



**Doctoral School of
Business
Administration**

THESIS SYNOPSIS

Alexandra Köves

**Back from the Future: Defining Sustainable Employment through
Backcasting**

Ph.D. dissertation

Supervisor:

György Pataki, Ph.D
associate professor

Budapest, 2014

THESIS SYNOPSIS

Alexandra Köves

**Back from the Future: Defining Sustainable Employment through
Backcasting**

Ph.D. dissertation

Supervisor:

György Pataki, Ph.D
associate professor

© Köves Alexandra

Content

- 1. Research background and research goals..... 4
- 2. Research methodology 5
- 3. Research results 7
 - 3.1. The contribution of the literature review to our understanding of sustainable employment 7
 - 3.2. The contribution of the Hungarian backcasting experiment to our understanding of sustainable employment 8
 - 3.3. Policy recommendations 11
 - 3.4. Methodological contribution..... 12
 - 3.5. A personal note 14
- 4. Most important references 15
- 5. Relevant publications of the author 17

1. Research background and research goals

The topic of this PhD is a contribution to understanding the concept of sustainable employment beyond mainstream economic paradigms. Even though it is clear that we live in times when neoclassical economics experiences serious anomalies like ecological unsustainability or the widening of social gaps, both researchers and policy-makers are still trying to find solutions without questioning the validity of underlying assumptions. Ecological economics is a research field that attempts to leave the comfortable realms of mainstream paradigms behind in order to establish the frameworks of an economy that respects ecological boundaries while aiming to achieve social justice and it provides the theoretical framework of the thesis.

On the one hand sustainable employment as such - not being a commonly used scientific terminology - does not have extensive literature. On the other hand, in most cases when sustainability becomes the topic of discussions, the issue of employment comes up directly or indirectly. The literature review part of the thesis attempts to put the pieces together and provide an overview of what may constitute as sustainable employment in existing scientific debates. The empirical part shows how participants in a participatory future-oriented research of backcasting envision sustainable employment and policy interventions that may lead towards it.

There are no firm assumptions or validated theories in the literature on sustainable employment beyond the mainstream economic paradigms. Therefore, it is not the aim of this research to prove or refute theories. It is an abductive research that explores the meanings attached to a given topic by stakeholders in order to uncover the characteristics of the subject. This approach is particularly suited to research where we have limited knowledge of the topic and hence the researcher can base her conceptions on the cognitive frames of stakeholders. In the case of this research, the stakeholders will be the backcasting participants and authors of the relevant literature. The abductive nature of this research does not necessitate the phrasing of hypotheses but it does demand clear research questions. The research questions of this thesis aim at establishing what sustainable employment is; what the main concepts of sustainable employment are; and what policy steps may lead to ecologically and socially sustainable employment. The fact that this research is embedded in the field of ecological economics prompts that my quest to find the elements of sustainable employment must bear

in mind strong environmental sustainability, social sustainability based on social justice, and a non-growth oriented economy.

The goals of this research is to add new insights as to what alternative interventions could break the negative loops of environmental degradation, the widening of the social gap, social disintegration and economic crises. Being a policy-oriented research, the results can hopefully influence policy-making as well as scientific practices. Even though this research is not primarily a methodological one, its tangential benefit is to share the experiences of the relatively newly developed, and in Hungary rarely used method of backcasting.

2. Research methodology

In order to tackle complex issues such as sustainable employment and uncover new priorities, new methods and new approaches for introducing sustainability to the world of work, new sets of tools must also be found. This is the reason why the underlying assumptions as well as the research method itself intended to discover uncharted territories.

In 2012 I took part in a research project on alternative economic policy approaches commissioned by the National Council for Sustainable Development (NCSD), a consultative body of the Hungarian Parliament. Even though there had been an ongoing scientific discussion on the possibility and the necessity of implementing policy measures that lead towards a more sustainable future, these alternatives almost always remain theoretical. The NCSD wanted to see if it was indeed possible to translate these theoretical goals into operationalised policy options and if yes, how. As there was neither sufficient time nor sufficient resources to cover the whole spectrum of economic policy, the topic was narrowed down to employment policy, a field that I have been involved with almost all my professional life. The topic of employment provided a perfect subject for this research as it is topical; includes economic, social, individual and technological perspectives; and reflects the complexity of any other part of economic policy. The chosen method for this research was backcasting.

Backcasting belongs to the family of normative scenario building exercises that envision futures of social establishments like companies, cities or whole societies. The novelty of backcasting methods lies in the fact that rather than using the current state of affairs as a starting point in envisioning potential futures, it creates the normative vision of an ideal future and works its way back to the presence as to what actions could lead towards that desired

state. It perceives that our current ways of thinking, and the lock-in effects we experience in the present can debilitate our perceptions of a possible future and hence our contemporary actions. Therefore, it bases its methodology on the assumption that stakeholders' vision of the future can influence current actions. This way it differs significantly from forecasting. The name itself also reflects this distinction as it stems from the word forecasting but swaps 'fore' with 'back' illuminating its nature of moving backwards in time rather than forwards. Another important distinction between forecasting and backcasting is the way it perceives the actors themselves. While forecasting presumes that actors simply adjust themselves to trends and events and merely follow them, backcasting assumes that actors move towards a perceived future direction while as a kind of feedback loop, their actions influence outcomes and directions. Backcasting works well in an environment where the future is uncertain and the heterogeneous systems involved are highly complex and the foreseeable trends of the present lead to unacceptable outcomes that demand continuous social learning in order to cope with rapidly changing natural, technological and social environment. In other words, backcasting is required when system innovations are absolutely necessary in order to break free from current trends.

It is clear from the previously described nature of backcasting that its multi-dimensional and multi-levelled concept provides a 'structural affinity' to sustainability topics as it can handle transdisciplinary approaches as well. In summary, this normative approach can cover a wide scope and time-horizon and create alternative visions of the future that can facilitate thinking that moves beyond current paradigms. The qualitative, abductive nature of this research method enables drawing conclusions from a limited number of participants even if they cover just a small sample of society. All these properties make backcasting a suitable research method for sustainable employment.

The NCSD research project covered one backcasting workshop with a panel of 17 experts coming from four different sectors (business, academia, civil, public administration) with considerable experience in employment issues. The average age of this group was 46 years. Even though this workshop alone provided significant insight into a possible future scenario, the scientific curiosity of the researchers prompted them to organise another backcasting workshop using their own personal resources. The curiosity was in particular to see how the vision of a different group with participants from a dissimilar background and age group would relate to that of the expert panel of the first backcasting workshop. Therefore, a second workshop was organised that consisted of 14 university students from courses with

environmental orientation (MA in Human Ecology; MSc in Environmental and Regional Economics) with an average age of 26 years. The workshops took place in March 2012 and January 2013 and each lasted for two days.

The results of the two workshops provided ample data to see what elements participants considered crucial for building a sustainable world of work. The analysis of qualitative data emerging from these two backcasting workshops contrasted to one another and weighed against the available literature on sustainable employment may become a noteworthy contribution to the scientific discussion on the future of work in a transition to a sustainable society.

3. Research results

3.1. The contribution of the literature review to our understanding of sustainable employment

Sustainability discussions and environmental movements are manifold and cover a wide array of paradigms. The elements to sustainable employment are certainly different if we change the underlying priorities or assumptions of an approach. There is little available literature on the definition of sustainable employment and only a few deal with the relationship of employment and sustainability in detail. The literature review attempts to provide an overview of existing approaches. In order to facilitate some structure in the cacophony of ideas, the approaches are classified according to four main environmentalist perspectives: market liberals; institutionalists, bioenvironmentalists, and social greens. The four categories are also merged into two main subchapters: the market liberal and institutionalist approaches reflect the environmental approaches of the current mainstream, while bioenvironmentalists and social greens can both be regarded as representatives of the radical change paradigm.

The available literature is presented bearing in mind the focus on strong environmental sustainability, just and fair social sustainability, and a non-growth oriented economy. This means that in the case of ideas that do relate to sustainable employment but do not meet the previous criteria, the criticisms are also mentioned. At the same time, those ideas that are out of the mainstream solutions and less frequently discussed in mainstream literature are presented more extensively. This draws attention to the fact that in the discourses on the relationship of sustainable employment and sustainable environment, there are highly distinct presumptions on what sustainability is.

Current mainstream aims at preserving the status quo whereby business-as-usual (only somewhat greener) with a little help of technology can maintain both high growth strategies and the ideology of full employment. The overview shows that even though they put effort into making the economy more environment-friendly, the leading concept of ecological modernisation of market liberals can only serve as transitional measures to sustainability as they apply weak sustainability criteria and have little to say about social and environmental justice. Institutionalists - as opposed to market liberals - are not ready to leave the solution of sustainability problems to the invisible hand of the markets but believe in strong institutional interventions. Measures like ecological taxes, regulations to foster work safety or to protect the environment may be considered distortions to the market but - according to institutionalists – they have become absolutely crucial in protecting citizens and the environment. They also focus on social cohesion for example by supporting the social economy or offering public work schemes to provide employment to those crowded out of the primary labour market. However, they still fail to address distribution and equality issues.

Within the radical change paradigm, bioenvironmentalists believe that ecological degradation has long reached the carrying capacity of our planet, mainly due to the fact that humankind has failed to control its urge to overfill ecological space. Even if their proposed solutions (primarily population control) meet the criteria of strong sustainability and the creation of a steady-state economy, they fail to address the issue of social sustainability altogether. It is undoubtedly social greens who have the most to say about directions where strong environmental sustainability and social sustainability complement each other in a non-growth oriented economy. Social greens are willing to throw status quo off balance and think out-of-the-box. Their proposed measures include among others the redefinition of human needs; re-establishment of community ties; restoration of work-life balance; support of ecocalism or bioregionalism; or the establishment of a service-economy. In their approaches, strong sustainability can become the norm and just tinkering with eco-efficiency - without redefining notions, institutions, and political strategies - is not an acceptable option.

3.2. The contribution of the Hungarian backcasting experiment to our understanding of sustainable employment

When the two distinct groups were provided the opportunity to envision “the future we want in the world of work”, they constructed surprisingly similar answers. The participants’ vision for sustainable employment abandoned the ideal of full employment and made way for a life

where people are free to work not because they are forced by their subsistence but because work is an activity that serves the well-being of both their community and themselves. Well-being was defined not only in material terms but also in terms of self-development; self-fulfillment; sufficient time for nurturing family and community relationships and access to a healthy environment. This approach would enrich the forms of employment and dispose of the idea that employment generally means a 40-hour paid labour week. Participants truly believed that localized employment through the encouragement of local production and consumption patterns would contribute significantly to sustainable employment. This shift is facilitated by technological development. Today we translate technological development that frees up human labour into unemployment. The sustainable employment concept translates it into time spent within the community and with self-actualisation.

The research results underlined that in order to implement solutions that handle ecological and employment problems simultaneously, a shift from satisfying needs purely through personal consumption towards satisfying some human needs through - for example - meaningful work must take place. The backcasting visions seem to reproduce the results of most 'happiness research', namely that human happiness is based on three main components: positive emotions, meaningful life and profound activities. As the world of work is strongly related to all three, it is barely surprising that most concepts revolved around the solutions to maximise the gains in these components through "good work". Gardner, Csíkszentmihályi and Damon (2001) identify four key factors in laying the foundations of "good work" in the times we live in: development, ethics, democracy and education, all of which areas were reflected upon to varying degrees in the backcasting groups. This indicates that thinking about sustainable employment in the departmentalised policy environment we live in would not lead to satisfactory results. Sustainable employment is not just about the supply and demand side of the labour-market in green shading. It is ultimately about the way humans perceive themselves.

The deliberations, the visions and the policy suggestions of both backcasting workshops moved well beyond the concept of the homo oeconomicus. The issue they raised here is the acceptance that we are just as much homo sociologicus, homo reciprocans, homo ludens, homo habilis, homo moralis, or homo politicus as we are homo oeconomicus. The need is not to completely renounce the rational decision-maker or the self-interested man in all of us but to stop building a global society and global economy merely on this one perspective. As soon as we allow ourselves to embrace the other outlooks on human nature - as participants did -,

we can redefine common social values and concepts and reconfigure social institutions. The visions were also fully in line with Sen's capability approach (Sen, 1995) as they bore in mind the differences in needs and focused on facilitating the attainment of life quality not just through monetised income but through other means.

Healthy living systems organise themselves into dynamic, inclusive and self-sustaining local living communities but maintain permeable boundaries. They strike a balance between individual and collective needs and interests. They cultivate diversity, share knowledge and value moderation, reciprocity and co-operation. Finally, they optimise their use of energy and material to the micro-environment they have to adapt to (Korten, 2009). Even though the panels never reflected on the basics of self-supporting organic mechanisms, their visions on sustainable employment display a considerable appreciation towards the co-dependencies that describe not just biological but also social contexts.

The visions established during the two-day workshops bear considerable resemblance to those ideas that are present in social green economic literature (e.g. redefinition of human needs; re-establishment of community ties; restoration of work-life balance; support of ecolocalism) and policy recommendations (e.g. supporting local consumption and production networks; developing social economy; establishing atypical employment forms; introducing the guaranteed basic income). Common ground is that the current definition of work and the employment policies that rely on the concept of full employment are outdated. This crosstalk between the literature and the solutions identified by the participants may be due to a number of reasons. One can be that the reasons behind the economic, environmental, and social crises are perceived similarly. As soon as people are given the opportunity – like in the backcasting workshops – to distance themselves from the complexity of current problems, break-out strategies start to bear resemblances. It is also possible that mainstream paradigms are already so challenged that alternatives that are currently labelled alternative no longer seem unattainable. This seems to be underpinned by the fact that the foundations of many elements in the vision had already been laid. The social economy currently also presents an alternative to those crowded out of the labour market; a number of non-monetised local exchange and trading networks exist; and the legal base for a number of atypical employment forms had been developed. One of the main obstacles of the flourishing of these solutions is that the economic and political system still holds on to certain presuppositions. The rejection or, at least, the questioning of these assumptions could pave the way for a wider use of already existing patterns that enable a better harmonisation of ecological and employment interests

and visions. Another explanation – and this would explain why the visions of the two groups were also quite similar – is that underlying basic human desires and the cognitive pictures of how these desires could be met adequately in an ideal scenario are highly similar.

Even if ecological economics does not explicitly possess a common understanding of sustainable employment as such, certain common guiding principles do exist. The most important principle is that ecological economics does not accept that economic growth is the only way to solve the employment problems of our times, let alone the environmental ones. Well-being is by no means solely dependent on material consumption but also relies on our access to clean environment as well as meaningful work. The redefinition of human needs facilitates the redefinition of work. Employment does not entail just a 40-hour paid working week but the concept of mixed work becomes widely accepted. Paid employment is complemented by non-monetised, non-institutionalised work that has the purpose of serving personal self-realisation and advancing community goals. Hence, working for and locally within the community is not just a voluntary undertaking on the peripheries of the economy but a crucial part of it. Sustainable employment cuts its chords to the mainstream ideals of full employment, limitless globalisation and mobility and places itself in the conceptual network of local communities. This way environmental and employment goals can work alongside each other rather than in continuous confrontation. The backcasting empiria has backed up these guiding principles.

3.3. Policy recommendations

Due to the policy context of the thesis, both the literature review and the backcasting results contain a high number of policy recommendations. (Participants in the two panels identified altogether 157 recommended policy steps.) A few underlying concepts of these recommendations deserve reiteration in this synopsis as well.

In Hungary, the political discourse on employment revolves around three main concepts: flexibility of the labour market, public work schemes and to a lesser extent investments into green technology. Employment policy interventions are limited to adjusting the supply side of the labour market through trainings and labour-market services on an ever contracting primary labour market and organising public works for those who seem to be crowded out of the primary market permanently. The political rhetoric emphasises the concept of “work-based society” and the relentless goal of achieving full employment. This research

showed that sustainable employment starts with revisiting these moral and economic principles and substituting them with new values. Employment policy is currently subordinated to economic policy at best, sometimes treated as social policy, and at the worst of times seen as just organised labour supply to public works. This inferior role indicates the preferences: humans are being relegated to instruments and (employment) policy-making has lost its focus, namely to support society in achieving a better life. The backcasting exercise has shown that as soon as this focus is allowed to be shifted back to issues that matter to both individual and collective well-being, a myriad of employment policy directions open up. Employment policy needs to regain this focus in order to support sustainable employment.

Even though on European level economic growth is still of utmost importance (European Commission, 2010), there are strategic initiatives that aim to strengthen the social economy, acknowledge and legalize household and care-taking jobs, invest in community-building and the civil sector, enhance corporate social responsibility or support social dialogue. The rationale behind the encouragement of these measures may be slightly different from the rationale this research uncovered but nonetheless constitute as policy steps that we can build on if we are to move towards sustainable employment.

The research also sends another strong message. Despite the dismal results Hungarians achieve on active citizenship comparisons with other countries, both groups highlighted their desire to participate in real social dialogue. Participatory methods such as backcasting – especially if the results are taken into consideration by policy-makers – can serve as primary steps towards more citizen involvement. There are highly controversial issues related to sustainable employment such as the guaranteed basic income that must be the subject of undistorted and widespread public debate in order to learn when and how a society is ready to implement such measures.

3.4. Methodological contribution

While this thesis was never meant to be a methodological work, the novelty of the method in the Hungarian context also produced some reflexive results on the method itself. The Hungarian process can be categorized as participatory pathway-orientated backcasting. When evaluating the participatory nature of the method, it must be admitted that the experimental nature of this backcasting was emphasised during the invitations to participate. Even though in the case of the expert panel, the results were to be presented to decision-makers, the

hardcore implications of their contributions were not felt to be significant. This changes significantly the conclusions that can be drawn from the participatory nature of the process as this was more of an imitation of what could be done rather than a deliberative procedure that has radical impacts on their lives. Nonetheless, the experience supports Habermas' idea of communicative action (Habermas, 1984) being of foremost importance in democratic decision-making and his conviction that - given the right circumstances -, people with different viewpoints are indeed capable of converging their views after ample deliberation. There were heated debates and widely differing views regarding certain issues in the panels and still a coherent picture could arise from the discussions. However, - as noted previously – the participants may not have felt the urge to defend their positions as strongly as they would have in situations where the outcome radically changes something they care about (e.g. a backcasting on local development in the area they live in where the backcasted policy recommendations are certain to be fed back into decision-making). Nevertheless, it is important that participants coming from highly diverse backgrounds were still capable of framing issues that reflect their common standpoint.

This backcasting experiment has only revealed that it works well with highly educated individuals. We have no straight answer whether backcasting is indeed suitable for involving stakeholders with lower knowledge capital. Participants admitted that the two-day workshops were highly taxing and mentally tiring, and leaving the realms of the present behind in order to focus on the normative vision of the future demanded quite a bit of cognitive challenges. This may imply that the method is not well suited for involving all representatives of lay knowledge. The experiment also showed that - in backcasting - expert panels work similarly to lay panels. The request at the beginning of the workshop not to represent organisations but merely themselves and the fact that the time span was long enough not to actually know what role an institution would play in such a long-term scenario enabled the experts to participate as private persons. Therefore, the method works just as well with lay panels as it does with expert panels. This suggests that a wide range of stakeholders can be included in backcasting processes.

The thesis also describes the limitations of the research but in general it can be stated that the Hungarian experiment has proven that backcasting could be used both for further social research and as a complementary tool for decision-making. The method provides ample space for associative and free-flowing thinking and deliberation that can uncover highly complex relationships and lead us to the synthesis of different knowledge and backgrounds. As the

technique facilitates out-of-box thinking, decision-makers could be assisted in facing legitimate and implementable policy options also outside the realms of mainstream solutions.

It is also acknowledged that – as in most abductive, qualitative research - this vision reflects the co-construction of a limited number of individuals. However, it also shows that the knowledge of many overwhelmingly outweighs the knowledge of few. Great thinkers like Polányi, Beck, Habermas, Csíkszentmihályi, Frankl, Sen have raised questions and suggested answers that demonstrate incredible individual insight into contemporary social and psychological issues. However, - given the freedom to think without restraint – two groups of “ordinary” people could extraordinarily reflect on these same issues without the scientific knowledge we claim is crucial in having a proper uptake on complex subjects. Collective wisdom emerging out of deliberation is seriously undervalued in our world and I seriously hope that one of the major contributions of this research is to reinstate its merits.

3.5. A personal note

My primarily optimistic belief that humankind can conquer all, including its own shortcomings may have influenced the outcome of this research. Surely the results may seem utopian to some but - using Wright’s terminology (2012) – they are “real utopias” and our society badly needs alternative visions to find its way out of a seemingly unsustainable modus operandi. There are no clear-cut answers to complex problems such as sustainable employment. However, the search itself brings in insights that broaden our horizons on potential solutions. As Csíkszentmihályi (1997) claims, the consciousness of contemporary humans determines the future of humankind in the third millennium and all our thoughts, values and not just physical but psychological actions matter in shaping our future. This backcasting research was a thought experiment that deployed a lot of this mental energy on behalf of the participants and the researchers in the hope that it contributes not just to understanding our options but also to redesigning our future.

4. Most important references

Beck, U. [2007]; *A munka szép új világa* 1st ed., Szeged: Belvedere.

Boström, M. [2012]; A missing pillar? Challenges in theorizing and practicing social sustainability: introduction to the special issue. *Sustainability: Science, Practice, & Policy*, 8(1), pp.3–14.

Bruni, L. & Zamagni, S. [2007]; *Civil economy. Efficiency, Equity, Public Happiness*. Bern, Germany: Peter Lang AG.

Brynjolfsson, E. & McAfee, A. [2014]; *The second machine age: Work, Progress, and Prosperity in a Time of Brilliant Technologies*. London, UK: W.W. Norton & Company. DOI: 10.1016/S0921-8009(02)00262-8

Clapp, J. & Dauvergne, P. [2011]; *Paths to a green world: the political economy of the global environment* 2nd Edition. Cambridge, MA: Massachusetts Institute of Technology.

Csikszentmihályi, M. [2011]. *A fejlődés útjai – A harmadik évezred pszichológiája*. Budapest, Hungary: Nyitott Könyvműhely.

Csoba, J. [2010a]; *A tisztos munka*. Budapest, Hungary: L'Harmattan Kiadó.

Curtis, F. [2003]; Eco-localism and sustainability. *Ecological Economics*, 46(1), pp.83–102. DOI: 10.1016/S0921-8009(03)00102-2

Daly, H.E. [1977]; *Steady-state economics*. San Francisco: W.H. Freeman.

Funtowicz, S. & Ravetz, J. [2003]; Post-Normal Science. *Internet Encyclopedia of Ecological Economics*, pp.1–10.

Gardner, H., Csikszentmihályi, M. & Damon, H. [2001]; *Good Work: When Excellence and Ethics Meet*. New York: Basic Books.

Habermas, J. [1984]; *The Theory of Communicative Action. Reason and the Rationalization of Society*. Boston: Beacon Press.

Handy, C. [1984]; *The Future of Work: A Guide to a Changing Society*. Oxford, UK: Blackwell.

Hirsch, F. [1976]; *The Social Limits to Growth*. Cambridge, Massachusetts: Harvard University Press.

Ingebrigtsen, S. & Jakobsen, O. [2012]; Utopias and realism in ecological economics — Knowledge, understanding and improvisation. *Ecological Economics*, 84, pp.84–90. DOI: 10.1016/j.ecolecon.2012.09.015

- Jackson, T. [2010]; *Prosperity without growth? The transition to a sustainable economy*. London, UK: Sustainable Development Commission.
- Kallis, G., Kerschner, C. & Martinez-Alier, J. [2012]; The economics of degrowth. *Ecological Economics*, 84, pp.172–180. DOI: 10.1016/j.ecolecon.2012.08.017
- Kemp, R. & Loorbach, D. [2003]; Governance for Sustainability Through Transition Management. In *EAEPE 2003 Conference, Maastricht, The Netherlands*. pp. 1–27.
- Kerkhof, M. Van De & Wieczorek, A. [2005]; Learning and stakeholder participation in transition processes towards sustainability: Methodological considerations. *Social Change*, 72, pp.733–747. DOI: 10.1016/j.techfore.2004.10.002
- Khallash, S. & Kruse, M. [2012]; The Future of Work and Work-Life Balance 2025. *Futures*, 44(7), pp.678–686. DOI: 10.1016/j.futures.2012.04.007
- Király, G. [2013]; Útban a fenntarthatóság felé: Az átmenetmenedzsment megközelítése. *Kovács, Tavaszi-Tél*, pp.3–28.
- Korten, D. C. [2009]; *Agenda for a New Economy: From Phantom Wealth to Real Wealth*. San Francisco, CA, USA: Berrett-Koehler Publishers.
- Loorbach, D. [2007]; Governance for sustainability. *Sustainability: Science, Practice, & Policy*, 3(2), pp. 1-4.
- Max Neef, M.A., Elizalde, A. & Hopenhayn, M. [1991]; *Human Scale Development*. New York: Apex Press.
- Málovics, G. & Bajmócy, Z. [2009]; A fenntarthatóság közgazdaságtani értelmezései. *Közgazdasági Szemle*, LVI. (5), pp.464–483.
- Murphy, K. [2012]; The social pillar of sustainable development: a literature review and framework for policy analysis. *Sustainability: Science, Practice, & Policy*, 8(1), pp.15–29.
- Nierling, L. [2012]; “This is a bit of the good life”: Recognition of unpaid work from the perspective of degrowth. *Ecological Economics*, 84, pp.240–246. DOI: 10.1016/j.ecolecon.2011.10.030
- North, P. [2010]; Eco-localisation as a progressive response to peak oil and climate change – A sympathetic critique. *Geoforum*, 41(4), pp.585–594. DOI: 10.1016/j.geoforum.2009.04.013
- Pataki, Gy. & Takács-Sánta, A. (Eds.) [2004]; *Természet és gazdaság: Ökológiai közgazdaságtan szöveggyűjtemény*. Budapest: Typotex Kiadó.
- Pataki, Gy. [2009]; Ecological modernisation as a paradigm of corporate sustainability; *Sustainable Development*, 17(2), pp.82-91, DOI: 10.1002/sd.403
- Polányi, K. [1946]; *Origins of our time. The Great Transformation*. London, UK: Victor Gollancz Ltd.

Quist, J. & Vergragt, P. [2006]; Past and future of backcasting: The shift to stakeholder participation and a proposal for a methodological framework. *Futures*, 38(9), pp.1027–1045. DOI: 10.1016/j.futures.2006.02.010

Raskin, P.D. [2014]. The Great Transition Today: A Report from the Future. In *Great Transition Initiative: Toward a transformative Vision and Praxis*. Boston: Tellus Institute.

Rifkin, J. [1995]; *The End of Work: The Decline of the Global Labor Force and the Dawn of the Post-Market Era*. New York: Putnam Publishing Group.

Robinson, J. [2003]; Future subjunctive: backcasting as social learning. *Futures*, 35(8), pp.839–856. DOI: 10.1016/S0016-3287(03)00039-9

Røpke, I. [1999]; The dynamics of willingness to consume. *Ecological Economics*, 28, pp.399–420. DOI: 10.1016/S0921-8009(98)00107-4

Schor, J. B. [2005a]. Sustainable Consumption and Worktime Reduction. *Journal of Industrial Ecology*, 9(1-2), pp.37–50.

Sen, A. [1995]; Rationality and Social Choice. *The American Economic Review*, 85(1), pp.1–24.

Stubbs, W. & Cocklin, C. [2008]. Conceptualizing a “Sustainability Business Model.” *Organization & Environment*, 21(2), pp.103–127. DOI: 10.1177/1086026608318042

Tacconi, L. [1998]; Scientific methodology for ecological economics. *Ecological Economics*, 27(1), pp.91–105. DOI: 10.1016/S0921-8009(97)00134-1

Williams, C.C. [2008]; Re-thinking the future of work: Beyond binary hierarchies. *Futures*, 40(7), pp.653–663. DOI: 10.1016/j.futures.2007.12.003

Wright, E.O. [2012]; Transforming Capitalism through Real Utopias. *American Sociological Review*, 78(1), pp.1–25. DOI: 10.1177/0003122412468882

Zsolnai, L. [2001]; *Ökológia, gazdaság, etika*. Budapest, Hungary: Helikon Kiadó.

5. Relevant publications of the author

Scientific papers

Király, G., Köves, A., Pataki, Gy., & Kiss, G. [2014]; Rendszermodellezés és részvétel: egy magyar kísérlet tanulságai. *Szociológiai Szemle*, 24(2), pp.90–115.

Köves, A. & Mandják, T. [2014]; Úton egy fenntartható gazdasági paradigma felé: A komplexitás befogadása a hálózati elméleteken keresztül. *Vezetéstudomány*, XLV.(7–8); pp.69-75.

Köves, A. [2014]. Fenntarthatóság és foglalkoztatás: Mégis kinek a fenntarthatósága? *Munkügyi Szemle*, 5, pp.9-22.

Köves, A., Király, G., Pataki, Gy., & Balázs, B. [2013]; Transition to Sustainable Employment: Using Backcasting Technique for Designing Policies. *Managing Global Transitions*, 11(2), pp.119–139.

Köves, A., Király, G., Pataki, Gy., & Balázs, B. [2013]; Backcasting for Sustainable Employment: A Hungarian Experience. *Sustainability*, 5(7), pp.2991–3005. DOI: 10.3390/su5072991

Király, G., Pataki, Gy., Köves, A., & Balázs, B. [2013]; Models of (Future) Society: Bringing Social Theories Back In Backcasting. *Futures*, 51, pp.19-30. DOI: 10.1016/j.futures.2013.05.001

Conference papers

Király, G., Pataki, Gy., Köves, A., & Balázs, B. [2014]; Future visions and social theory. In *XVIII. World Congress of Sociology* (Yokohama, Japan; 13-19 July 2014)

Köves, A. [2014]; Back from the future: A vision of the turquoise economy. In *Integral European Conference* (Budapest, Hungary; 8-11 May)

Király, G., Köves, A., Pataki, Gy., & Kiss, G. [2013]; Assessing the participatory potential of system mapping. In *Workshop Pathways, scenarios and backcasting for low-carbon lifestyles* (Rotterdam, The Netherlands; 7-8 October 2013)

Király, G., Pataki, Gy., Köves, A., & Balázs, B. [2013]; Models of (Future) Society: Bringing Social Theories Back in Backcasting. In *ESA 2013 Conference* (Torino, Italy; 28-31 August 2013)

Köves, A., Király, G., Pataki, G., & Balázs, B. [2013]; Back from the Future: Defining Sustainable Employment through Backcasting. In *10th Biannual Conference of the European Society for Ecological Economics: Ecological Economics and Institutional Dynamics* (Lille, France; 18-21 June 2013) – Best poster prize

Köves A., Király G., Pataki Gy. & Balázs B. [2012]; Transition to sustainable employment – Using backcasting technique for designing policies. In *Management International Conference* (MIC), (Budapest, Hungary; 22-24 November 2012) – Best paper award

Köves, A. [2012]; Thinking out of the Box: Sustainable Employment from a Different Perspective. In *8th International Conference of PhD Students, Economics Section* (Miskolc, Hungary; 5-11 August 2012)

Köves, A., Király, G., Pataki, Gy. & Balázs, B. [2012]. Backcasting for sustainable employment. In *2nd Sustainable World Forum*. Sustainable Development and Policy Section (online conference, 1-30 November 2012)

Köves, A., Király, G. [2012]. What will work be like in the future? – Using the method of backcasting for tackling sustainable employment issues. In *Conference on The Global Economic Crisis: Consequences and Challenges – Macro-Economy, Management, Finance and Accountancy Section* (Budapest, Hungary; 22-24 February 2012)

Köves, A. [2011]; A zöldgazdaság munkahelyteremtő ereje?. In *Fenntarthatóság és versenyképesség*. LIII. Georgikon Napok, Pannon Egyetem Georgikon Kar (Keszthely, Hungary; 29-30 September 2011)

Research Studies

György, A., Köves, A., Mózer, P., Papp, E., Simonyi, Á. & Sziklai, I. [2013]; *A magyar munkaerő-piaci intézményrendszer fejlesztéspolitikai szerepe 2014 után: nemzetközi tapasztalatok, hazai kihívások*. Nemzeti Munkaügyi Hivatal, 71 p. (The developmental role of the Hungarian labour market institutional system after 2014 – international experiences, local challenges)

Király, G., Kiss, G., Köves, A. & Pataki, Gy. [2013]; *Nem növekedés-központú gazdaságpolitikai alternatívák: a fenntartható életmód felé való átmenet szakpolitikai lehetőségei*. Nemzeti Fenntartható Fejlődési Tanács, 126 p. (Non-growth oriented economic policy alternatives: policy opportunities for moving towards sustainable lifestyles)

György, A. & Köves, A. [2012]; *A Nemzeti Foglalkoztatási Szolgálat fejlesztéseinek EU2020 stratégiával történő koherenciavizsgálata*. Nemzeti Foglalkoztatási Hivatal, 226 p. (Gap assessment of the development of the National Employment Service with regard to the EU2020 targets)

Király, G., Köves, A., Pataki, Gy. & Balázs, B. [2012]; *A fenntartható társadalom felé való átmenet gazdaságpolitikai alternatívái - A fenntartható foglalkoztatáspolitikai alapvonalai*. Nemzeti Fenntartható Fejlődési Tanács, 118 p. (Alternative economic policies towards a transition to a sustainable society – Fundamental principles of sustainable employment)