www.sigov.si/zmar.

[26] Jaffe, 1989 in Cainelli G, R. Leoncini, A. Montini, The evolution of industrial sectors in Europe, in EAEPE 2001.

[27] Soros G. 1997. The Capitalist Threat. The Atlantic Monthly, 279, 2, pp. 45-58; in Arrighi G. Globalization, State Sovereignty, and the 'Endless' Accumulation of Capital; paper presented at the Conference on States and Sovereignty in the World Economy, University of California, Irvine, Feb. 21-23, 1997, 1997, http://fbc.binghamton.edu/gairvn97.htm, p. 4.

[28] Fahey et al, 2003.

predicted by objective indicators. Disappointments are usually refused with an argument of **too high pre-transition expectations**.[29] This claim can be easily tested with available indicators of gap between achievements and expectations in three European regions. A number of questions connected with the gap are explored in this paper: what social characteristics predict the gap, how wide that gap is, what are the reasons for the gap, whether it appears to be increasing in time.

It becomes clear that pre-transition expectations were not high only in subjective projections but also objectively grounded with initially favourable position. Achievements were lower than objectively possible. We conclude from this assessment that post-transitional disappointment in EUCE is not based only on achievements relating to higher QL but on the gap between achievements and objective expectations, which resulted in a less optimistic attitude about their future. Policy makers continually face decisions which seem to set different social, economic and environmental goals against each other. Where new development should be accommodated? More comprehensive methods are necessary for setting out and comparing all the different plusses and minuses of different options, taking account of both sides of the gap simultaneously. This is what QL assessment seeks to provide. We are living in a world of limited expectations while we allow our government to manage ourselves. It is time to demand a future that is not the same as what we have already accepted. It is time to end the fact that the government's current successes are only measurable by historical achievements indices instead of on the gap between the goals of the people to have ***a better life*** and ***achievements*** of policies.[30] Any differences between your current situation and the future aspirational state can be thought of as a deficiency or gap.[31] The gap between visibly displayed new potentials (such as new advertising and products) and limited opportunities (for the less well-off citizens) is presumably a major cause of the lower levels of satisfaction in acceding and candidate countries.[32]

Expectations are the seed and driving force for social progress. But they also increase the danger of frustration, disappointment and violence. The end of the Cold War was expected to usher in an age of peace, but actually violence is on the rise in both developing and developed countries because of the *widening gap between human expectations and achievements.* This growing gap between expectations and achievements is at the root of contemporary turbulence worldwide.[33] In Central and Eastern Europe, where progressive energies of people were long confined, these energies now surge forward in high and eager expectations of a better quality of life. This demands not only *better achievements* but also *brighter future* which requires more sustainable, long term vision of development to replace present short sighted vision.

This paper is organised as follows: in the next chapter different concepts of quality of life are discussed. The third chapter proposes an indicator based tool of objective gap analysis with the main purpose of identification and evaluation of the gap. In the forth chapter results are

[29] Cook V. A New Direction for Quality of Life: Evaluating the Comprehensive Quality of Life Scale as a Measure of Satisfaction and Depression, presented at annual conference of Australian Centre on Quality of life 2001, p. 8, http://acqol.deakin.edu.au/Conferences/abstracts_papers/

[30] http://www.countryside.gov.uk/LAR/Landscape/Quality/overview/whatisqualityoflifecapitalfor.asp .

[31] Pettigrew, A.M., R. Whipp. 1991. Managing change for competitive success. Oxford: Blackwell.

[32] Delhey J. ed. 2004. Quality Of Life In Europe: Life satisfaction in an Enlarged Europe. Social Science Research Centre (WZB), Berlin, prepared for European Foundation for the Improvement of Living and Working Conditions; Luxembourg: Office for Official Publications of the European Communities, 2004; www.eurofound.eu.int/qual_life, 88 p.

[33] Mikhail Gorbachev. 1994. Uncommon opportunities. An agenda for peace and equitable development. The report of the international commission on peace and food. Zed Books.

presented. In the last chapter results are discussed in light of its consequences for European policy evaluation.

2 Concept of quality of life

The recognition of the need to go beyond income and wealth in measuring welfare/well-being has underpinned the development of a variety of broader concepts such as living conditions and quality of life, and more recently social exclusion, social capital, human development, and social quality.[34]

The conventional substitute for GDP is the *level of living* which is defined in terms of the access to resources in the form of money, possessions, knowledge, mental and physical energy and social relationships, through which an individual can control and consciously direct his living conditions.[35]

One of the proposed substitutes for GDP is the g*enuine progress indicator* (previously index of sustainable economic welfare*)*,[36] that adjust GDP for a wide range of social, economic and environmental factors that GDP either ignores or measures inappropriately (Cobb)[37]. They include income distribution, unpaid housework and voluntary work, loss of natural resources, and the costs of unemployment, crime and pollution.

Life expectancy is also a commonly used measure of QL and statistically projects life duration at birth. Sen proposed to calculate the number of human lives lost because of the difference in life expectations in different countries, which he calls *disability adjusted life years index* (‘*DALYS*'.)[38]

The *Human development index* (HDI; UNDP) is a summary measure, aggregating achievements in three dimensions of human development: long and healthy life (by life expectancy at birth), knowledge (by adult literacy and combined primary, secondary and tertiary gross enrolment ratio) and a decent material standard of living (measured by GDP per capita in purchasing power parities. This methodology shows that conventional measures of progress can be effectively exploited for measurement of more general phenomena.

Measurement of *happiness* is another complement for the assessment of QL and it is often addressed by subjective based approaches. However, happiness is not the same thing as QL. It is possible for people to feel happy - content, invigorated, satisfied - and still lack meaning in their lives. Happiness should also be distinguished from life satisfaction. The former is seen as more of an affective state, whereas the latter represents more of a cognitive state.[39] W*elfare* is neither the same as QL! Somebody can enjoy relatively high standard of living, but also perceives her/his position as unfair, unhealthy, uncreative etc. And the opposite, somebody who is lacking comfortable goods, can perceive his position as morally dignified, contemplating or safer in relation to others. In both cases QL differs from welfare.

[34] Fahey et al, 2003.

[35] Erikson, R., R. Aberg, eds. 1987. Welfare in transition: living conditions in Sweden 1968-1981. Oxford, Clarendon Press.

[36] www.foe.org.uk/campaigns/sustainable_development/progress

[37] Eckersley, 1999, p. 11.

[38] Fox-Rushby J. 2001. Whose values count? A critique of disability adjusted life years, presented at 8th Annual conference of ISOQOL, 7-10 Nov., Amsterdam: Kluwer, 127 pp; www.isoqol.org.

[39] Fahey et al, 2003.

A quite recent notion of welfare is that embodied in the concept of '*social quality*'.[40] This framework identifies ***two axes of differentiation***: the micro-macro distinction and the distinction between institutions/organisations and communities/groups of citizens. Taking these two axes together, it is possible to define a 'social quality quadrant' that identifies four dimensions of social quality. These are socio-economic security, social inclusion, social cohesion and empowerment. The main aim of this approach is to outline a framework within which a wide range of existing indicators might be brought together.[41]

Noll makes a general distinction between concepts of quality of life and quality of societies. A characteristic of the quality of life concept is the more or less individual approach. Dimensions of welfare related to societal focuses are rather neglected. Fahey explicitly defines social QL as the overall well-being of those living there,[42] which confronts previous distinction between well-being and QL.

A final alternative to the assessment of quality of life that should briefly be mentioned is the 'liveability' perspective proposed by Veenhoven.[43] It is one of a number of dimensions used to characterise the 'quality of nations'.[44] The 'liveability' of a nation is defined 'as the degree to which its provisions and requirements fit with the needs and capacities of its citizens'. The needs in question include both the physiological (food, shelter, etc.) and the psychological (sense of security, identity, trust, etc.). While there are minor distinctive features in the liveability approach, it is basically similar to prevailing understanding on quality of life.

Even among those who agree that they assess a concept which is about quality of life, there is considerable variety of approaches proposed and under discussion. It is a concept that selects a number of dimensions of human existence and defines these as essential to a rounded human life. It indicates how those dimensions might collectively be viewed and measured so as to provide an overall assessment of how well individuals are faring. Its distinctive feature is its attempt to move beyond narrow or one-dimensional views of the human personality towards a many-sided and more encompassing view.[45]

The construction of quality of life appears as a new interdisciplinary approach: historians, economists, sociologists, philosophers, psychologists, scientist of medicine, they all reflect the question in their own manner: what constitutes a good life? QL is a complex, multifaceted construct that requires multiple approaches from different theoretical angles.[46] It is a broad ranging concept affected in a complex way by the person's physical health, psychological state, personal beliefs, social relationships and their relationship to prominent features of their environment (WHO).[47] Cummins and Baxter observe QL as the aggregate of seven domains:[48]

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[40] Beck W., van der Maesen, L. and Walker, A., The social quality of Europe, Bristol, the Policy Press, 1998, pp. 301-40; Beck W., L. Van der Maesen, , F. Thomese, A. Walker. Social quality: a new vision for Europe, The Hague, Kluwer, 2001.

[41] This practical approach is proposed and applied by network on Indicators for Social Quality http://www.socialquality.org/site/.

[42] Fahey et al, 2003.

[43] Veenhoven R. Happy life-expectance: a comprehensive measure of quality-of-life in nations, in Social Indicators Research, Vol. 39, 1996, pp. 1-58.

[44] Berger-Schmitt R., H.H. Noll. 2000. Conceptual framework and structure of a European system of social indicators, EuReporting Working Paper No. 9, Mannheim, ZUMA.

[45] Fahey et al, 2003.

[46] Diener E, E. Suh. 1997. Measuring quality of life: Economic, social and subjective indicators. Social indicators research, 40, pp. 189-216.

[47] http://ww.euro.who.int/

[48] Cummins, R.A., C. Baxter. 1997. The influence of disability on quality of life within families International Journal of Practical Approaches to Disability, 21, p. 2-8.

material well-being, health, productivity, intimacy, safety, community, and emotional well-being.

QL research basically fit into two camps – general, and health-related.[49] It comprises very different fields of interest:[50] different populations (to the elderly, poor, children and adolescents, women, ethnic minorities, consumers, specific-disease population, e.g., diabetes); 2) specific life domains (subjective, leisure, work, emotional, social well being; 3) specific disciplines (media, marketing, travel and tourism, labour and employment, economic development); 4) measurement related to different units of analysis (individual, family, community, state-level QL).

Beck et al distinguish three national approaches for addressing QL: Scandinavian level of living approach, Anglo-American quality of life approach and German school. In all the main factors which drive improvement of QL are:[51] raising living standards and improving living and working conditions; strengthening social cohesion and combating exclusion; promoting equal opportunities; and safeguarding sustainability. Within this broad frame different schools have innovated alternative approaches for the evolution of QL.

QL refers to the *overall* level of well-being of individuals. WHO defines QL as an individual's perception of their *position in life*, in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns. For Calman, QL studies point to '*the gap between a person's expectations and achievements*'.[52]

This attempt to observe QL as a *gap* brings us to Sen's concept of functionings and capabilities (1982, 1985).[53] This concept does not refer to utilities or monetary values, but to functionings (doings and beings) and capabilities (sets of functioning; Sen; 1985). He defines 'functionings' as the various things a person manages to do or be in leading a life – such as being adequately nourished and in good health, having self-respect and being socially integrated. The 'capability' of a person reflects the alternative combination of functionings s/he can achieve. Everybody should be free to live *the way one would like* – this has intrinsic value and therefore it is constitutive of a person's being. Not only achieved functionings are decisive but also the individuals' capability of *choosing and discriminating among possible livings*.[54] A high quality of life is attained not when a predetermined lifestyle becomes universally affordable, but rather when people's scope to choose the lifestyle they wish for themselves is enhanced.[55]

The idea of ***sustainable development*** proposes formal conditions and thresholds for such a paradigmatic transformation to take palace. To recapture shortly from the theory of

[49] Eckersley, 1999, p. 9.

[50] http://ww.euro.who.int/

[51] Fahey et al, 2003.

[52] Calman K.C. Quality of life in cancer patients - an hypothesis. Journal of Medical Ethics. 1984 Sep;10(3):124-7.

[53] Sen, A.K. 1982. Choice, Welfare and Measurement. Cambridge: Harvard University Press. Pressman and Summerfield, for instance, have observed that "the capabilities approach leads to fundamental changes within the field of economic development. It has helped change the development paradigm from promoting economic growth to promoting human well-being" (in Comim F., F. Carey. 2003. Social Capital and the Capability Approach: are Putnam and Sen Incompatible Bedfellows? Von Hügel Institute, St Edmund's College, University of Cambridge, manuscript, 20 p.). The concept of capability has been extremely influential also at an academic and institutional level. Some of UNDP's and World Bank's most important recent publications, such as the Human Development Report and the World Development Report have been largely influenced by Sen's approach.

[54] Sen, A. 2000. Social exclusion, concept, application and scrutiny, Social Development Papers No. 1., Office of Environment and Social Development, Asian Development Bank, Manila, Asian Development Bank.

[55] Fahey et al, 2003.

sustainability:[56] *weak sustainability* demands maintaining constant total stock of capital (Solow)[57] so as to substitute extraction of non-renewable with accumulation of renewable capital (Hartwick).[58] The present stock of capital is depreciated by its use (devaluation) and recovered by re-creation (net savings, education, lower costs of environmental damages etc). Weak sustainability is then only a very rough tool for the assessment of QL: it succeeded in pointing the attention of policy makers on the maintenance of the total material and non-material stock of resources, but it also failed to make them recognise, that certain essential components of QL are both irreplaceable and non-renewable. Using weak sustainability in assessment of QL one needs separately to analyse data about its irreversible component. Following the alternative concept of *strong sustainability* (eco-systemic, Holling's),[59] natural capital should notbe traded with commercial capital, at least not without any restrictions. Non-renewable natural capital provides irreplaceable QL and complementary services for future generations, which otherwise ca not be enjoyed. Strong sustainability strictly restricts substitution between renewable and non-renewable resources.

From a standpoint of QL one distinction with the concept of strong sustainability seems relevant. There is present an idea among conservationists, who are in favour of endless (or ever increasing) accumulation of renewable resources, because in this way the sustainable yield is increased for future generations. Sometimes, like in the case of increasing standing stock of wood because of abandonment of small agricultural holdings and subsequent forestation of previously agricultural land, this increased forest yield is the result of failure to maintain present sources of QL and as unplanned process poorly serves interests of the present generation. From the viewpoint of present QL this limits upward present conservationist efforts (above level which could *waste* present QL) in spite of their favourable sustainability.

Ekins (2000) distinguishes two time horizons of sustainability: "meeting human needs and increasing quality of life may be regarded as the 'development' part of sustainable development. Being able to maintain this into the future may be regarded as the 'sustainability' part". Current achievements with currently available resources refer to '*present sustainability*', which requires that measurement of actual economic achievements is weighted each against its own sustainable threshold. So present level of QL can be achieved at different levels of sustainability. Sustainability is an essentially inter-temporal and intergenerational concept, which means that one also needs to observe *'future sustainability'*, about the use of non-renewable resources and irreversible effects of present lifestyle. This second horizon of sustainability compares to expectations in the QL equation.

3 Empirical assessment of QL

The selection of indicators (Annex 1) was partly subjected to decisions taken in previous steps of the study (Seljak, 2001). An important criterion for selection was the statistical availability of indicators for EUCE and WB countries, including all of the former Yugoslav republics.

[56] Pezzey, J. 1992. Sustainable Development Concepts: an Economic Analysis, World Bank Environment Paper No.2, World Bank, Washington DC.

[57] Solow R.M. Intergenerational Equity and Exhaustible Resources. Review of Economic Studies, Symposium, 1974, pp. 29-46.

[58] Hartwick, J.M. 1977. Intergenerational Equity and the Investing of Rents from Exhaustible Resources. American Economic Review, let. 67, p. 972-4; Atkinson G., R. Doubourg, K. Hamilton, M. Munasinghe, D. Pearce, C. Young. 1997. Measuring Sustainable Development: Macroeconomics and the Environment. Lyme: Edward Elgar Publishing; for empirical work cf. World Development Indicators. Washington: The World Bank. 1999, p. 174-6; 2000, p. 168-70; 2001, p. 180-3; 2002, p. 188-91.

[59] In Atkinson et al, 1997.

Practically all indicators are ***downloadable*** from the internet free of charge (see a list of statistical sources and hyperlinks in Annex 2). From the viewpoint of public discussion about issues linked to QL, this practical solution is not because of eventual convenience for the collector of data but a precondition for equal accessibility, inclusiveness and sharing views about QL assessment. This is increasingly taken into account by international organisations and services which provide free access to basic statistical services (EEA, Eurostat, World Bank, IMF, UNSTAT and other UN's agencies, OECD and national statistical offices). Even private sources sometimes offer excellent statistical data free of charge.

Indicators were all benchmarked to the most sustainable value in the period of market transition in Central and Eastern Europe (1990, 1995, 1998, 2000, and 2002 or the latest available) for 31 countries which are grouped into three regions: (1) Western European countries (EurW) consists of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom; (2) Central and East European countries (EUCE) covers Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia, Slovenia and (3) Western Balkan region are Bulgaria, Croatia, Bosnia and Herzegovina, Serbia and Montenegro, Romania and Macedonia.

Countries of the same institutional milieu, like members of EU, share the same *acquis communautaire*, which has been constituted to unify conditions for mobility of goods and resources within EU which limits institutional bias in general conditions for creation of opportunities, potentials, achievements and expectations in member countries. This offers some ground for assumption that members of EU share relatively equal conditions for the evolution of their national QL, in combination between achievements and expectations. This at least in general terms justifies *benchmarking* of indicators as a methodology for comparative assessment of QL in European countries. Comparisons between EU and non-EU members in this study remain certainly more risky, in spite of the fact that all WB countries harmoniously aspire for membership in EU.

Indicators were *standardised and normalised* to the most sustainable value in a series of countries and years. Statistical make-up was necessary to overcame comparability problems from use of diverse quantitative phenomena and to distribute actual values of indicators more over the interval between: (i) zero, which is set at the lowest value of the indicator in the series of countries for all years under study; and (ii) one, which is the most favourable value of the indicator in the series of countries from the point of sustainable development.

Regional aggregates were obtained by *unweighted aggregation of national indices*. This solution could be criticised because in this way the smallest country (in terms of population, territory or GDP volume) affects regional aggregate just with the same intensity as the largest one. Weighting is important when one wants to aggregate *functional* information (such as deficits in governmental budget or inflation rates in Euro zone), but not when discussing *universal* issues, such as human rights, national sovereignty and QL. The same approach (unweighted aggregation) was followed by Seljak (2001) who justified it by ecological reasons: environmental effects are not weighted for global pollutants, biodiversity, common goods when these are trans-boundary, irreversible or global.

Changes in expectations and achievements are estimated with separate indicators: (i) index of balanced development (Seljak, 2001) estimates achievements in QL from assessment of 30 indicators in economic, social and environmental development. IBD benchmarks actual achievements to best ones (list of sub-indicators in **Annex 1**). Higher IBD means that present achievements in relation to sustainability thresholds and other countries improved. As already explained, this aspect can be understood in terms of present sustainability of QL. Development is considered *balanced*, when environmental, social and economic aspects of development are relatively equally progressing. In this way, IBD displays the direction and composition of

achievements; (ii) adjusted net savings is the measure for expectations; this aspect is *intergenerational,* it observes if capacities for QL are accumulating over time.

The number of input indicators included in ANS is much smaller (7) than for IBD which results in higher variability of standardised values of ANS (larger oscillation vertically than horizontally). There is actually no generally accepted indicator for monitoring sustainable changes in capital stocks. The World Bank has proposed the genuine savings index (later renamed into adjusted net savings - ANS).[60] ANS is measured in relation to GDP. Empirically it is estimated as the difference between the annual net increment of produced capital (calculated as a sum of net savings) and non-produced capital (expenditure on education and environmental degradation resulting from the extraction of mineral and energy raw materials, tree felling and CO_2 emissions). If ANS is positive over longer periods of time, the capital stock has been increasing and thus improving capacities for future QL. Increasing future potentials promises better achievements in the future, which in turn objectively supports higher expectations.

Weak sustainability does not sufficiently take into account irreversible environmental damages (Pezzey, 1992). QL is better explained in the context of strong sustainability. As a matter of compromise between conceptual requirements and available statistical means, ANS was decomposed on its reversible and irreversible component. As sub indicator of ANS for irreversibility, aggregate indicators of CO_2 emissions and energy intensity were summed up. Of course, not all energy intensity can be really attributed to irreversibility until considerable share of energy inputs represent renewable resources. Part of the energy is presently used for most unnecessary life sustaining functions, which justify for irreversible effects by natural laws itself. Still, energy intensity per GDP (and QL) is too high. Weizsäcker estimates that it is too high at least for factor four.[61] High energy intensity also closely correlates with irreversible environmental effects because of consumption of non-renewable resources or/and with greenhouse emissions.

The identification and measurement of achievements and expectations is based on *benchmarking* of national indicators of development. The essence of this technique is to compare and classify results on a referenced scale. In our experiment, reference values are determined as *thresholds of sustainability*. The most sustainable value in a series of data is determined as threshold of sustainability: it is minimum, maximum, average value in a series, 0 or specially set threshold value (only for GDP per capita). It is certainly not always straightforward which threshold applies for particular indicator: for inflation and unemployment rates thresholds are straightforward zero; for life expectancy this threshold is absolute maximum recorded among all countries. The problem is with indicators which ca not be simply minimised or maximised such as stock of wood in forests or income growth. The costs of income growth's unsustainability is also growing,[62] there exists a threshold between income growth and QL. The Chilean economist Manfred Max-Neef and his colleagues undertook a study of 19 countries, both rich and poor, to assess the things that inhibited people from improving their well-being in the late 1980s. They detected among people in rich countries a growing feeling that they were part of a deteriorating system that affected them at both the personal and collective level. This led them to propose a *income threshold hypothesis*,

[60] Hamilton K. 2000. Genuine Saving as a Sustainability Indicator. Paper No. 77, Environmental Economics Series, World Bank, http://www-esd.worldbank.org/eei/; Hamilton, K. 1995. Sustainable development, the Hartwick Rule and Optimal Growth. Environmental and Resource Economics, no. 5, p. 393-411; cf. Hartwick, Atkinson et al, World Development Indicators.

[61] Weizsäcker, von E.U., A.B. Lovins, L.H. Lovins. 1997. Factor 4: Doubling Wealth – Halving Resource Use. The New Report to the Club of Rome. 1997. London: Earthscan Publications Ltd. 311 pp.

[62] Wackernagel et al, 2002, p. 4.

which states that for every society there seems to be a period in which income growth brings about an improvement in QL, but only up to a point - the threshold point - beyond which, if there is more economic growth, its negative 'side effects' prevail and QL may begin to deteriorate.[63] Beyond the income threshold point, the most effective ways for increasing QL are shifted from economic (income growth) onto environmental, social and human factors. Beyond that point *non-market factors become decisive* of overall improvement of QL.[64] Because of this, the most sustainable values for certain indicators of QL are somewhere in between maximum and minimum value which is recorded in a series of countries.

The empirical evidence and theory (Sen, 1982) both support the threshold hypothesis for income. In UNDP's human development index, the threshold level of incomes per capita was estimated at approximately 6,100 US$[65] which is well exceeded in majority of enlarged EU and as such becomes almost ineffective for our purpose (neutralising effect for comparisons of countries with already relatively high income per capita). Low threshold income would not be justified for EUCE and WB. In EUCE and WB countries relatively low income per capita remains the crucial component for future improvement of QL (in comparisons with EurW). For this reason we set threshold level of income on the European average to 18,947Eur (calculated as unweighted average).

When these problems which relate to preparation of data are solved, both indicators (IBD and ANS) are combined together in an orthogonal system (OGA coordinate plain) with two axes, which represent two shores of a gap between expectations and achievements. In this diagram the ANS is used on an inter-temporal axis of expectations and explores future sustainability of present development. On the other side, the IBD indicates present aggregate achievements in economic, social and environmental development.

Once the data is plotted in the coordinate plain, *regional pathways,* P of quality of life are obtained. Regional pathways are points of annual intersections between achievements and expectations for an individual region or a country and describe temporal changes in level and structure of quality of life gap (between expectations and achievements).

On the OGA plain, a more remote location from the point of origin (0) is better for QL than a closer position. A country would normally approach the upper right corner of the OGA plain when the position relative to both axis improves. This point represents the highest QL in a series of countries: hypothetically this point is reached if all most sustainable achievements are recorded in the same country.

Regional pathways as shown in Fig. 3-1 enables the following evaluations:

1. The rectangular distance of *P* to *P'* (diagonal [0,*Q*]), denoted by *g,* shows the ***structural gap*** to the point of balance, where achievements equal the point of balance on the diagonal*; P* which is above diagonal [0,*Q*] means that the path (of *Q* formation) is more in favour of the future generation than in favour of the present one and the opposite; if the pathway is in the local vicinity of the diagonal [0,*Q*] it shows that the improvement in achievements (*A*) and expectations (*E*) in a specific region are balanced. The relationship between changes on *A* and *E* axes is important for the assessment of *Q*: when one dimension is positive and the other negative over some period of time, than confrontation between present and future generation is accumulating. In such circumstances, co-operative solutions which are necessary for balanced achievements in the future are highly unlikely. Graphically, balanced improvements of achievements and expectations take place when regional

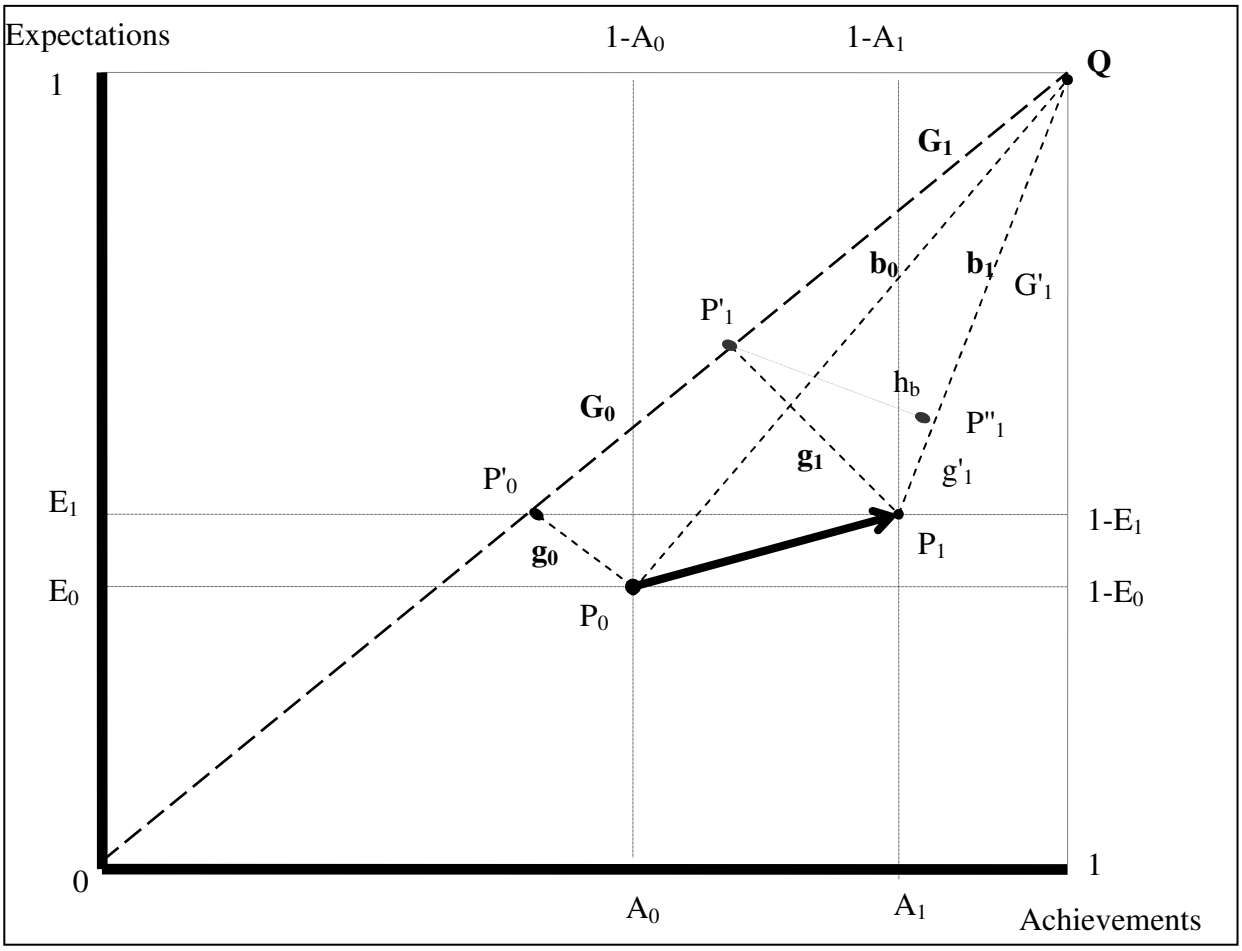
[63] Eckersley, 1999, p. 11.

[64] Porter E. M. 1998. The competitive advantage of nations. London: Macmillan Press, p.73.

[65] UNDP, 1998.

pathway in the vicinity of diagonal [0, *Q*] parallels with it. This balance (parameter *g*) appears as an essential parameter because it addresses preconditions for more enthusiastic provision of diverse QL.

Figure 3-1: **Objective gap analysis**



2. The distance between *P'* to *Q* is the ***combined benchmarking gap*** (in *A* and *E*), denoted by *G*. G_1 is the distance between P'_1 and *Q*, and G_0 is a distance between P'_0 to *Q*. Shorter *G* means higher *quality of life*. The identification of *G* is presently the most conventional tool of policy evaluation which is incorporated also in the Lisbonian approach. However, it would not be justified to match OGA's benchmarking with Lisbonian one until the former is based on two dimensional policy evaluation, while the latter is only achievements oriented (actually, all phenomena are treated as *A*).
3. The distance between P to Q denoted by *b* than aggregates and shows the *aggregate QL gap*. The smaller the distance between P and Q, the higher is realised and actually enjoyed QL.
4. *G* and *g* can be orthogonally (along height of rectangular triangle $P_1P'_1Q_1$, denoted as h_b) projected on b_1 (and analogously g_0 and G_o to b_0, etc.) which produces another pair of variables *G'* and *g'*, which are decomposed components of aggregate gaps (*G*+*g*) to *b*.

Now we can finally turn to the presentation of the results of QL assessment with OGA and their evaluation.

4 Results

In the following chapter are first presented the achievements of three regions between 1990 and 2002. This component of QL has indeed improved more than objective expectations which are presented next. The overall improvement in QL has been achieved only in aggregate for all three regions, while their individual results diverged very much in intensity and sign, less in structure. Finally, results of the gap analysis are addressed: the main finding seems to indicate ongoing redistribution of QL from enduring to instantaneously effective components of QL in the period of reforms in Europe – EUCE have undergone market transition, EurW has been faced with economic stabilisation reforms connected with the introduction of the Euro and reforms of financially unsustainable social security services (such as pension systems, unemployment schemes, health services); WB faced chaotic developments because of wars in former Yugoslavia and more painful market transition in Romania and Bulgaria than in EUCE. At least in EUCE and EurW, restructuring of QL in favour of present achievements can be justified with the implementation of reforms. In this way the present (Lisbonian) approach to policy evaluation can be taken as a fair approximation of economic trends and QL. However, this is only because no major improvements in objective expectations as a component of QL have taken place in the period under study.

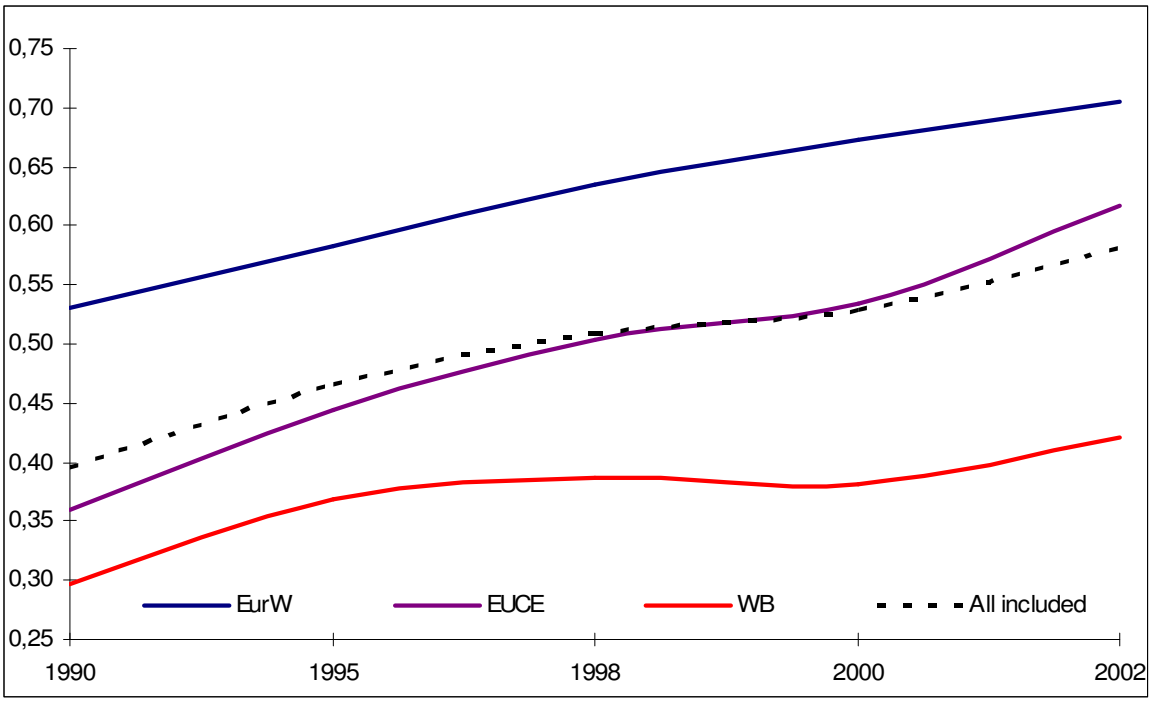
With the completion of the main reforms, much more pronounced improvements in objective expectations seem justified as the decisive driver for future QL improvements. This conclusion seems valid for all three regions in spite of wide differences which were indicated with OGA among them. The most obvious demand for improved expectations as a driver for overall improvement in QL was detected for WB, because of accumulated social and intergenerational deficits during the nineties and at the beginning of the new decade. A practical conclusion would be that strong determination of WB for EU membership might appear as a crucially important factor for their economic and social recovery. This conclusion is in opposition with the present EU policy towards the Balkan which is realised under slogan ‘standards (realised achievements) for membership (realised hopes, meet expectations)’. Improved expectations as a driver of future change can be attributed to EUCE as well: at the beginning of market transition, this region has already possessed relatively (to EurW and WB) high expectations and successful market reforms recovered high objective expectations for the future. EurW has already reached firm balance between achievements, benefiting present generations most and expectations which are mostly strengthening long term components of their QL. It can be however objected that this balance has not been utilised for more decisive improvement of overall QL. The burden of reforms in EurW has been lower than in EUCE and effective stimulus for growth resulted from eastern enlargement. Still, overall QL improved only modestly in the period under study in EurW. This suggests that EurW would also need to improve more eagerly its expectations for the future. This indicates that economic competitiveness can hardly be seen as a central goal for development of overall QL in EurW.

4.1 Achievements

From Fig. 4-1 and Annex 4 it can be seen that all included countries in 1990 on average achieved only 39,6% of the most sustainable values in all thirty indicators in the whole period. Achievements were increased to 58,1% in 2002. Overall improvements in achievements have been recorded in the entire period for all included countries on average as well as regionally.

Achievements differ between regions and only partially convergence took place. The largest exception from general improvement is WB with initial improvement between 1990 and 1995, practical stagnation in all three aspects of sustainability on average in period between 1995 and 2000 with improved achievements after the year 2000 (the environmental aspect continues its stagnation).

Figure 4-1 **IBD trends, by regions, 1990 – 2002**



Source of data: Annex.

From aggregated results one would conclude that achievements have improved in all European regions which has favourably affected QL. EU's structural indicators, which are all achievement (output) oriented indicators, have supported such opinions. This might bring one to the conclusion that present policies for provision of QL do not need any major change. As elaborated earlier, output indicators and benchmarking of achievements fail to reveal the structural nature of changes in QL as a gap between achievements and expectations. From this point of view a conclusion only about improving achievements does not mean much in terms of QL. Improved achievements are certainly a favourable sign but far from sufficient to make any judgement about QL.

Achievements improved even in WB where two thirds of member countries suffered three wars with most tragic losses between 1991 and 2000. Even in such extremely unsustainable circumstances indicators of their present achievements improved! This is not any proof about effectiveness in provision of QL, it may only reflect that the tendency toward improvements in economic indicators is resistant (at least when the starting position was relatively favourable like in former Yugoslav republics, in comparison with EUCE in 1990).

One can immediately observe from Figure 4-2 that different ***components of achievements*** were dominant for the improvements of individual regions. Among all three regions convergence was achieved in the economic component, while in the social component differences continued to diverge (for the environmental component the conclusion is not straightforward).

Income growth alone reflects only favourable effects of transition which means it should be corrected for accompanying negative effects in indicators of unemployment, public financial deficits, inflation. When positive and negative economic achievements are aggregated, they do not appear entirely encouraging neither for EUCE, not for EurW. In EurW *economic* achievements are the most advanced component of QL reaching 78,5% of the benchmarked value (Annex 4) and EUCE (69,5%), but they have improved for EUCE and for EurW by the lowest margin in the period of market transition. Economic development is the most

pronounced component of improvement in QL only for WB (at rather low level) in the period between 1990 and 2002.

Environmental achievements are pronounced as a result of economic crises (WB) or restructuring (EUCE). Among all, *the* ***environmental component*** has improved the most in EUCE (Figure 4-2) and with this environmental achievements almost surpassed by importance the economic component in overall QL in 2002. This was a result of massive environmental investment mainly in air pollution, water supply and waste management. These environmental improvements can be recognised as immediately effective for the QL of local population (present generation) which distinguishes them from environmental achievements with postponed effectiveness for QL such as climate change, use of non-renewable minerals and energy resources. However, revived energy, resource and labour intensive industrialisation at the end of nineties slowed down further improvements in environmental trends in EUCE. The first phase of transition to a market economy was fairly sustainable as a result of contraction of production in heavy (and dirty) industries. In the second phase of transition (the period in late 90's), the commercial upturn was achieved to the detriment of sustainability of development because environmental development was weak (SEI, 2004).

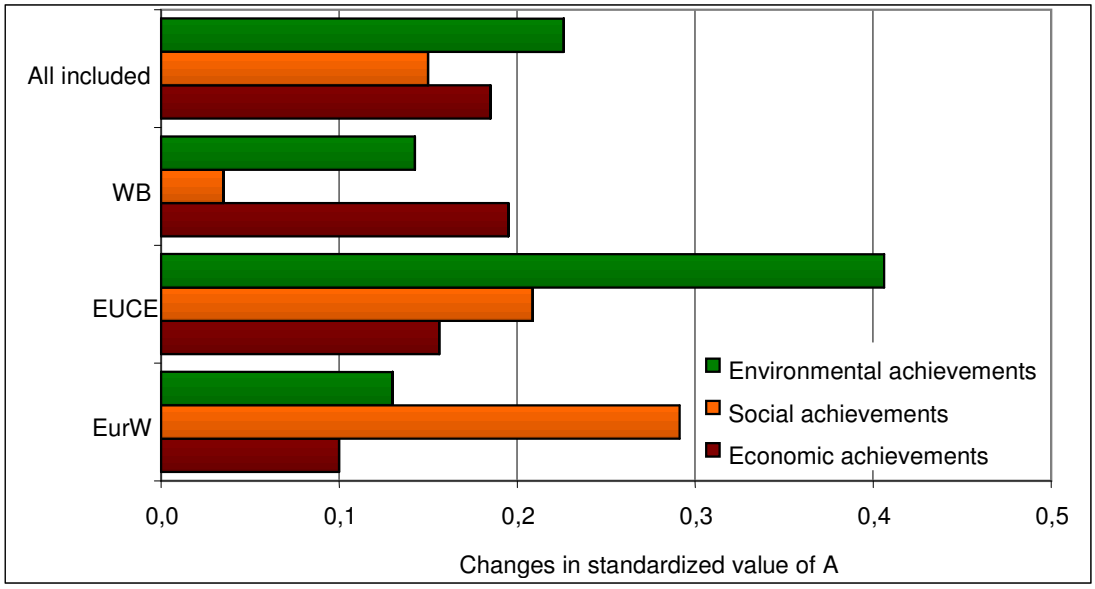
Social achievements are the second most important component in EurW but these have improved the most; ***Social*** achievements are the third ranking component of QL in EUCE, with the second ranking improvements margin since the beginning of transition – within overall positive development of previous decade social achievements were sufficient only to maintain their structural importance in overall achievements. From this one might deduce that social gains of new entrepreneur freedoms and formal democratic freedoms was reduced with simultaneous increase in social burdens of free enterprise (unjust privatisation; slow constitution of welfare state) and democratic polarisation (nationalisms, left – right polarisation; strategic partnerships etc) instead of what has been expected at the beginning of the process - authentic pluralisation. In spite of obvious social improvements and achievements, social reductionism of market reforms accumulated ***social deficit*** during transition.

Disparities in social development (measured as standard deviation relative to the value of the indicator in the latest available year) are the only one component of achievements where regional differences increased (exactly doubled). Social deficit of the transition period is an important observation for the assessment of QL. First of all, it immediately increases the relevance of subjective judgements about QL which are usually left out from normative assessments. Next it suggests *overall re-examination of present social priorities in economic development*. Increased social dissatisfaction in parts of Europe seems founded.

This is particularly important to realise in relation to WB because it points not to economic but social capital as a priority component of development in particular for former Yugoslav republics. Comparison between WB and EUCE in social achievements shows that in pre-transition year (1990) WB enjoyed for approximately one fourth higher value of social indicators than EUCE; at the end of the period in 2002 WB lagged behind EUCE in social achievements for even slightly more, so the total drop was actually enormous in only one decade. Only this deterioration in social achievements quantitatively explains the whole WB's lag behind EUCE in achievements in the whole period.

The direction of restructuring priorities is straightforward for EUCE and EurW as well. It is obvious that EUCE maintained and even further deepened their structural reliance on non-commercial components of overall QL. Structurally the same type of transformation is going on in EurW.

Figure 4-2 **Achievements by components, 1990-2002**



Source of data: Annex.

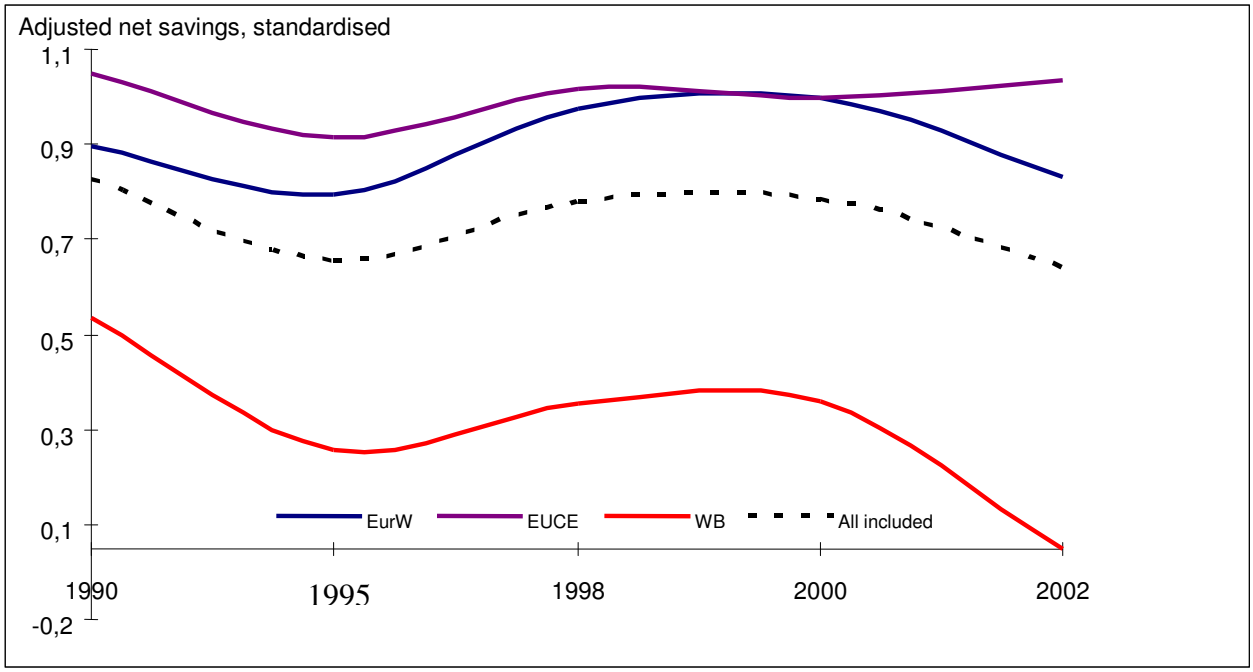
Patterns of QL provisions to present generation are regionally specific but it seems that policy conclusions for the future would be quite comparable. Achievements were not improved by all components equally (economic, social and environmental) which means that the aggregate effect of achievements on overall QL is blurred - . But we already noticed that benchmarking of achievements is not sufficient tool for judgements about changes in overall QL, because they can be achieved at very different concordance with the future generation (and long term improvements in QL). We turn now also to this forward oriented aspect of QL which will later enable to introduce the gap analysis (g- and G-distances) which complements conventional benchmarking.

4.2 Expectations

The OGA vector of expectations (E) is quantified in **Annex 3**. It shows that E in EurW varied between 12.5% and 14,5% of GDP which means that capital stock increased annually at rates in this interval. In global comparisons, EUCE's E is higher than for EurW (for one percentage point of GDP), but not the highest globally: Singapore's E amounted to 33% of GDP, China's to 28% and S. Korea's to 20%. Higher E in EUCE than in EurW *explains why (*pre)transitional *expectations were high*.

In the whole period under study and for all included countries, E decreased by two percentage points of GDP (from 13) on average. For all countries studied on average, E has been slowly decreasing (Figure 4-3 and Annex 3). This trend is very obvious for WB from mid-nineties. E is picking up only for EUCE. For EurW a rather unconvincing level and trend of E is recorded.

Figure 4-3 **Regional expectations 1990-2002, standardised**



Source of data: Annex.

Structural insight in ANS indicates that E for EUCE and EurW might differ because of two main reasons. The first one is quicker accumulation of economic capital (net domestic savings) in EUCE which is the expected result of forced reforms under market transition. WB in part failed to undergo transitional reforms, which is clearly seen from their low accumulation of economic potentials for the future over the entire period (Annex 3). The second explanation for difference between EurW and EUCE is environmental, because of essentially higher environmental damages in EUCE (between 1,3 and 1,9% of GDP annually) than in EurW (between 0,3 to 1,0% of GDP annually; Annex 3). This result is not inconsistent with previous conclusions derived from trends in IBD (which shows higher QL from environmental capital in EUCE than in EurW): the environmental component is defined as global in ANS and as local in IBD. The difference is important: IBD comprises indicators about clean as well as about dirty use of environment for the benefit of present generation (such as local pollution, water purification, waste managements, renewable energy or pesticide use), while ANS captures only global (intergenerational) environmental effects from use non-renewable raw materials and energy sources.

The difference in E tended to decrease only between EurW and EUCE but it is hard to observe any convincing convergence. The differences among all three regions ended wider in 2002 than at the beginning of the period (Table 4-1). *This indicates that the intergenerational pattern of development diverges more than intra-generational differences converge (achievements in IBD)*. As trends in A and E are not parallel, we obviously ca not conclude from IBD alone or ANS alone if regional patterns of QL improve or not.

The most striking observation for future improvement of QL is that almost all environmental damage arises from *irreversible effects* (Annex 3), which can be observed as the negative component of overall expectations. In EUCE these are twice as high as in EurW, dropping from even higher ratio at the beginning of market transition (when it was three times higher). If only this irreversible component of ANS is observed, conclusions about future sustainability of present QL also change (Table 4-1) - future sustainability of development in EurW almost equalises with EUCE. The relationship between WB and two other regions becomes even more pronounced. In WB resource irreversibility increased almost for one third of the level in 1990 - with this deduction, WB closely approached the bottom line where even in weak terms future

sustainability of development practically all vanishes. In such situation only the most basic survival (QL) options remain opened.

Lower irreversibility of development in EUCE for one fifth in 2002 compared to 1990 is important. In spite of this favourable outcome we shall conclude that *market transition has taken place at decreasing favourable* intergenerational components of QL.

Table 4-1 **Regional comparisons of E with and without irreversible effects** (as a ratio to E_{EUCE})

	EurW/EUCE with irreversible effects	EurW/EUCE without irreversible effects	WB/EUCE with irreversible effects	WB/EUCE without irreversible effects
1990	0,90	0,97	0,67	0,62
1995	0,91	1,00	0,54	0,43
1998	0,97	1,04	0,57	0,50
2000	1,00	1,04	0,58	0,41
2002*	0,87	0,90	0,36	0,20

Source of data: Annex. Notes: Note: *2001.

A relatively high share of QL in EUCE (and increasing share in WB) arises from the production and export from conventionally defined dirty industries.[66] For previously inward oriented (import substitution) transition economies, export is the essential dynamic factor of development from both, positive (employment, income) and negative (higher pollution and energy intensity of GDP) aspects.[67]

Changes of E show (Fig. 4-1) that differences between EUCE and EurW decreased. Trend of deterioration in EUCE's E slowed down and since mid nineties practically closes down transitional gap, reaching approximately the historical level from the beginning of the market transition.

Regional differences in E (measured as standard deviation relative to the value of the indicator in the latest available year) have increased from one fourth to three quarters of the level of the phenomena itself. Those countries that were relatively more advanced before transition tended to perform better except the Yugoslav part of Western Balkan, which markedly deteriorated its progress during 1990s.

Based on these results there might be an increasing conflict between immediately effective and postponed (future) contributions to present QL. This conflict has been increasingly resolved in favour of the interests of the present generation during transition. Such outcome might appear somehow abstract but it is not. One could recognize that a term *future generations* is not referring to people who will be born in a remote future meaning that they could never intersect directly with the present generation. Instead, *future generation does not refer to abstract terms but it means people, who presently observe their life choices in the long-term horizon of intergenerational sustainability*. The 'future' generation is therefore present just in the same way as the present one (short-term oriented) and continuously represented by the interest of those who make their present decisions about themselves primarily within forward oriented and long-run horizon. Hence, the present generation consists by those who prevailingly derive present decision about themselves within short- to medium-run horizon. The transitional conflict, which is in terms of sustainability defined as intergenerational, exists in configuration of society and it reflects as the conflict between groups (lifestyles and QL patterns) with

[66] World Bank. 1998. Slovenia: trade sector issues. WB: European and Central Asia Regional Office—Poverty Reduction and Economic Management Unit, 54 pp.; Radej B., I. Zakotnik. Environment as a factor of national competitiveness in manufacturing. Clean Technologies and Environmental Policy, Springer Verlag, vol. 5 (no. 2-3), august 2003, pp. 254-264.

[67] For more see Zylicz T. 1997. Environmental policy in economies in transition. Warsaw Ecological Economics Centre, Warsaw University.

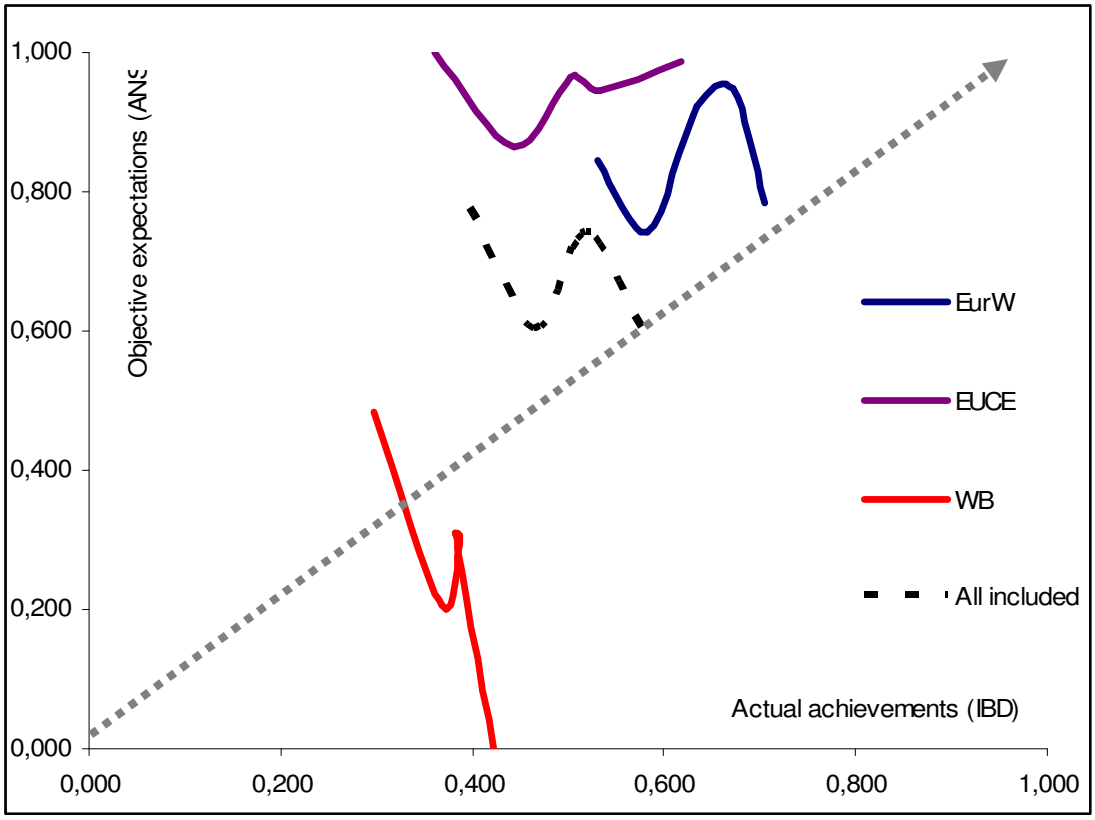
essentially different extent of time perspectives within which they adopt their day-to-day economically and socially effective decisions. In EUCE where E has been since the very beginning of market transition the relatively more important component of QL than in EurW, only poor improvements of E are seen as a justified reason for dissatisfaction with the complexity of market transition.

4.3 Quality of life – state of the art and gap analysis

When regional aggregates for A and E are combined for all years studied, than regional pathways of QL formation are obtained (**Figure 4-4**). Predominantly horizontal movements in the graph point to the fact that achievements improved in all regions more than expectations, except in WB where expectations deteriorated even more than achievements improved. We have already seen that the main reason for objectively lower achievements in EUCE is relatively poor social and inter-temporal *achievements* during transition. The largest horizontal change (improvement in relative achievements) is recorded for EUCE (40% of IBD in 2002; calculated as $((A_1-A_0)/A_1)$, see Annex **4**), followed by WB (30%), the lowest in EurW (20%). Vertical changes of regional pathways varied within the interval between very negative to stagnant (0).

Three completely different regional pathways are found in Fig. 4-4. Only EUCE parallels P to diagonal line. QL pathway of EurW have been fluctuating at already attained level of expectations from the beginning of nineties. The worst and alarming situation is found for WB, where both, intergenerational consensus as well as progress to higher QL for present generation alone deteriorated in comparisons with initial situation. There are serious concerns that part of WB countries entered the vicious cycle of stagnant achievements and contracting expectations.

Figure 4-4 **Regional pathways in QL, assessed with the objective gap analysis**



Source of data: Annex.

Contraction scales down present choices to less complex and more radical, such as in the situations when bare physical survival choices outweigh social, human and environmental goals, such as in economic crisis (oil crises, trade wars, black markets), international disorders (wars for water, oil, space, religion) or natural catastrophes (floods, storms, draughts). Such developments with deteriorating expectations may well invoke more radical values and survival strategies in this part of Europe.

Deteriorated hopes in part of WB could be cured with externally improved prospects for their future. Reorientation from present trends in WB could be at least initially rather slow and gradual, and *inclined to improvements in the social component of QL more than to economic improvements*, such as privatisation, liberalisation and export competitiveness.

Aggregate results of gap analysis are presented in Tab. 5-1. In terms of overall QL, the age of market transition was the most successful for EUCE which almost closed the gap in QL to EurW with the highest QL (Annex 5, column b). Poor improvement in QL in EurW can be illustrated with the following comparison: QL in EurW increased approximately just for the same magnitude as increased QL for all three regions on average.

Difference in overall QL between EUCE and WB tremendously increased (from 30% gap to 200% gap; see Annex 5, column *b*). Overall Q remained almost unchanged in 2002 compared to 1990, as well as structurally between A and E, but not also between regions – there was convergence in QL between EurW and EUCE and divergence with WB.

Table 5-1 finally compares results from various approaches to policy evaluation. The worst result was recorded in E which are lower in 2002 than in 1990 for all three regions. Increase in standardised GDP per capita (expressed in purchasing power parities) increased the least among all aggregates; better than GDP benchmarked achievements are summary economic achievements which comprise GDP and nine other economic indicators. Even better achievements are recorded in aggregate, when not only economic but also social and environmental achievements are summed up (except for WB). In EUCE, overall QL increased exactly for the same ratio as total achievements (0,257 in Tab. 5-1). Improvement in QL is lower than improvement in total achievements in EurW and WB. This means that achievement based Lizbonian approach to policy evaluation overestimates overall improvement in EurW and in particular in WB between 1990 and 2002. Certain historical success of Lisbonian type of evaluation in the case of EUCE is technical result of full recovery of E by 2002 to the initial (1990) value. In post-transition development, when E resumes to growth, Lisbonian approach will underestimate overall improvement in QL in EUCE as well.

Table 5-1 **Regional comparisons of components of QL gap**

	A			**E**	***b***	***g***	***G***
	Total	Economic	GDP p.c. at PPP				
	expressed as a difference in standardised values = value in 2002 minus value in 1990						
EurW	0,174	0,100	0,096	-0,062	-0,128	-0,167	-0,079
EUCE	0,257	0,156	0,136	-0,013	-0,257	-0,191	-0,173
WB	0,125	0,195	-0,004	-0,483	0,282	0,429*	0,253
All	0,185	0,150	0,076	-0,186	-0,058	-0,262	0,000
QL goal	increase				decrease	long-term consistency	decrease

Source of data: Annexes, own calculation. Note: *Absolute difference (from E>A in 1990 to E<A in 2002)

Unchanged G for all three regions shows (Tab. 5-1) that on average no major catch up has taken place in QL in nineties. The largest improvement in sum of all benchmarked indicators is recorded for EUCE. Still, successful vanishing of benchmarking gap G is the main factor of improved QL in EUCE and EurW (it also slows down deterioration of QL in WB).

One could recapitulate that all three gaps, *g* (structural gap), *G* (benchmarking gap) and *b* (QL gap) tended to systematic changes over the period. Prevailingly horizontal trajectories of regional pathways of QL are obtained which shows that improvements of QL resulted from decreased *G*-distances, while deterioration resulted from trends in g. This confirms that the present generation succeeded to increase immediately effective components of their own QL since 1990. However, these improvements in achievements were accompanied with worsened *g*-distance for all three regions, which reflects deteriorated prospects for the future. This intergeneration structural change between 1990 and 2002 is important for EUCE with traditionally higher g than EurW. For WB, *g*-distance is important because the future generation obviously suffered the most in radical overturns in part of the region, even more than the present generation - g decreased approximately for 2*G . EurW succeeded to reach balance between present and future interest of development but also seems it lacks its own specific trajectory (monotonically decreasing g-distance instead of ups and downs in their P).

The b-distance is obtained when G and g gap are observed together. These b-distance shows that QL gap decreased for EurW and EUCE and increased for WB, where prospects for the future deteriorated so much that they outweighed modest improvements in achievements. These were insufficient even for relative improvements (actual to benchmarked achievements).

One could straightforward conclude that it is necessary to introduce development policies and changes that enable long term asymptotic evolution of b and G distances to Q. However, the same is not possible to state for g-distance, it is not possible to reveal which g-distance is appropriate for all and even less for every particular region, at least not only from our present launch study. As QL is in most instances a relative concept it is unlikely that the gap will be eliminated. We only know that on the long turn and in normally favourable economic conditions *g*-distance will decrease, but we ca notsay from which side of the diagonal B, nor how quickly. In a certain historical context high g-distance can be purposely maintained high (at benefit of present or future generation) while in other circumstances balancing measures might well be advised to policymakers for closing the gap between expectations and achievements. This may well depend on cultural and subjective factors: one may choose to prefer high *g*-distance in favour of future generation just because s/he is a far sighted type of person, but many are not which is certainly no problem at all, because it is a matter of tastes, attitudes, personal circumstances and first of all, freedom of choice, which relates not only to market goods but also to value systems and economic rationales. These freedoms would be reflected in OGA only with the introduction of another, the third subjective axe in OGA, which remains a challenge for future work.

For our present effort it is important to conclude, that *g, G* and *b*-distances exist as evaluation criteria and contain certain interpretative possibilities for policy evaluation, in particular *g*- and *b*-distance, which are otherwise systematically ignored. This is certainly the case with the present Lizbonian policy evaluation framework, which introduced so called 'structural indicators' - in a terminology of OGA, Lisbonian indicators could be termed only as the *benchmarking* indicators, because their structural component is not yet worked out.

EU and member countries have all declared for sustainable development which constituted values of intergenerational equality, which would demand also that the policy evaluation approach is properly adjusted to reflect the intergenerational aspect of development. So it is not sufficient to have GDP p.c. as the prime evaluation criterion complemented with the whole set of 'structural' indicators'. Lisbonian indicators need to be systematised, worked out with diverse evaluation possibilities (such as proposed time or gap distances) to reflect anything more than what is the most obvious - historical achievements. The main conclusion from OGA is that policy makers should benefit from investing more efforts in the future to close down the structural g-gap as the main driver for future QL improvement in all three regions. This would

actually require reconsidering the present orientation of the EU development strategy to primary improvement of achievement oriented export competitiveness of European businesses.

5 Conclusions

Market transition was not a harmonious and balanced process. Overall improvements in European countries were achieved together with considerable disappointments. ***These are*** *not because improvements may not be sufficient but because they are ignorant for inter-temporal improvements*. The period which was characterised as market transition in EUCE ***shifted opportunities*** for improvement of QL in favour of the present generation. Evidence of confrontation between components of QL reveals the problematic nature of economic development in the nineties with an apparent *conflict between present and future generations, which was clearly resolved in favour of interests of the present generation*.

Present and inter-temporal inequalities in the provision QL amount to social deficit. This is an important observation for the assessment of QL. First of all, it immediately increases the *relevance of subjective judgements* about QL which are usually left out from official policy evaluation as well as from Lisbonian structrual indicators. Next, it demands overall *re-examination of social priorities* in the present economic development pattern. For future overall improvements in QL after the completion of market transition in EUCE, the observed inequality suggests not more cost-efficient but a more socially cohesive pattern of QL provision.

As Sachs and Warner unveiled, economies that are richly endowed with commercial natural resources tend to grow slowly.[68] According to the relationship between natural resource abundance and growth, EUCE were clustered in three groups:[69] (i) Poland, Hungary, Czech Republic, Slovakia and Slovenia are economically the most successful group with the least competitive natural resource abundance (in particular energy and minerals); (ii) three Baltic states and remaining Central European countries, (iii) natural resource abundant countries, former CIS and rest of former Yugoslavia, with relatively poor economic improvements.

It is not the existence of natural wealth as such that seems to be the problem, but rather the failure of public policies to avert the dangers that accompany the gifts of nature.[70] Natural resource abundance demands certain policy design to utilise the gifts of nature properly. A crucial reason for different pathways of environmental–economic integration in EUCE were different patterns of rent-seeking behaviour, such as asymmetrical protectionism (for industries of 'national interests'), monopolies, one-sided liberalisation (without internalising their full costs first), corruption, poor implementation of regulation[71] etc. This brings us back to Lipsey, Lancaster[72] and Porter[73] who marked that success of market reforms under imperfect competition (as the one which was inherited in EUCE from pre-transition period) decisively depends from non-price and non-monetary factors.

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[68] Sachs J., A. Warner. 1995. Natural resource abundance and economic growth, NBER working paper no. 5398.

[69] Kronenberg, 2002, p. 71.

[70] Gylfason T. 2001. Natural resources, education, and economic development. European Economic Review, vol. 45, no. 4-6, p. 847-859.

[71] cf. Slabe-Erker R. Metodologija indeksa okoljske trajnosti Svetovnega ekonomskega foruma in rezultati njegovih prvih ocen. (Methodology of environmental sustainability index by World economic forum) Ljubljana, IB revija, vol. 37. no4 (December 2003); pp. 43-59.

[72] Lipsey, Lancaster, 1956.

[73] Porter, 1998.

For overall QL in EUCE and WB, economisation with inter-temporal (non-renewable) resources seems at least equally important (and more justified because of present negligence) than economisation for profit. The Lisbonian strategy which prioritises measures in favour of improved European economic competitiveness is problematic because: (i) it violates income threshold hypothesis and pays no attention to the trends revealed since 1990; (ii) it seems that EUCE prefers more forward oriented QL development while EurW is more balanced. The competitiveness goal is obviously a more acceptable priority in EurW than in EUCE. This is a structural distinction which could emerge also a ***cultural*** distinction between the two European regions.

Short and long time horizons are both equaly present within their own time horizons of reasoning about QL. The problem is that the so called future generation is not recognised by their short minded fellows within their identifying long-term reasoning. Convergence between short and long term economic reasoning wodul be radical. However, *if convergence takes place only in evaluation process and not in policies themselves, than radical change is both, acceptable as only symbolic in real world but also socially effective because it provokes discussion and more pluralist reasoning. The demonstrational effect of the new style of QL assessment could support discussion about priorities and policies and budgets, which will gradually transform present orientation towards progress which in generational terms biased.*

This reveals OGA not only as an inovative policy evaluation tool but also as an instrument for change.

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Annexes

Annex 1 **List of IBD subindicators:**

Expenditure for research and development, as % of GDP; Export and import, as % of GDP; Central government's budget (deficit), as % of GDP; Gross capital formation, as % of GDP; Divorces per 1,000 persons; Emissions of Organic Water Pollutants (BOD) – Total mgO_2/l; Emissions CO_2 in tons per capita; Emissions NO_x in kg per capita; Emissions SO_2 in kg per capita; Export to import ratio in %; Female life expectancy ratio (female as a % of

male); Gross inland consumption of energy in mtoe per 1,000 US$ of GDP in 1995 prices; Gross domestic product in USD per capita in purchasing power parities; Governmental expenditure, as % of GDP; Greenhouse gasses intensity, in ton of CO_2 equivalents per capita; Infant mortality per 1,000 live births; Inflation rate %; Injuries in road traffic accidents, per 100,000 persons; Life expectancy at birth, years; Municipal wastes generation, kg per capita; Population connected to waste water treatment, in %, Protected areas as % of national territory, Public expenditure for health as % of GDP; Public expenditure for education, as % of GDP; Share of active population, in %; Share of value added from services, in % of GDP; Smoking; number of cigarettes per capita per year; Standing stock in m^3 of wood per capita; Suicides per 100,000 persons; Unemployment rate, in %; Users of internet, per 10,000 persons.

Annex 2 **Sources of data** [downloaded between 1/XII/2004 -23/XII/2004]:

European environmental agency http://themes.eea.eu.int/indicators/; Eurostat http://epp.eurostat.cec.eu.int/portal/page?_pageid=1090,1&_dad=portal&_schema=PORTAL; European foundation for the improvement of living and working conditions http://www.eurofound.eu.int/publications/files/EF02108EN.pdf; Human development report http://hdr.undp.org/statistics/data/index_alpha_indicators.cfm; International labour organisation http://laborsta.ilo.org/cgi-bin/; International monetary fund http://www.imf.org/external/pubs/ft/weo/2004/02/data/dbginim.cfm; International Telecommunication Union http://www.itu.int/ITU-D/ict/; Organisation for economic cooperation and development http://www1.oecd.org/scripts/cde/DoQuery.asp; Structural indicators for monitoring implementation of EU's Lisbon strategy, http://epp.eurostat.cec.eu.int/portal/page?_pageid=1334,1457268,1334_1457273&_dad=portal&_schema=PORTAL ; Eurostat's 'Statistics in focus' http://www.statistics.gov.uk/eurostatuk/statistics_in_focus/economy.asp ; United nations economic commission for Europe http://www.unece.org/stats/trends; United nations environmental programme http://sea.unep-wcmc.org/wdbpa/; United nations framework convention on climate change http://unfccc.int; United nations statistical office http://unstats.un.org/unsd/; World bank http://devdata.worldbank.org/data-query/; World health organisation http://www.who.int; World resource institute, http://earthtrends.wri.org/searchable_db/index.cfm?theme=5, World trade organisation http://stat.wto.org/StatisticalProgram/WSDBViewData.aspx?Language=E, Bosnia and Herzegovina http://www.cbbh.gov.ba/ , Croatia http://www.dzs.hr/, Macedonia http://www.gov.mk/English/, Switzerland http://www.bfs.admin.ch/bfs/portal/en/index.html , Serbia and Montenegro http://www.szs.sv.gov.yu/homee.htm

Annex 3 **Adjusted net savings, as % of gross national income, regional aggregates** (unstandardised values)

		EurW	EUCE	West Balkan	All included
1.1 **Gross National Investment**	1990	23,4	24,5	17,2	21,7
	1995	21,7	22,1	15,4	19,7
	1998	23,0	21,9	15,8	20,3
	2000	23,9	22,0	17,4	21,1
	2002*	22,1	22,4	14,2	19,6
1.2 **Consumption of fixed capital**	1990	14,1	12,4	10,0	12,2
	1995	14,1	12,0	9,9	12,0
	1998	13,8	11,5	9,8	11,7
	2000	13,8	11,5	9,8	11,7
	2002*	13,9	11,6	9,9	11,8
2 **Net National Savings (subtotal)** (2=1.1-1.2)	1990	9,3	12,1	7,1	9,5
	1995	7,6	10,1	5,5	7,7
	1998	9,2	10,4	6,0	8,6
	2000	10,1	10,5	7,7	9,4
	2002*	8,3	10,8	4,3	7,8
3 **Education expenditure**	1990	4,9	4,9	4,9	4,9
	1995	5,4	5,3	4,4	5,1
	1998	5,4	5,5	4,1	5,0
	2000	5,4	5,5	3,9	4,9
	2002*	5,4	5,5	3,8	4,9
4.1 **Net forest depletion as % of GNI**	1990	0,0	0,0	0,0	0,0
	1995	0,0	0,0	0,0	0,0
	1998	0,0	0,0	0,0	0,0
	2000	0,0	0,0	0,0	0,0

	2002*	0,0	0,0	0,0	0,0
4.2 **Mineral Depletion**	1990	0,1	0,1	0,1	0,1
	1995	0,0	0,1	0,3	0,1
	1998	0,0	0,0	0,2	0,1
	2000	0,0	0,0	0,2	0,1
	2002*	0,0	0,0	0,1	0,0
4.3 **Energy depletion**	1990	0,4	1,0	0,9	0,8
	1995	0,2	0,5	0,7	0,5
	1998	0,1	0,2	0,4	0,2
	2000	0,7	0,3	1,1	0,7
	2002*	0,5	0,3	1,0	0,6
4.4 **Carbon dioxide damage**	1990	0,2	0,8	0,9	0,6
	1995	0,2	1,2	1,4	0,9
	1998	0,2	1,0	1,3	0,8
	2000	0,3	1,2	1,9	1,1
	2002*	0,3	1,2	1,7	1,1
5 **Adjusted net savings, total** (5=2+3-4)	1990	13,5	15,0	10,0	12,8
	1995	12,5	13,7	7,4	8,2
	1998	14,3	14,7	8,3	13,2
	2000	14,5	14,5	8,4	11,9
	2002*	12,9	14,9	5,4	10,9

Source: World development indicators (The World Bank), own aggregation. Note: * 2001.

Annex 4 **Index of balanced development; trends, 1990 - 2002, by regional groupings and by components**

	year	**EurW**	**EUCE**	**Western Balkan**	**All included**
1 **Total**	1990	0,531	0,360	0,297	0,396
	1995	0,583	0,444	0,368	0,465
	1998	0,635	0,503	0,387	0,509
	2000	0,673	0,534	0,382	0,529
	2002	**0,704**	**0,617**	**0,421**	**0,581**
1.1 **Economic**	1990	0,685	0,539	0,251	0,492
	1995	0,723	0,572	0,314	0,536
	1998	0,783	0,632	0,387	0,601
	2000	0,829	0,645	0,389	0,621
	2002	**0,785**	**0,695**	**0,446**	**0,642**
1.2 **Social**	1990	0,377	0,255	0,314	0,315
	1995	0,422	0,278	0,302	0,334
	1998	0,505	0,302	0,294	0,367
	2000	0,579	0,332	0,286	0,399
	2002	**0,668**	**0,464**	**0,350**	**0,494**
1.3 **Environmental**	1990	0,530	0,287	0,325	0,381
	1995	0,605	0,482	0,489	0,525
	1998	0,618	0,576	0,479	0,558
	2000	0,611	0,624	0,469	0,568
	2002	**0,660**	**0,693**	**0,469**	**0,607**

Source: See Annex 2; own calculations.

Annex 5 **Objective gap analysis, 1990 - 2002, by regional groupings and by components**

	A	E	**QL=a*e**	**b**	**g**	**G**	**h_b**	**g'**	**G'**
EurW									
1990	0,531	0,845	0,448	0,494	0,222	0,441	0,199	0,100	0,394
1995	0,583	0,743	0,433	0,489	0,113	0,476	0,110	0,026	0,464
1998	0,635	0,924	0,587	0,372	0,204	0,312	0,171	0,112	0,261
2000	0,673	0,948	0,638	0,331	0,195	0,268	0,157	0,115	0,216
2002	0,704	0,783	0,552	0,367	0,056	0,362	0,055	0,008	0,358
EUCE									

1990	0,360	1,000	0,360	0,640	0,452	0,452	0,320	0,320	0,320
1995	0,444	0,865	0,384	0,572	0,298	0,489	0,254	0,155	0,418
1998	0,503	0,966	0,486	0,498	0,327	0,376	0,247	0,215	0,283
2000	0,534	0,946	0,505	0,469	0,292	0,368	0,228	0,181	0,288
2002	0,617	0,987	0,609	0,383	0,262	0,280	0,191	0,179	0,204
WB									
1990	0,297	0,483	0,143	0,873	0,131	0,863	0,130	0,020	0,853
1995	0,368	0,205	0,075	1,016	0,115	1,009	0,115	0,013	1,003
1998	0,387	0,303	0,117	0,928	0,059	0,926	0,059	0,004	0,924
2000	0,382	0,309	0,118	0,927	0,051	0,926	0,051	0,003	0,924
2002	0,421	0,000	0,000	1,155	0,298	1,116	0,288	0,077	1,078
All									
1990	0,396	0,776	0,307	0,644	0,269	0,586	0,244	0,112	0,532
1995	0,465	0,604	0,281	0,665	0,098	0,658	0,097	0,015	0,651
1998	0,509	0,731	0,372	0,560	0,157	0,538	0,151	0,044	0,516
2000	0,529	0,735	0,389	0,540	0,145	0,520	0,140	0,039	0,501
2002	0,581	0,590	0,343	0,586	0,006	0,586	0,006	0,000	0,586

Source: See Annexes 2-4; own calculations.