

CRESSI Working papers

The CRESSI project explores the economic underpinnings of social innovation with a particular focus on how policy and practice can enhance the lives of the most marginalized and disempowered citizens in society.



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Report Contrasting CRESSI's Approach of Social Innovation with that of Neoclassical Economics

By C. Houghton Budd, C.W.M. Naastepad, and C. P. van Beers (Eds.)

Deliverable 1.3



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Creating Economic Space for Social Innovation

Report Contrasting CRESSI's Approach of Social Innovation with that of Neoclassical Economics

*Deliverable 1.3*¹

By C. Houghton Budd, C.W.M. Naastepad, and C. P. van Beers (Eds.)

Contents

PART 1 – To guide the reader	4
1. Introduction (C. Houghton Budd, C.W.M. Naastepad, and C. P. van Beers)	
1.1. Theoretical framework	5
1.2. Working terminology	6
1.3. Structure of the report	7
1.4. The brief for this report	8
1.5. Synopses of the papers	9
PART 2 – Task 1.4: How does an economic sociology of social innovation challenge conventional economic assumptions concerning the role and development of innovation in general?	15
2. Institutions from a Capability Approach perspective (N. von Jacobi)	16
2.1. Introduction	16
2.2. Defining institutions	16
2.3. Relative position and collective capabilities	21
2.4. Conclusion	22
3. Innovation – a genealogy from the standard approach in economics to an economic-sociological model for human development (R. Ziegler)	25
3.1. Introduction	25
3.2. Standard economics and innovation	26
3.3. The Schumpeterian critique of the standard approach	29
3.4. Ecology and destruction	31
3.5. Towards an extended grid model for better understanding the economic underpinnings of (social) innovation for human development	33
4. How does social innovation challenge neo-classical assumptions regarding technological innovation? (A. Havas)	40
4.1. Introduction	40
4.2. Technical, organisational and institutional changes: a subject in classical economics	41

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4.3. Technical, organisational and institutional changes: exogenous factors in neo-classical economics	43
4.4. Social innovation and the assumptions of neo-classical economics	45
5. Neoclassical economics and innovation – An EU policy making perspective on legitimising R&I policy (K. Kubeczko)	47

PART 3 – Task 1.5: What incentive structures or types of motivation best suit social innovation addressing the marginalised?50

6. Aristotelian economics and modern finance. A consideration of the true counterpart to today’s financial markets (C.W.M. Naastepad and C. Houghton Budd)	51
6.1. Introduction	51
6.2. Background	52
6.3. A first attempt at quantification	53
6.4. ‘Too much capital’ and ‘the real values of life’	55
6.5. Humanity’s ‘permanent problem’	56
6.6. Rethinking growth.....	57
6.7. In search of the ‘invisible hand’	60
6.8. Freedom, responsibility, character and capital.....	62
6.9. A twin theory for capital	63
6.10. Freed capital.....	64
6.11. The ‘unfinished symphony’ of Marshall, Keynes, Mill, Smith and Marx	65
6.12. <i>Telos</i> and <i>ethos</i>	70
6.13. Two kinds of capital; two concepts of liberty	70
6.14. Capital = capacities	72
6.15. Capital and the emancipation of the human being	73
6.16. Conclusion.....	75
7. Commitment to social and ecological objectives: Crucial in generating social innovations for the marginalised? (J. Lodemann)	87
7.1. Introduction	87
7.2. Definition of commitment.....	88
7.3. Commitment and social innovation	92
7.4. Summary	94
8. From rational agents to human diversity (M. Sebastianelli, E. Chiappero and N. von Jacobi).....	97
8.1. Introduction	97
8.2. Comparing the two approaches	98
8.3. Economic agents	100
8.4. The nature of rationality.....	101
8.5. Evaluative space and metric	108
8.6. Conceptual space for social innovation.....	109
9. The role of incentives versus intrinsic motivation in relation to micro-credit activities (G. Molnár)	115
9.1. Introduction	115
9.2. Motivations in setting up microlending institutions.....	116
9.3. The marginalised on the Hungarian labour market: incentives versus inner motivations.....	119

PART 4 – Task 1.6: Synthesis and sharing	119
10. CRESSI’s Common Framework (C. Houghton Budd, C.W.M. Naastepad, and C. P. van Beers)	119
10.1. Introduction	119
10.2. A succinct-as-possible explanation of neoclassical economics (NCE) in relation to social innovation addressing marginalisation	119
10.3. ‘Externalities’ in social innovation	124
10.4. Towards theoretical foundations for social innovation: CRESSI’s Common Framework	128
10.5. Conclusion.....	132

PART 1

To guide the reader

1. Introduction

By Christopher Houghton Budd, C.W.M. (Ro) Naastepad and Cees van Beers

This report is part of CRESSI project Work Package 1 (WP1)². It follows the previous deliverable (D1.1), entitled *Report on Institutions, Social Innovation & System Dynamics from the Perspective of the Marginalised*³. That report provided initial contextualising of the CRESSI concept and project, with its aim of Creating Economic Space for Social Innovation with a view to contributing to the overcoming of marginalisation⁴. This theme takes its cue from the statement in the EU (2013) FP7 programme call that

“...we lack systematic research about how markets, public sector and institutions (including incentives, norms and legal provisions) work for those groups of society which are marginalised...”⁵

1.1. Theoretical framework

Devised from the work of three main scholars – Jens Beckert, Amartya Sen, and Michael Mann – the over-arching research objective of WP1 is to develop a novel theoretical framework to improve understanding of the economic underpinnings of marginalisation and social innovation in the European Union.⁶ Other approaches, such as Resilience Theory⁷, Schumpeterian economics,⁸ and novel perspectives on capital (especially its link to capacities or capabilities)⁹ will also play a role.

The primary framework is the social grid of Beckert, the essence of which is that no single social field has a primary role *ex ante*. On the contrary, different social structures are likely to be at play contemporaneously, which means that their interconnections and co-evolution need to be taken seriously. For Beckert there are three main and irreducible social forces: cognitive frames, social networks and institutions (see Deliverable 1.1, Chapters 2 and 4).

The value and validity of such a grid is being explored by way of Sen’s ‘capabilities approach’, whereby individuals alone and/or collectively transform their ‘endowments into ‘achieved functionings’ (see Deliverable 1.1, Chapters 3 and 5¹⁰).

Such a process, along with its success *vis-à-vis* the real world, is also being conceived

² Further details about the CRESSI project, including its work packages and deliverables, can be found at: <http://www.sbs.ox.ac.uk/ideas-impact/cressi>

³ Chapters from this deliverable are available online at: <http://www.sbs.ox.ac.uk/ideas-impact/cressi/publications-0>

⁴ Marginalisation is a key word which, however, people interpret in various ways. Coming to an agreed, shared and clear meaning that the world can also use is one of the project’s main challenges.

⁵ European Commission (2012) Activity 8.1, SSH.2013.1.1-1 ‘Economic underpinnings of social innovation’ of *FP7 Cooperation Work Programme 2013 Theme 8: Socio-economic sciences and humanities*.

⁶ For a definition of these terms, see Section 1.2: Working terminology.

⁷ Grant Agreement, Annex 1, WP1 description.

⁸ Grant Agreement, Annex 1, WP1 description.

⁹ Grant Agreement, Annex 1, WP5 description.

¹⁰ Both chapters are downloadable at: <http://www.sbs.ox.ac.uk/ideas-impact/cressi/publications-0>

and evaluated in terms of Mann's account of four (which were expanded by Risto Heiskala, one of the partners in D1.1, into six) social powers (see Deliverable 1.1, Chapters 9 to 11¹¹).

These perspectives have been combined into a Common Framework, set out in D1.1 Chapter 11.

1.2. Working terminology

The work in the project relates to an important set of concepts – in particular, marginalisation, social innovation, and economic underpinnings. These are being used in the sense of initial and provisional, even loose, formulations, so that their deeper or agreed meanings can be explored as the project unfolds. Such a working terminology serves to give all partners a shared focus, while avoiding the stifling or standardising of researchers' intellectual creativity and freedom. The hope is to arrive at convergence of meaning out of diverse perspectives.

1.2.1. Marginalisation

The EU has no fixed meaning for 'marginalisation' or for 'vulnerable people'. The connotation is often of poverty and people on the edge of society, but such things as poverty are complex matters, while one also has to distinguish between those who need help extended to them and those who, were it not for lack of resources, could develop and drive their own overcoming of marginalisation. What marginalisation actually comes to mean in the CRESSI context will therefore depend on the terms of reference and empirical findings of the cases studied.

1.2.2. Social innovation

The EU descriptor for social innovation is more concrete, namely, "the development and delivery of new ideas and solutions (products, services, models, markets, processes) at different socio-structural levels that intentionally seek to change power relations and improve human capabilities, as well as the processes via which these solutions are carried out."

1.2.3. Economic underpinnings

Conventionally, both theoretically and empirically the economic underpinnings of social innovation are understood in terms of "how different actors gain access to the resources needed to innovate in a general context of scarcity".¹² These resources include "not only financial capital, but also manufactured, social, and cultural capital, and natural resources, depending on the context of the innovation. Access to resources raises questions of efficient and effective allocation, as well as of fair distribution and sustainable use."¹³

This echoes but is not quite the same as 'the economic problem' when understood as efficient allocation of scarce resources, leading to the question: to what extent does

¹¹ Chapters 9-11 are downloadable at: <http://www.sbs.ox.ac.uk/ideas-impact/cressi/publications-0>

¹² Grant Agreement, Annex 1, Part B, p. 8.

¹³ *Ibid.*

social innovation require a widening of today's prevailing concepts and theories, including 'the micro-foundations of economic theory'¹⁴ beyond the current paradigm? Put more succinctly, can space, and economic space in particular, be created for social innovation if all social life is reduced to markets?

1.2.4. Capabilities, capacities, and related concepts

In the context of the CRESSI project, with its emphasis on Amartya Sen's capability approach¹⁵ there is a need for precision as to the use of the word 'capability', as well as of related words which are also central to the project, such as 'capacities'. There is also the fact that, in English, both words have general meanings, which would tend to override, as it were, any specific meaning unless that qualified use is made clear.

In general (and dictionary) usage, 'capability' can mean the power or ability to do something, the extent of someone's or something's ability, and the facility to perform a specified task. 'Capacity' means, variously, the amount that something can contain or produce, the ability or power to do or understand something, and a role, as in 'his capacity as director'. If one discounts the meanings linked to physical life, such as an army's capability on the battlefield or a cup's capacity to hold water, focusing instead on the social meanings, then it is evident that these terms are also somewhat overlapping if not interchangeable.

In writing this report, we have sought to let the context make this clear where the meanings of these words have been made specific. For example, Sen's 'Capability Approach' uses 'capability' in the sense of being capable of, or ability, hence 'beings' or 'doings', which it further translates as 'functionings' – states and activities that constitute a person's being. Examples of functionings vary from being healthy, having a good job, and being safe, to being happy, having self-respect, and being calm. In other words, capability is conceptualised as a reflection of the freedom to achieve valuable (often non-economic) 'functionings', achieved through the agency of one's ability to pursue one's goals on a basis of self-determination, self-empowerment and autonomy.

The term 'capacities' as used in CRESSI, refers to such human qualities as intelligence, consciousness, thinking, ideation, intuition, creativity and initiative, non-material dimensions to human existence (and indeed wealth or value creation) without which economic and social life, and capital in particular, would make little sense. Arguably, creating economic space for social innovation depends crucially on such 'capacities', and a main problem we face is narrow or simplified thinking that does not capture such ephemeral phenomena. Such thinking, therefore, often fails to embrace the full meaning of socio-economic events, at the same time that it too readily marginalises or 'outlies' those people, events and ideas that challenge the viability of its assumptions.

1.3. Structure of the report

In the previous CRESSI report (D1.1) we focused on research tasks conducted under three sub-headings:

¹⁴ Grant Agreement, Annex 1, Part B, p. 9.

¹⁵ Through his academic work over decades, Sen had come to remark the importance of an ethical and philosophical analysis as the basis for a new concept of development, distinct from other current economic perspectives within international development theories: "values are not then *just* instruments, but also views of what should be or should not be promoted" (Sen, 1988).

- Task 1.1: What are the common institutional factors at play in defining and facilitating the enactment of effective social innovation focused on the marginalised in different contexts?
- Task 1.2: What are the systemic dynamics that delineate the lifecycles and resilience of social innovation?
- Task 1.3: How is power enacted in the key contexts for social innovation?

This report (D1.3) comprises two further topic areas:

- Task 1.4: How does an economic sociology of social innovation challenge conventional economic assumptions concerning the role and development of innovation in general?
- Task 1.5: What incentive structures or types of motivation best suit social innovation addressing the marginalised?

The report at hand has four parts. Part 1 is this Introduction. The remaining sections explain Task 1.4 and Task 1.5 in more detail (Section 1.4), and provide synopses of the papers in this report (Section 1.5).

Parts 2 and 3 comprise the various papers under the headings of Task 1.4 and 1.5 respectively. Part 4, comprising Task 1.6, presents the findings of this stage of the work, and provides a (tentative) common framework as it emerges from the eight papers in this report, which is to guide the case studies, measurement and analysis to be undertaken later in the project. Conversely, the work done in the remainder of this project will feed back into the common framework.

1.4. The brief for this report

The ‘bottom line’ of the brief suggested for the papers covered by this report¹⁶ was: How does the project’s suggested approach to social innovation differ from established neoclassical microeconomic analyses? And what departure from, or further evolution of, neoclassical economics is required for social innovation?

As regards Task 1.4 (*How does an economic sociology of social innovation challenge conventional economic assumptions concerning the role and development of innovation in general?*), the idea was to integrate the conceptual tools elaborated in the previous three tasks by referring to more standard economic analysis. In particular, to compare the notions of vulnerability, institutions, power and social innovation¹⁷ previously developed in this Work Package with today’s predominant neoclassical microeconomic analysis, and to highlight the utility of each of these different approaches in terms of an analysis of social innovation and its (potential) impact on the most marginalised and vulnerable populations particularly in terms of institutional and systems level structures and dynamics.

Task 1.5 (*What incentive structures best suit social innovation addressing the marginalised?*) focuses on a concern that the scale and viability of innovation that takes

¹⁶ See Grant Agreement, Annex 1, Part B.

¹⁷ Per OED, to innovate is ‘to change into something new, to bring something new into being, or to change something already established.’

social and ecological goals into account often appears to be limited because of incompatibilities with the normative theoretical foundations on which our economic order rests. Neoclassical economic theory suggests that the rational, utility-maximising individual will allocate resources to maximise his own returns rather than returns to others or to society generally. This view of the allocation of resources rests on narrow assumptions about human motivation. Human beings are depicted as ‘rational fools’ (Sen, 1990), whose main motivation is myopic, microeconomic self-interest. This is not just a positive (objective) characteristic, but a utilitarian moral prescription; according to this paradigm human behaviour should be guided by self-interest in order to achieve maximum common welfare.

This theory is, however, increasingly questioned by philosophers and economists who argue that, in reality, human actors balance two opposing sets of propensities, the self-oriented and the other-oriented. It is this balance, rather than self-interest alone, which qualifies human beings for social existence. Moreover, a one-sided emphasis on self-interest may erode our social qualities (Sen 1997; Grant 2011). If the only factor that can possibly motivate people towards ethical behaviour is financial gain, sustainable and inclusive growth may prove prohibitively costly, if attainable at all in any effectively social way.

There is a need, therefore, to study how commitment to social and ecological objectives, or ‘intrinsic motivation’, is critical to generating business and employment opportunities for the marginalised in ways that exhaust neither nature nor the human actors. This entails reviewing the literature on and investigating empirically the role of ‘ethics incentives’ versus ‘intrinsic motivation’ in social innovation in finance in various sectors.

The findings of the enquiries under Task 1.4 and 1.5 are presented in Part 4 of this report (1.6: Synthesis and sharing), which also frames the implications of its findings in terms of CRESSI’s Common Framework,¹⁸ comprising the perspectives of Beckert, Sen and Mann.

1.5. Synopses of the papers

The papers in this report come under two headings, defined by Tasks 1.4 and 1.5 of Work Package 1. This section provides synopses of the papers showing how the papers address these tasks, and how they relate to the three main scholars Beckert, Sen and Mann.

1.5.1. TASK 1.4 – How does an economic sociology of social innovation challenge conventional economic assumptions concerning the role and development of innovation in general?

Nadia von Jacobi’s paper *Institutions from a Capability Approach perspective* (Chapter 2) aims at a reconceptualisation of the nature and scope of institutions from the vantage point of Amartya Sen’s Capability Approach. From the point of view of neoclassical economics, institutions [such as property rights, contracts, intellectual

¹⁸ Summarised at the end of D1.1 and also at the end of this chapter.

property rights, in short, laws and formal and informal rules and regulation (eds.)] exist to improve the functioning of markets, or to enhance efficiency. From the perspective of economic sociology (à la Beckert 2010) as well as the Capability Approach, on the other hand, institutions are ‘*socially defined structures* which enable and shape human interaction.’ Institutions serve collective aims and in order to serve these aims, institutions consist of *constraints* which shape human behaviour, as well as of *space* which is constantly renegotiated and modified.

Von Jacobi then goes on to ask who creates institutions: the individual (à la Douglas North 1990) or society (à la Pranab Bardhan 2005)? For North, however, the individual is constrained by structures, whereas von Jacobi argues that “apart from a delimiting power, institutions have wider instrumental value in providing opportunities for human action.” Within a Senian view, “the institutional setting should ideally be evaluated in terms of the degree to which it enables its society to achieve greater capabilities.” This is in line with Idealist Institutionalists such as Johnson (1989) who state that “institutions express ideas and embody a continuing approach to resolving the issues which arise”. “Once realised that institutions embed an idea or particular will,” continues von Jacobi, “we should ask ourselves whose idea and will it is.” Institutions can serve the interests of a restricted group or create opportunities that recast the distribution of capabilities within a society.

Social innovation depends on the balance between institutions’ two elements: constraints and space, or structure and ideas or aims. By not mentioning explicitly space for ideas and agency, theories concentrating only on limits (such as constraints and rules) can have important social effects by shifting the focus of attention to adherence to rules. This has the effect of forcing “places and people with diverse history, values and culture to adhere to resolutions of human issues that have evolved outside of their own values and collective choices.” Besides being ethically questionable, this tends to lead to institutions that do not work; “it is far from empirically proven that a one-size-fits-all approach to institutions is efficient in terms of human development, or even in terms of growth.”

Returning to the question who creates institutions (the individual or society), this is taken up also by researchers within the Capability Approach. Are capabilities created at the individual level or at the collective level? For the author, acknowledging the position of the individual within society does not require renouncing ethical individualism.

Rafael Ziegler observes, in his paper *Innovation – a genealogy from the standard approach in economics to an economic-sociological model for human development* (Chapter 3), that today, entrepreneurship and innovation are strongly associated with a focus on profits, and with social and ecological problems resulting from profit maximisation. The legitimisation of this behaviour appears to be given by neoclassical theory, which doesn’t leave (let alone create) space for entrepreneurs to behave otherwise but which paradoxically also does not offer an account of entrepreneurial action as a distinct type of economic rationality. The neoclassical (equilibrium) approach contrasts to some extent with, for example, the emphasis of the Austrian

school on entrepreneurship as a discovery process (although also there, the only envisaged outcome is profit maximisation). At the macroeconomic level, the only goal considered is economic growth, which is regarded as the “single most important determinant of the economic well-being of a nation’s citizens” (Mankiw 2000). But what creates economic growth is not analysed. In neoclassical models, it depends on so-called ‘exogenous factors’ (typically population growth and technological progress) whose causes are not researched (“the determinants of technological progress are not understood”, says Mankiw 2000: 115).

Schumpeter has criticised the standard approach for leaving out from the analysis the entrepreneur and his entrepreneurial and innovative activities in their concrete historical context; but he stays within the same normative frame of increases in the standard of living as the goal of economic activity. Schumpeter’s focus on disruptive change and out-of-equilibrium processes is also adapted by the resilience approach, which – inspired by systems ecology – focuses on transition processes, or “the capacity to change and yet still maintain the integrity of the original” (Westley, Zimmerman and Patton 2007). “This ecology-inspired perspective on innovation finally breaks with the cognitive frame of economic development and a rising standard of living,” writes Ziegler. However, the focus on maintaining the health and integrity of the system that the resilience approach offers remains problematic, if this focus is also posited as a “given frame” or metaphor that is not further analysed for its normative aspects.

Ziegler concludes that – in the light of a) the failure of neoclassical economics to provide an account of entrepreneurship and innovation while insisting on the importance of entrepreneurship and innovation for its guiding frame of economic growth, b) the Schumpeterian insight, adopted by contemporary innovation studies, that the study of innovation has to be sensitive to its historical context, and c) finally the observation that all these approaches include societal ideas that frame the analysis and give it an evaluative dimension – there is space for a creative inference to an improved model of innovation that takes history and social context as well as ethics seriously. The Capabilities Approach and its account of human development and emphasis on ethical individualism offer a language and cognitive framework that could help create space for normative discussions, while Michael Mann’s framework of social powers will help in analysing the dynamic social reality that will be involved. In this view, economics is – paraphrasing Mann – the study of the central human capability to extract, transform, distribute and consume the produce of nature. Thus, the brief genealogy of innovation and entrepreneurship in economics suggests the prima facie legitimacy of the extended social grid proposed by CRESSI, which takes ethics and history seriously. However, clearly there is space for alternative approaches in this direction, and CRESSI needs to compare its own approach with these alternatives as it enters the case studies and refines its approach.

Attila Havas’s paper *How does social innovation challenge neo-classical economic assumptions regarding technological innovation?* (Chapter 4) traces the loss of realism in the evolution from classical to neoclassical economics. While classical economics paid attention to dynamics (including learning processes), uncertainty, and historical path-dependence (including irreversibilities) within a context of political and social

structures, all of which are crucial to a realistic analysis of innovation, neoclassical economics, with its focus on optimisation and (static) equilibrium, is a-historical and abstract, and ignores technological, institutional and behavioural change. Although some economists, such as Nelson (1959) and Arrow (1962), have taken up analysing innovation within a neoclassical framework, this research has tended to remain confined to a particular class of innovations (based on intramural R&D results), and to disregard other, equally important types of innovation, including innovations based non-R&D knowledge and non-technological innovations, as well as the impact of co-evolving social, political and economic structures.

In *Neoclassical economics and innovation – An EU policy making perspective on legitimising R&I policy* (Chapter 5), **Klaus Kubeczko** discusses the impact of neoclassical economic thinking on EU research and innovation (R&I) policy making. Political action addressing R&I is frequently legitimised with reference to concepts such as market failure and regulatory failure, which are derived from a neoclassical perspective on the economy and society. Such concepts need to be thought through, however. For instance, regarding market failure, are ‘markets for knowledge’ to be treated in the same way as ‘markets for products and services’? Are ‘market solutions’ the answer in all cases, despite differences in terms of, for instance, uncertainty, divisibility, externalities, and private appropriability?

1.5.2. TASK 1.5 – What incentive structures or types of motivation best suit social innovation addressing the marginalised?

In *Aristotelian Economics and Modern Finance. A consideration of the true counterpart to today’s financial markets* (Chapter 6), **C.W.M. (Ro) Naastepad and Christopher Houghton Budd** argue that marginalisation and social exclusion are related to the motivating forces that belong to what have come to be accepted as the foundation of modern economic theory, policy and institutions. Solving these problems requires rethinking the microeconomic foundations of economic theory. The root of the problem, according to the authors, is an incomplete analysis of capital, itself the result of an incomplete understanding of the human being. Unless we understand the wider nature of the human being and the purpose of human life, we shall not be able to define the boundaries of the economy or assign to capital its proper role in society. This paper is an invitation to review – and hopefully remedy – our theoretical understanding of capital in the light of Aristotle’s concepts of *τέλος* (telos, purpose) and *ἦθος* (ethos, character), or the inner sense of what is right and worthy in human life. It explores how these concepts can help in defining the boundaries of the economy, and, more specifically, in finding a true counterpart to today’s ‘superabundant liquidity’ – a phenomenon that can also be described as “too much capital”. Unless this counterpart can be identified, marginalisation and social exclusion are inevitable.

Justus Lodemann’s paper *Commitment to social and ecological objectives: Crucial in generating social innovations for the marginalized?* (Chapter 7), places commitment centre-stage as the *sine-qua-non* of innovation. Lodemann then looks at various aspects of commitment, including (a) how it shapes relationships between social innovator, target group and other stakeholders; (2) how, *vice versa*, relationships between social innovator, target group and stakeholders influence commitment; and (3) what factors

initiate, foster or decrease commitment. It is important, however, to distinguish commitment and motivation. Although commitment has a voluntary component (it is not initiated by merely recognising responsibilities, obligations, or to avoid punishment), during the course of action a degree of obligation might develop for the committing social entity.

Key features of neoclassical economics identified by **Marco Sebastianelli, Enrica Chiappero and Nadia von Jacobi** in *From rational agents to human diversity* (Chapter 7) are (a) methodological individualism, which ignores the impact of individual's actions on others (the whole is nothing but the sum of individual actions); (b) methodological instrumentalism – that is, only the end counts (in fact just one single end, namely maximisation of individual utility), and rationality is subjected to this end; the particular way in which ends are achieved does not matter; (c) the assumption of perfect information; (d) the assumption of an inherent tendency towards equilibrium; (e) confusion of objective and normative stances;¹⁹ and (f) circularity in reasoning.²⁰

The Capability Approach, on the other hand, recognises (a) a diversity of ends or values ('ethical individualism'); (b) multiple dimensions of wellbeing; (c) intrinsic motivation in addition to instrumental motivation; or commitment in addition to self-interest;²¹ (d) an emphasis on the necessity to understand the nature of economic phenomena with the purpose of producing knowledge-driven suggestions on how to improve people's lives (rather than assuming automatic tendencies towards equilibrium states); and (e) freedom of choice in the sense of freedom of thought; that is, of being free to choose the values guiding one's behaviour (rather than being constrained by alternatives determined by axiomatically given preferences, and denied by axiomatic forms of rationality or "machine-like responses to inputs such as prices and other monetary incentives").

Coming to the implications for social innovation, the authors emphasise the importance of *conceptual space*. A comparison between neoclassical theory and the Capability Approach points to the importance of *ideas* and (shared) intentions rather than self-interested responses to incentives as movers of people and drivers of choices and actions including innovation. These ideas are then transmitted through social interaction (with 'social networks' functioning as *connectors*) and implemented through collective as well as individual agency.

György Molnár investigates *The role of incentives versus intrinsic motivation in relation to microcredit activities* (Chapter 8). Neoclassical economics treats

¹⁹ For instance, besides being an over-simplification of the object of analysis (*i.e.* the human being), neoclassical economics' definition of the 'representative agent' as a 'rational being' (complying with the assumption of perfect rationality) also includes normative elements.

²⁰ In contrast to recommendations by methodologists (in particular Karl Popper) for scientific research to aim at falsification rather than verification, the neoclassical paradigm clings to inferring predictions from unproven (axiomatic) theory, subjecting these to empirical testing, and then using neoclassical theory to explain the outcomes (rather than using the outcomes to test the theory), thus preferring deduction over induction, and ignoring the fact that the test result could be an outcome of many different underlying models. Another example of circular reasoning is the explanation of behaviour in terms of preferences, whose existence is 'proved' by the behaviour, thereby excluding other explanations of behaviour (including lack of freedom to choose).

²¹ Including *commitment* to choices "that are not best in one's personal interest but are considered more appropriate or rightful", *i.e.* to "the act in itself, not because of the consequences it generates."

marginalisation (which can occur as part of free-market equilibrium) as a consequence of the absence of incentives and work ethic. Its ignorance of intrinsic motivation is the cause of a number of market and government failures. Taking the example of micro-lending, Molnár shows that at the start of his experiment, Muhammed Yunus had in mind a concept of entrepreneurship and investment based on intrinsic motivation ('psychological, emotional, and spiritual satisfaction'). Simultaneously, he was aware that businesses owned by the poor or disadvantaged must run a profit in order to be sustainable in the long run. However, in practice, (previously) socially excluded people often experience difficulty in maintaining profitability, and their capital soon starts to shrink. In policy circles as well as in academia, the compatibility or otherwise of intrinsic motivation and 'market-based solutions' is an issue creating confusion in many minds. On the one hand, we find those who do not expect self-sustainability of microfinance institutions; on the other, there are those who believe the poor can be helped in profit-maximising ways (e.g. by providing them with loans and hence a strong financial incentive to profit-maximise). A main problem, however, is extremely poor initial conditions in terms of not just financial capital, but also knowledge and social relationships, which in turn erode trust and motivation. In such circumstances, can incentives work as a 'jump-start'?

PART 2

Task 1.4: How does an economic sociology of social innovation challenge conventional economic assumptions concerning the role and development of innovation in general?

2. Institutions from a Capability Approach Perspective

By Nadia von Jacobi²²

2.1. Introduction

Within the CRESSI project, institutions play an important role in shaping the context within which social innovation processes emerge, evolve and - eventually - exert pressure to change the social forces *cognitive frames, networks* and *institutions* themselves. If institutions are to be understood as *providers* of reasons and resources for human development and social progress in general, the point of view adopted for their conceptual framing matters: how we understand and conceive institutions affects which *role for society* we attribute to them and how we think about *changing* them, including through social innovation processes.

Within neoclassical economics, institutions are broadly conceived as equilibrium-outcomes that lead to a more efficient functioning of markets.²³ Such an interpretation of institutions is reductionist mainly because it implies that different contextual realities will eventually converge towards the most efficient institutional set-up. Consequently, neoclassical economics-inspired interpretations of institutions – also known as *Rational Choice Institutionalism* – are unable to explain on one hand the coexistence of very diverse institutional realities, on the other hand the persistence of highly inefficient institutional set-ups. The institutional literature can of course not be reduced to *Rational Choice Institutionalism*, as many other scholars have already highlighted the role of complementarities (Aoki, 2001; Pagano, 2011) and of complex interactions between formal and informal rules (e.g. North, 1990).

This study departs from Amartya Sen's Capability Approach in order to conceptually reframe the nature and scope of institutions within society. It proposes an alternative definition for institutions and tries to highlight conceptual commonalities and differences with other, broadly used definitions.

2.2. Defining institutions

Institutions can be considered a subset of contextual characteristics - or as in Beckert (2010), as one of the social forces that cannot be missed out in analyzing social processes. Within the Capability Approach, contextual characteristics can have an external effect on individuals by providing *reasons and resources* for action (von Jacobi, 2014; Longshore Smith and Seward, 2009; Robeyns, 2005). In what follows, I

²² University of Pavia.

²³ In Neoclassical Economics, equilibrium is conceived as the clearance between demand and supply, meaning that any amount of good or service exchanged on the market encounter an interested consumer on one hand and a producer willing to offer it on the other. Efficiency, in Neoclassical Economics, is a synonym for this market clearance, as it requires for the maximum amount of goods and services to be exchanged on the market, reducing therefore any potential loss in 'surplus' which stands for a proxy of well-being or satisfaction of individuals that participate in the market. Applying this logic to institutions implies envisaging rules as a good that - as any other product - results from the interaction of people demanding for it and people producing it. If institutions are equilibrium-outcomes this means that they take on the precise form according to which demand and supply meet, neither under-regulating nor over-regulating any topic.

provide a definition of institution that is functional for an analysis in which institutions are meant to provide both, reasons and resources to their citizens:

Institutions are *socially defined structures* which enable and shape human interaction. These structures are defined by *constraints* and by *spaces* withheld by the same constraints. The spaces (i) reflect a collective aim that resulted from a bargaining process and (ii) become themselves the *arena of action* for those who want to modify the constraints. The structure itself is therefore dynamic and *continuously reshaping*.

2.2.1. Common elements

In choosing this definition as my preferred one, I pool between the work of Douglass North and others that mainly belong to different branches of the New Institutionalism on one side, and Pranab Bardhan which adopts the view of a development economist. Among the most famous definitions of institutions are “the rules of the game in a society or the humanly devised constraints that shape human interaction”, (North, 1990:3) and the “formal and informal rules a society decides to give itself”, (Bardhan, 2005). In what follows, I outline to which extent my definition is different.

Some elements are common to both (North’s and Bardhan’s) and to my preferred definition such as the inclusion of formal and informal elements - where Bardhan states this explicitly, North also specifies his constraints as being informal or formal (North, 1990:35). The definition I propose does not refer explicitly to the nature of the structures, but implicitly includes formal — intended as state-guaranteed — and informal arrangements.²⁴

A second common element is the understanding that institutions originate with a precise goal, namely to shape human interaction, usually in the attempt of reducing uncertainty and of simplifying a smooth coexistence of diverse strategic behaviors. This notion is commonly accepted among institutionalists, for example by March and Olsen: “institutions create elements of order and predictability” (March and Olsen, 2006:4).

A third and directly deducible ground of agreement among scholars is that order and predictability, or the shaping of human interaction requires a structuring process. For the rational choice institutionalists it is North’s constraints or scripts, behavioural repertoires, sequences... who can be either exogenous (as in Shepsle, 1979; North, 1990) or endogenous (as in Riker, 1980; Schotter, 1981; Calvert, 1995).²⁵ Historical institutionalists also focus on “rule structures that are human creations” (Sanders, 2006:40), although they are more interested in the processes that shape these structures in time, often referring to the concept of path dependence (Pierson, 2004). The “logic of appropriateness” that belongs to sociological institutionalism also refers to conventions, norms and cognitive frames (Hay, 2006:58) which enable a structuring process, just as

²⁴ I do not distinguish between formal and informal institutions to imply different degrees of enforcement, or credibility, or differences in functioning. I simply distinguish in terms of their “form”, namely among those that belong to the terrain of state-action, and can therefore be the direct object of policy-intervention, and those that evolve and act outside of the state-terrain. For a theoretic appraisal of the usefulness of distinguishing between formal and informal institutions and an introduction of the concepts of form and content when analyzing institutions, see Sindzingre (2006, 2003).

²⁵ For rational choice literature reviews that distinguish between exogenous or endogenous constraints see for example Shepsle (1986, 2006) or Weingast (2002).

the “stable and recurrent patterns” that are dear to the network institutionalists give structure to repeated interaction or exchange (Ansell, 2006:75).

2.2.2. Conceptual differences: agents

Beyond these commonalities, there are some conceptual differences, which have implications for the empirical and practical application of the definition. A first relevant difference between North’s and Bardhan’s definition derives from the authors’ choice of who ultimately creates institutions. Where North refers to “humanly devised” constraints, Bardhan explicitly identifies the “society” as the creator. Of course we could argue that human action does not exclude collectivities, such as a society, but North explicitly states that his theory is individual-centered (North, 1990:27).

The location of the individual within a society is dealt within a theory of transaction costs, which however implicitly constrains the analysis to a one-to-one game, whereas in society multiple players and multiple interactions occur contemporaneously.²⁶ My definition follows Bardhan’s intuition that institutions can only be created by a collectivity, and implicitly refuses to regard collective behavior as the simple sum or aggregation of individuals, as isomorphism in individual and collective behavior can not explicitly be assumed.²⁷

In my definition, the institution reflects a collective aim, which results from the convergence of interests. The institution therefore works as a cumulative collective choice and is therefore better defined at the society level.

2.2.3. Conceptual differences: underlying elements

While the notion of structure is accepted and shared, there are differences to which ought to be their elementary components. My definition slightly detaches from North’s and Bardhan’s conception of institutions by introducing *the other side of the coin* to their delimiting concepts of constraints and rules: I stress that institutions create spaces that are delimited by the constraints.²⁸

Why is it relevant to go beyond the mere notion of constraints or rules? North himself states that “Institutions reduce uncertainty by providing stable structure to everyday life” (North, 1990:3), and therefore implicitly states that the ultimate outcome of constraints are structures. While it is hard to counter that structures are made of constraints, I argue that a focus on them only is limiting. Apart from a delimiting power, institutions have wider instrumental value in providing opportunities or space for human action: be it agency, interaction or evolution and change. This is particularly true within

²⁶ While North brilliantly understands the logic of societal interaction of human beings, his need to insert his theory into the theoretical framework of neoclassical microeconomics is stronger and leads him to prefer the adoption of behavioral hypotheses of a representative individual.

²⁷ Isomorphism is the assumption that two phenomena are linked with a monotonic function, which implies that the meaning of a concept is identical at the individual and the context/collective/societal level.

²⁸ The importance of considering *agency* within institutions has been acknowledged and investigated by the literature on Institutional Entrepreneurship, see for example: DiMaggio, 1988; Dacin et al., 2002; Hoffman and Ventresca, 2002; Seo and Creed, 2002; Maguire et al., 2004; Lawrence and Phillips, 2004; Garud et al., 2007; Lounsbury et al. 2007; Battilana et al. 2009.

a Senian view in which the context is considered a conversion factor, meaning that the institutional setting should ideally be evaluated in terms of the degree to which it enables its society to achieve greater capabilities.

A structure implicitly withholds shapes and paths which lead to and consist of meaning. This intuition is partially in line with the argument of the Idealist Institutionalists (for example Johnson, 1989; Nicholson, 1990) who state that “institutions express ideas and embody a continuing approach to resolving the issues which arise” (Johnson, 1989:131) in human interaction. This passage is very much in line with the part of my definition where “spaces reflect a collective aim that resulted from a bargaining process”.

Ideas are a fuzzy concept, which might comprise visions and goals, both achievable and non-achievable. They are likely to be highly influenced by existing cognitive frames, but might also represent some groundbreaking thought that works against them. By becoming 'shared ideas' they may actually represent a kick-off for the development of innovative cognitive frames. For the scope of the definition provided, the concept of ideas is relevant as it might represent some sort of *fuel* for collective aims: the horizon that people look to when they motivate their own paths, their motion. Cognitive frames - which may be different among different groups of society - act as filters in translating ideas into an own understanding. Therefore they play a crucial part in selecting *who* in society will eventually engage into the collective aim and who will not.

Embedded ideas and practices are crucial to a theory of institutions that maintains a pluralistic and context-specific approach. It is further highly useful for analyses that are interested in investigating how and in which cases institutions contribute to perpetuating inequality and poverty, as common in macro institutionalist research. A focus on spaces is further helpful for conceptualizing institutional change, as the spaces are the arena within which the institution itself can be changed.

Once realized that institutions embed an idea or particular will, we should ask ourselves whose idea and will it is. Institutions reflect the struggle and temporary resolution for the distribution of power and resources: “institutions are defended by insiders and validated by outsiders” (March and Olsen, 2006). They do not automatically imply an equitable resolution. Often, they incorporate and reflect distributional inequalities. When the ideas and wills that are incorporated into an institution come from a leading minority that withholds most power and resources, this will typically reflect in the type of mechanism with which the institution works. By designing the mechanism of the institution in a way that only a restricted group of individuals can occupy an advantageous position within it, the institution becomes an instrument for the perpetuation of existing social inequalities. Differently, institutions that guarantee opportunities with broad access can recast the distribution of capabilities within a society.

'Bargaining' therefore is directly linked to power issues and their analysis. The sources of social power that may provide greater 'bargaining power' can be different, as analyzed by Thomas Mann. Correspondingly, the institutional (re-)production process may very easily not include marginalized groups and therefore reinforce their relative disadvantage. What the notion of 'bargaining' indeed implies is some sort of participatory and deliberative process. The more inclusive the discussion is about 'collective aims', the more broad and accessible shall be the space provided by the

institution. Where participation and deliberation systematically excludes certain groups, institutions and their evolution are not providing *arenas of action* for the excluded, firstly by not considering their ideas, visions and cognitive frames. Secondly by triggering functioning mechanisms that will systematically reduce their access to opportunities.

While I can place ideas into the notion of structure as previously defined, these seem to be slightly out of place in those theories that concentrate only on limits, such as constraints and rules. Let's consider this argument on hand of the easiest example of structure we can think about: a rack. Clearly, the rack has a known shape that is made of constraints, namely its edges and its boundaries. We could focus our attention on the fact that the rack does not permit to place anything beyond its boundaries, which would follow the conceptualization of a structure as merely being made of constraints. We could also adopt a slightly different perspective and appreciate the useful space that the rack provides to give our life more predictability. It helps with putting some of our material belongings into order and facilitates the moment in which we will desire to find them. This view focusses on the space notion. We will further realize that some objects will fit well into the rack, while others will not — maybe due to their size or weight or shape.

The structuring process so dear to Institutional Analysis starts with the structure and the subsequent choice and convention to use the structure in a certain way, namely to place objects into its space. Clearly a rack can serve as example for a structure, but not for an institution, which I described as socially defined.²⁹

2.2.4. Conceptual differences: implementation

We could argue that the existing definitions that focus on constraints and rules implicitly comprise spaces and ideas and that it is not necessary to mention them separately. While this might be true in theory, my point is that differences in perspective, as the one just outlined, can have important effects in the phases of implementation: by explicitly mentioning spaces for agency and ideas, institutions can assume a different role within the analysis of social progress.

For example, the focus on constraints leads to an implementation logic where developing countries adhere or do not adhere to certain types of rules — for example to the so-called Global Standard Institutions: these are supposedly 'better institutions' that improve governance in developing countries. Defended by mainstream economic theory and promoted by e.g. the World Bank, IMF, OECD, G7 and the World Economic Forum. They typically derive from neoclassical economic theory and are seen as maximizing market freedom and as protecting private property rights most strongly (Chang, 2010:2).³⁰

This logic however has a number of flaws: it is ethically questionable as it forces places and people with very diverse history, values and culture to adhere to resolutions of human issues that have evolved outside of their own values and collective choices.

²⁹ Beyond it being a structure, a rack does not necessarily shape human interaction, as it could be built and used by a single individual.

³⁰ For a critical review see for example Chang, 2005.

Secondly, profound ownership of the social solution is required in order for it to be accepted by the society, which in turn is a necessary element for the credibility of any institution. As Pritchett (2012) puts it: “The only way to get to the rule, is having to get to the rule through struggle”. He emphasizes that it is the struggle, the *revolutionary process* that is based on the *consolidation of successful experiments* that leads to institutions that work.³¹

Despite of extensive cross sectional analyses, it is far from being empirically proven that a one-size-fits-all approach to institutions is efficient in terms of human development, or even in terms of growth. In a world where a multitude of capitalisms have arisen, and within a discipline in which the neat connection between institutions and economic performance has not been found so far, a more cautious approach is needed. Pluralism of views and exploration might do a better job than top-down solutions, which tend to simplify the complex connections between formal and informal institutions, economic structure and people.

Beyond developing contexts, the comprehension that institutions need to result from a process and that this process needs to be 'owned' by citizens, is of great relevance everywhere where top-down technocracies shall be avoided. Social innovation processes represent a fertile ground of experimentation on the basis of which new solutions can be found and shared – and subsequently chosen as those most functional for the *collective aim* embedded in the institution.

2.3. Relative position and collective capabilities

As my definition of institutions tries to fill a gap in the capabilities literature, I would like to quickly review how this study differentiates from other studies on collective capabilities whose research questions partially overlap with mine. My study distances itself from both, those authors who claim that capabilities cannot merely be defined at the individual level, but that they should instead be considered as “collective“ (Ibrahim, 2006; Ballet et al, 2007) and those that interpret contextual causality as strictly of the relational type (Smith and Seward, 2009). While the notion of “collective capability” is not irrelevant, I argue that it should not to be mixed up with the methodological unit of analysis, which in the Capability Approach ideally is the individual.³²

A number of authors stress that the life of an individual only occurs in relation to others and that an important aspect to consider is the relative position an individual occupies within the social structure.³³ The relative position of a person within society could however also be considered an individual endowment, as it can be interpreted as a relational resource. For example, a person borne from higher-class parents that have strong connections to a variety of actors in the local economy, is endowed with greater “connections” when setting out to find a job. The endowment is individual. Contrarily, the particular shape of the network linking actors within the local economy – which can

³¹ See Pritchett’s speech at the annual lecture of the UNU-WIDER institute, September 2012 (Pritchett, 2012) and other work of his.

³² When considering groups as a unit of analysis, we always risk neglecting inequalities and differences within that group. In line with Robeyns (2005), I adhere to the view that the individual should be the relevant unit of analysis, not only in methodological terms, but also (and most importantly) ethically.

³³ This is an argument particularly common in the Sociological literature.

be more or less conducive to the repetition of inequalities – is a contextual or societal characteristic.³⁴

My point is that the relevance of the relative position of an individual can perfectly be analyzed without renouncing on ethical individualism. By identifying social structures such as institutions and their mechanisms that advantage certain people over others at the social/contextual level, the relative position of an individual can still be taken into account.

The milestone for my reasoning is therefore the attribution of the proper level of analysis to different phenomena: collective capabilities, and collective agency, can be attributed to collectivities, which are not the simple sum of individuals. Compare this argument with a quote reported in Smith and Seward, (2009:222[119]):

Social structures (. . .) have an ontological existence that is both autonomous and independent from individuals. Like natural entities, *social structures emerge from relations*: the relations between humans, and between these human relations and nature (Bhaskar, 1998; emphasis added)

Within the framework previously proposed, collective capabilities and collective agency can broadly be included into the analysis as institutions themselves. Let us consider the conceptual analogy between collective capabilities and institutions: although the single individual/event cannot actively modify the collectivity/institution, at a certain tipping point one additional or incremental action/event will provoke or realize a collective capability/institutional change.³⁵

This reasoning recognizes the relevance of each single's agency in realizing a collective achievement. It also reminds that the certain realization of this achievement is out of the immediate control of the single individual.

2.4. Conclusion

This paper has outlined that a different interpretation of institutions might be important for the understanding of their role in society. In particular, the definition proposed allows to pay greater attention to *which collective aims* are currently being protected, *whose will* has been embedded most strongly into the working mechanism of the institution during the bargaining process and *which social innovation possibilities* are de facto provided by the institutional set-up. The interpretation of institutions proposed could serve as complement to the analysis of social innovation processes, in particular with a view to changes in power structures.

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³⁴ See for example Bowles, 2009 and other work of his.

³⁵ For a reference that explains this concept in relation to institutions, see Pierson, 2004.

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3. Innovation – A Genealogy From the Standard Approach in Economics to an Economic-Sociological Model for Human Development

By Rafael Ziegler

3.1. Introduction

Entrepreneurship and innovation are predominantly associated with new products and services for markets. Paradigmatic is the new, technological product and the tech entrepreneur, who makes a private fortune and changes the social world in numerous intended and unintended ways. Attempts to extend the language use – *social* entrepreneurship and *social* innovation – remain strongly attracted by the prevailing use: the most famous social entrepreneur/innovator is Muhamad Yunus: he is a banker, and his entrepreneurial and innovative achievement is widely recognized. His example confirms our linguistic expectations regarding entrepreneurship and innovation: it is about money and markets. Suppose somebody with good knowledge of the Indian subcontinent asks: so why is Gandhi not heralded as a social entrepreneur and social innovator? Was he not truly creative and had massive social impact? A likely answer: he did not have a business; he was a social activist/politician.

With a view to everyday use of the term, the reply is unsurprising: entrepreneurship and innovation are closely associated with markets and earned income from selling products and services to customers. It therefore can appear appear also logical to identify entrepreneurship and innovation as a cause of social and ecological problems. They exemplify a primary focus on the economy, a quest for maximum profit and a permanent stream of new products and services that reproduce societal unsustainability. A scientific approach that seeks to analyse the causes of this unsustainability predicament, and contribute to the discussion of ways out of unsustainability, therefore has to scrutinize this language use and its associations very carefully³⁶. However, even on a purely disciplinary perspective, the coherent use of concepts needs to be tested where the exclusions and inclusions of everyday use suggest a puzzle or possibly confusion.

With a view to both the social challenge and the intellectual curiosity, this paper embarks on the following type of genealogy: If the prevailing use of entrepreneurship and innovation refers to entrepreneurship and innovation in the economy, then economics should be a good starting point for critical reflection of the terms. Accordingly, the paper starts with the standard economic approach that emerged in the second half of the 19th century. What perspective on entrepreneurship and innovation does it propose? And given the issues that as we will see arise with the standard approach, what alternatives to this approach have emerged in economics? Accordingly, the paper turns to the Schumpeterian critique of, and alternative to the standard approach. How are entrepreneurship and innovation focused on here? Finally, with a

³⁶ In the literature on sustainability as well as on social innovation such an approach is labeled transdisciplinary (Mittelstrass 1992, Moulart et al. 2013) because it seeks to respond to the societal problem (as opposed to the disciplinary puzzle) and for this reason also may have to work across different disciplines.

view to the social challenge, I will contrast the Schumpeterian approach with an approach emerging from systems ecology that shares the Schumpeterian focus on out of equilibrium dynamics but breaks with the focus on economic development/growth as the orienting societal idea³⁷. In a final step, I will draw conclusions from this brief genealogy for the analysis of innovation and entrepreneurship: what elements does a critical and coherent approach to entrepreneurship and innovation require? How does it create space for the varieties of entrepreneurship and innovation, in particular the social innovation introduced above? Thus, the genealogical proposition is simple: we better understand a term, if we look at the history of its use. Such a history can serve a critical purpose, if it helps us better understand the presuppositions and (alleged) foundations of the present use, and it can have a constructive liberating effect, if it allows us to see conceptual alternatives more clearly.

3.2. Standard economics and innovation

Standard economics here refers to neo-classical economics as the prevailing conceptual approach for research and teaching in economics departments. A central concern of this approach is to model and explain the economic process as the “study of human behavior as a relationship between ends and scarce means which have alternative uses” (Robbins 1932). It is impossible to comprehensively introduce such a vast and mathematically brilliant body of thought. The sketch of a few central ideas must be sufficient to prepare the discussion of standard economics in relation to entrepreneurship and innovation³⁸.

Neo-classical economic focuses on the efficient employment of means with given ends. It takes these ends – as the preferences of customers, or the goals of firms – as given, in the sense that the analysis of ends is not part of the economic analysis. It assumes, however, that these ends are pursued rationally. “Rationality” here refers to the idea that economic agents are utility maximizers; they know their preferences, they are able to rank them and act according to what best suits their interests. This idea of rationality is typically introduced as a simplifying, modelling assumption (*homo oeconomicus*): not how people are or ought to be, but as a useful approximation for the analysis of markets.

The assumption is consistent with the methodological individualism of the standard approach, which seeks to explain economic phenomena in terms of individual actors. The approach combines this individualism with a subjective theory of value: the value of a good is dependent on the preference of the actor, and especially the marginal utility

³⁷ Societal idea here is inspired by the economic sociology discussion of cognitive frames (Beckert 2010). The inspiration is philosophical: rule application leaves space for interpretation – a point familiar to anyone who has visited a public administration. The judgment required for rule application tends to be informed by shared meanings: the cultural codes, narratives, norms and how-tos of socialization. Cognitive frames therefore are usually taken for granted, and in this way, they are very influential: they help us deal with uncertainty and they legitimize action, including of our language use and the “appropriate” ways to use a term. There are many cognitive frames. Cognitive frames sometimes change, and actors sometimes explicitly argue for one cognitive frame rather than another one. Here I focus on cognitive frames that orient our thinking about society, economy and its environment. Therefore, I use the term “societal idea”.

³⁸ The origin and meaning of neoclassical economics are far from clear (Aspromourgos 1986). I therefore here follow a Kuhnian device and rely on textbooks used to initiate students into the paradigm. For microeconomics, I rely on Varian 1996, for Macroeconomics on Mankiw 2000. To be sure, as Attila Havas remarks in his contribution to this report, some of the neoclassical assumptions have been relaxed and modified in different ways. The discussion should be read with this caveat in mind.

a further unit of the good has for the actor. Due to this subjective theory of value, neo-classical welfare economist focus on the Pareto criterion, according to which an allocation of goods is efficient, if it is impossible to make somebody better off without making somebody else worse off. The criterion takes preferences as given along with the social positions that these preferences are related to.

Neo-classical economics combines this instrumental rationality with a focus on markets and their equilibria. It shows that – assuming the rationality of actors stated above – the combined action of utility-maximizing actors (consumers, firms) will result in market equilibrium. Whenever demands is in excess, suppliers will increase prices, and they will undercut each other when supply is in excess. Strictly speaking, however, the equilibrating process just described is purely hypothetical. For the standard approach defines a competitive market as a market where goods and prices are given; they are outside the control of each participant³⁹.

This focus on market equilibria partly explains the relative absence of innovation analysis in neo-classical economics. With prices and goods assumed as given, there just does not seem to be any space for entrepreneurial action. For example, the market equilibrium (and even the hypothetical process of mutual adjustments just described) presupposes *comparable* products. This does not leave analytical space for innovations, which are distinguished by novelty and in this sense by incomparability with the older product. “Invention is the ultimate heterogeneous product. This impedes the optimality analysis underlying most microeconomic theory. Explicitly or implicitly, an optimality calculation entails a comparison among possible substitute choices, while the innovating entrepreneur deals with no well-defined substitutes with quantifiable attributes” (Baumol and Schilling 2008, 876). Due to this focus on market equilibrium, neo-classical economics conceptually marginalizes the study of transitions and out-of-equilibrium dynamics.

3.2.1. Entrepreneurship as a discovery process

There is, however, even with a focus on market equilibria, one exception. Entrepreneurs can discover profit-opportunities that create a tendency toward market equilibrium. If for example a population trend with market implications can be anticipated – an increase in students at universities that yields an increase demand for student housing – then there is a profit possibility that the entrepreneur can exploit, and which in turn will strengthen the tendency towards market equilibrium.

Entrepreneurship as a force that strengthens the tendency towards market equilibrium is associated especially with the work of Israel Kirzner (Kirzner 1973⁴⁰). Kirzner stresses the relation between entrepreneurship and equilibrium but analyzes the relation in terms of the Austrian school of economics (Kirzner 1997). In other words, it is by no means a standard economic account in terms of neo-classical economics. His approach offers a distinct perspective on the entrepreneurial process as a discovery process. Rather than

³⁹ For a standard textbook exposition of the neo-classical approach to equilibrium see Varian 1996, 284

⁴⁰ Along with Schumpeter, Kirzner’s work is often present as the classic foundation of entrepreneurship research with Schumpeter suggesting a focus on the role of innovation for large-scale change processes, Kirzner complementing a focus on continuous, incremental change processes. Shockley and Frank proposes that the two account also can serve as a foundation for social entrepreneurship (Shockley and Frank 2011).

positing known prices and products as the default assumptions, the focus here is on uncertainty and discovery leading to changes of prices and in products. “Where shortages have existed, we understand the resulting price increases as driven by entrepreneurs recognizing, in the face of the uncertainty of the real world, the profit opportunity available through the expansion of supply through production, or through arbitrage” (Kirzner 1997, 70). On this view, the entrepreneurial process via the profit-motive nudges the market in “equilibrative direction” (Kirzner 1997, 70). It stresses error, and learning from error as central elements that routine-resisting entrepreneurs rely on to exploit up to then unknown opportunities for their profit. “The lure of pure profit in this way sets up the process through which pure profit tends to be competed away. Enhanced mutual awareness, via the entrepreneurial discovery process, is the source of the market’s equilibrative properties” (Kirzner 1997, 71).

3.2.2. The macro level

While the central focus of neo-classical economics is on the micro-level due to the above stated methodological individualism, neo-classical economists also analyze and explain macro-economic phenomena such as inflation, unemployment, balance of trade etc. on this foundation. The central macro-economic focus has been economic growth. A widely-used textbook tells its students: “Long-run economic growth is the single most important determinant of the economic well-being of a nation’s citizens. Everything else that macroeconomists study pales in comparison” (Mankiw 2000, 122).

According to the Solow model (Solow 1956), economic output can be studied as a production function based on the capital stock and the labor force, with demand of economic output depending on consumption and saving. In the model, savings equal investment. Economic growth depends on the initial capital stock and the investment rate (minus capital depreciation). On this basis, it is possible to calculate a steady state, which represent the equilibrium of the economy (investment equals depreciation). Based on the neo-classical assumption that individuals seek to maximize their preferences, here identified with maximum amount of goods and services, neo-classical economist seek to identify the optimum steady state that maximizes consumption possibilities⁴¹.

As a result of the pull towards steady-state equilibrium, the model cannot explain sustained economic growth. Therefore, the model has been expanded with two further sources of growth: population growth and technical progress. Technological progress – and via it innovation – is modelled as increasing the efficiency of labor. In the steady state, only technological progress can explain the long-run possibility of an increase of goods per worker, and thus on the neoclassical view, a rising standard of living⁴². Therefore, on this model stimulating private and public investments in technological innovation is very important. Yet the approach encounters difficulties with the analysis of this source of growth. “Unfortunately, the determinants of technical progress are not well understood” (Mankiw 2000, 115).

⁴¹ Solow (1974) has modified this in terms of a weak sustainability approach. On the expanded model, the natural environment as “natural capital” is a further input into the production function that should be optimally exploited to total net investment being higher than zero (Neumayer 2010, 22).

⁴² Population growth can explain sustained economic growth but not sustained increase in well-being as the total product has to be shared by a larger population.

3.2.3. The standard approach, entrepreneurship and innovation

On the standard approach, the actor focus is on individual actors, which for modelling purposes are represented as rational, utility maximizing actors. Both on the micro- and macro-level, the explanatory focus is on market equilibrium and on market exchange relationships primarily informed by price signals. Both on the micro- and on the macro-level, the approach encounters difficulties modelling innovation processes.

On the micro-level, entrepreneurship as a discovery process effectively draws on a research tradition (Austrian economics) that rejects the neo-classical focus on equilibrium as well as the modelling assumptions about the knowledge of individual actors (assumed to know and to be able to rank their preferences in the light of given prices and goods on the standard approach). On the macro-level, innovation in terms of technical progress is drawn on to explain sustained economic growth, but the standard neo-classical approach encounters difficulties in further analyzing this source of growth.

The axiological foundation of the standard economic approach in subjective value theory offers the possibility to analyze the normativity of market dynamics in terms of the Pareto criterion. On the macro level, the axiological foundation in association with the modelling assumption of *homo oeconomicus* yields a focus on a raising standard of living that is somehow tracked by a growth in economic activity (economic growth). Due to subjective value theory, “somehow” in the last point means that strictly speaking intersubjective well-being comparisons and collective well-being estimates are not possible.

The standard approach combines the societal idea of progress (in the guise of economic growth for increased standard of living) with a mathematical, ahistorical analysis of equilibrium processes explained in terms of individual actors, who are modelled as rational and as identical for modelling purposes. Differences in actors only emerge if, as in the Kirznerian approach, the process of innovation receives closer attention. But as noted, these differences require a break with the neoclassical model of rationality.

3.3. The Schumpeterian critique of the standard approach

The standard approach pursues a one-dimensional model of rationality, in the sense that some version of *homo oeconomicus* is drawn on to explain all economic processes. As we have seen, this model struggles to account for innovative and entrepreneurial action. An influential critique of this approach was early on launched by Joseph Schumpeter, who remarked that the absence of an analysis of disruptive innovative action in the standard approach decisively limits its capacity to analyze the dynamics of capitalism: “it is like Hamlet without the Danish Prince” (Schumpeter 1942, 86). As William Baumol remarked, the “theoretical firm [in neoclassical economics] is entrepreneurless” (Baumol 1968, 66). The entrepreneur has disappeared and continues to play a marginal role in the initiation of students into standard economics (Gunther 2012).

Entrepreneurial activity for Schumpeter is not the invention of something new (Schumpeter 1911, 111) but the active carrying out of the invention. This activity has complex motivations that are not reducible to income only (136). Schumpeter speaks of the dream to found a private kingdom, of the will to conquer: the impulse to fight, to

prove oneself superior to others and to raise socially, to succeed for the sake, not of the fruits but success itself, and finally he mentions the joy of creating: of getting things done and exercising one's energy and ingenuity (Schumpeter 1911, 138f). In short, innovative action calls for psychological and sociological analysis beyond the one-dimensional meta-frame of the rational utility-maximizer. Overcoming resistance and changing habits is therefore a key to entrepreneurial activity; even though this sociological dimension is frequently overlooked by economists (Swedberg 2009, 80). Thus, sociology is important for the study of entrepreneurship and innovation.

In *Theory of Economic Development* Schumpeter primarily focuses on the individual entrepreneur. He argues that the change in habit and routines, and the overcoming of fear and anxiety regarding the novel required leadership (Schumpeter 1911, 118-129): to act without established rules and certain data, against the habits of others, and to influence others in such a way that they will follow, imitate and adapt. In the later *Capitalism, Socialism and Democracy* (Schumpeter 1942) Schumpeter acknowledges that organizations can include as part of their capabilities the research and development of new products and services. Innovation can become a "routine" task of organizations. The secondary literature speaks of Schumpeter Mark 1 and Mark 2, and seeks to accommodate the seeming contradiction in terms of different stages of development (Peneder 2007, 526): The "entrepreneurial function" with its focus on the individual and his or her leadership dominates in the early phase of the development of an economy, whereas innovation as a routine of organizations and entire systems dominates at a later stage. Large firms organize research and development laboratories, accumulate knowledge and create high barriers for the entry of entrepreneurs and small firms. Monopolies and oligopolies dominate the market for a product and service. This dynamic famously provoked Schumpeter's hypothesis that the "success" of capitalism would ultimately undermine capitalism itself and lead to socialism, as it blocks and dries out the entrepreneurial function (Schumpeter 1942). However, subsequent research rather suggested that in the presence of major technological and market disruptions, the research and development within established organizations can be replaced again by entrepreneurs and small firms (Malerba 2007). Thus, from this Schumpeterian tradition, we can see the continued importance of better understanding the psychological and sociological specifics of entrepreneurial activity, in contrast to a one-dimensional rational actor model.

Schumpeter here leaves a demanding legacy: on the one hand, akin to the standard approach, he suggests the possibility of a context-independent account of action, as something that is always there throughout history; on the other hand, he emphasizes the importance to focus on the guises of entrepreneurial action in the concrete historical context. For example, in his analysis, he focuses on the "industry captains" of late 19th century capitalism (Schumpeter 1911). This contextual study of innovation process has been further developed in the study of systems of innovation (Edquist 2005, Hanusch and Pyka 2007, Perez 2013).

This sensitivity to the historical context is also important for a second reason. In contrast to the standard economic approach, Schumpeter's account of economic innovation in capitalism co-depends on political structure. Political institutions do not only provide "fetters", they also "shelter" (Schumpeter 1942, 135). For early capitalism, they provided the space and the security to unfold within states governed by aristocratic

ruling class with a different socialization and different values from the economic actors. “The steel frame of that structure still consisted of the human material of feudal society and this material still behaved according to pre-capitalist patterns” (Schumpeter 1942, 136). This case rests on the proposition that there are political values and virtues required for a nation state or empire to survive that the “calculative”, “narrowly selfish” motivations promoted by capitalism undermine and respectively cannot reproduce. Generalizing from this: history, and historical sources of power matter, and they are neither reducible to nor reproducible by the economy and its analysis.

Having stressed these differences to the standard economic approach – i.e. the focus on specifically entrepreneurial action, and the focus on this action in its historical guise in a specific institutional environment – let me also emphasize what the approaches have in common. First, while the Schumpeterian account leaves open the possibility of other types of innovation (in arts, politics etc.), this possibility remains a footnote in Schumpeter’s works. The primary focus is on innovations in capitalist markets, and the primary object of analysis is the capitalist economy. Second, while Schumpeter and followers attack the focus on market equilibria, and point to the non-equilibrium transition processes of the “gale of creative destruction”, the frame of this “gale” is the economic version of the idea of progress: “economic development”. The entrepreneurial process keeps the economy dynamics, increases in the long-run the total economic output, and this raises the standard of living. Like the standard account, the Schumpeterian analysis does not analyze the normative aspects of a “standard of living”. Here too it remains a vague indicator for the subjective preference satisfaction – only that the elitist Schumpeter makes clear that the preferences of “the masses” are not his own, and that by implication the value of consumer sovereignty and Pareto optimality only has limited, ethical value by his own lights.

3.4. Ecology and destruction

For the study of entrepreneurship and innovation, the Schumpeterian focus on disruptive change and out-of-equilibrium transition processes can be complemented by a focus congenial to it from systems ecology. For reasons that would deserve a study of its own, this ecological perspective has provided a soil for the study of innovation not primarily focused on technical-economic innovation.

According to ecologist C.W. Holling’s, resilience determines the persistence of relationships within a system and is a measure of the ability of these systems to absorb change of state variable, driving variables, and parameters, and still persist” (Holling 1973, 17). In contrast to a focus on the one “perfect equilibrium”, this approach is based on the observation of multiple equilibria in ecology, and therefore also the possibility of change from one equilibrium to another. Resilience as the study of multiple equilibria and the related transition processes has been adopted as a conceptual lense by many disciplines and for various topics, including for the study of social innovation⁴³.

According to social innovation scholars Frances Westley, Brenda Zimmermann and Michael Patton, resilience is “the capacity to experience massive change and yet still maintain the integrity of the original. Resilience isn’t about balancing change and

⁴³ See Lodemann and Ziegler (2014).

stability. It isn't about an equilibrium state. Rather it is about how massive change and stability paradoxically work together" (Westley, Zimmermann and Patton 2007, 65). On this perspective on social and social-ecological systems, resilience is an important property on the systems level for the health of the system on various levels: the person, the organization, a country or social-ecological system.

Social innovation plays a functional role for maintaining the health of society: "The capacity of any society to create a steady flow of social innovations, particularly those which re-engage vulnerable populations, is an important contributor to the overall social and ecological resilience" (Westley and Antadze 2009, 4). Social innovations are a "complex process of introducing products, processes or programs that profoundly change the basic routines, resource and authority flows or beliefs of the social system in which they arise. Such successful social innovations have durability and broad impact" (Westley and Antadze 2009, 2).

This emphasis on the "profound change" mirrors the Schumpeterian focus on the disruptive innovation. It draws on the model of an adaptive cycle that is presented as the ecological version of the idea of creative destruction (Westley, Zimmermann and Patton 2007, 67; Westley 2013, 7). A four-stage adaptive cycle of release, reorganization, exploitation and conservation, so the proposal, can be drawn on to analyze social innovations. The work of Muhamad Yunus and the Grameen Bank on this view can be studied in terms of an adaptive cycle starting with a rigidity trap in Bangladesh that prevented many people from having access to credit (ibid. 68). In a post-independence poverty-crisis – Bangladesh became independent in 1972 – resources are released, yet there are quite different ideas what to do with them and there is therefore a competition for resources. This can create a poverty trap, if no single idea can win sufficient resources and space to thrive. However, if some ideas succeed, the idea can move from the stage of local experimentation and prototyping to large-scale diffusion, up to the moment when the idea has matured and institutionalized. The Grameen Bank is state-regulated and state-supported bank, and the idea of micro-credit has been adopted in many other countries. In a similar vein, the authors tell the development of PLAN (Planned Lifetime Advocacy Network), an organization that supports families to create a good life for people with disabilities, and that has spread throughout Canada. The shared features of these social innovation examples is the focus on a social problem – poverty, the exclusion of people with disabilities – and the development of an idea for dealing with it that has spread widely, even though it frames the problem/solution in a way that is disruptive.

This ecology-inspired perspective on innovation finally breaks with the unquestioned societal idea of economic development and a raising standard of living. Indeed, this might partly explain its popularity: in a time of anthropogenic climate change, a focus on the long-term health of social-ecological systems is perceived by many as more problem-oriented than the further pursuit of the elusive quest for economic variants of the idea of progress. The resilience approach (at least in the version presented here) instead proposes "health" and "integrity" of the system as orienting ideas. It emphasizes the multi-level and multi-sectoral aspect of change processes.

All the approaches presented here, both standard and non-standard, included societal

ideas with direct or indirect⁴⁴ normative implications. The resilience approach in the story told here has a liberating effect in that it proposes a different framing. But for this liberating effect to have critical value, health (or economic development for that matter) cannot be simply stated as given “social preferences”, rather, they must themselves be analyzed for their presuppositions and implications for a study of innovations that can reflectively deal with its normative dimension. I will return to this point in the next section⁴⁵.

But let me first conclude with two further points regarding the resilience approach to innovation. Like the Schumpeterian search for long-run business cycles according to the structure the gale of destructive destruction, users of the adaptive cycle model must show the empirical validity of this model with a view to innovation processes. However, so far this appears to be as difficult for “social” innovations (in the sense introduced in this section) as it is for “economic” innovations (in the sense introduced in section 2). Second, the resilience approach presented here replaces the standard economic focus on markets by a focus on “the social system” (compare the definition above). This can be understood in a complementary sense: the social system next to the economic system. The resilience authors intend, however, a general sense: the social system as “any organized assembly of human resources, beliefs, and procedures united and regulated by interaction or interdependence so as so to accomplish a set of specific functions” (Westley and Antadze 2009, 5f).

3.5. Towards an extended social grid model for better understanding the economic underpinnings of (social) innovation for human development

It is time to revisit our genealogy and draw some conclusions. An epistemic argument for the standard approach draws on the value of simplicity as a virtue of theories. On this view, the rational choice approach of neo-classical economic provides a research program to explain a large variety of economic phenomena based on a parsimonious set of assumptions about rationality and knowledge of individual actors.

For our topic – innovation and entrepreneurship – this simplicity proved to have the following consequences. First, the focus on rational agents and equilibrium in fact radically marginalizes the entrepreneur and innovation along with non-equilibrium dynamics. The entrepreneur disappears. Paraphrasing Schumpeter: Hamlet isn’t “simpler” without the Prince of Denmark, it just isn’t Hamlet. The first result of our brief genealogy is therefore disconcerting: rather than offering a foundation for entrepreneurship and innovation, standard economics removes the grounds. The effect is at first sight similar to a Nietzschean genealogy of morals: just as there is no god as a source of absolute values, so there is no heroic entrepreneur as the source creating an always increasing standard of living. The standard approach fills this void with *homo*

⁴⁴ Proponents of the standard approach of course emphasize that *homo oeconomicus* and economic growth theory are not to be understood as normative ideas that somehow follow from the theory. However, even proponents of the standard approach will not deny that the indirect effect of such “modelling assumptions” and “research foci” is normative, and has occupied a central place in economic policy throughout the last hundred years.

⁴⁵ In Lodemann and Ziegler 2014, we propose to interpret the “key functions” of the resilience approach in terms of human rights and central capabilities.

oeconomicus and is committed to the idea of an increasing standard of living that requires technological progress (or population growth) to avoid a steady state. As a result, entrepreneurship and innovation remain in a conceptual void while at the same time their importance is acknowledged. The conceptual void – the “ghost of Hamlet” – is “placed” in the context of markets and their equilibrium, and it acquires importance due the quest of an ever-increasing standard of living, the societal equivalent to the individual utility maximization of *homo oeconomicus*. Thus, it is hardly surprising that within economics a different approach emerged that studies the historic emergence of economic entrepreneurship in capitalism rather than founding entrepreneurship and innovation analysis in rational choice and equilibrium analysis. This leads us to Schumpeterian innovation studies: the study of innovation in historical context. The temporal marker is important on both the individual and on the societal level. At the individual level, the focus is on what is distinctive about entrepreneurial action: the carrying out of new combinations even if this meets resistance of the old (habit, customs and related interests). At the societal level, the focus is on the gale of creative destruction as opposed to the equilibrium dynamics. While the search for distinct patterns of large-scale business cycles has remained an elusive task, contemporary innovation studies follow the Schumpeterian lead via the study of national and regional systems of innovation in their specific context (Edquist 2005, Lundvall 2013)⁴⁶. Economics therefore requires sociology and history for the study of entrepreneurship and innovation.

Second, a model of rationality that treats preferences as given, and as not themselves part of the analysis, does not distinguish between simple preferences for goods and services and higher order preference about preferences based on rules and norms, culture and history. This omission is particularly problematic if we wish to analyze innovation in an unbiased way and not a priori with a view to private goods and services. Preferences for public goods depend on rules and customs as well as political commitments as the controversial discussion of the privatization of public goods in the late 20th and early 21st century amply demonstrates. These commitments can hardly be explained in terms of individual utility maximization, and even the idea of always self-interested action becomes near vacuous when applied to people putting considerable effort and assuming risk for what they take to be the “right thing to do”, i.e. their commitments. Thus, the analysis of action in the standard approach would posit “rational fools”, in the sense of actors incapable of drawing the diction between first order and higher order preferences (Sen 1977, 336). It also produces foolish researchers: they lack a language to describe what motivates both innovators as well as those benefited or otherwise involved in the innovation process. This is a descriptive, sociological point, and does not imply that second-order preferences or commitments are “good” or “better”. Rather, these commitments are a part pf the analysis of action, no matter whether they are democratic, nationalistic, religious etc. They are the ingredients of the ideas that move people. Thus, this second point also points to the importance of historical and of sociology for the study of entrepreneurship and

⁴⁶ And this approach needs to include the Kirznerian insight that next to the disruptive innovation of Schumpeter and the resilience approach, there is also the incremental innovation of the “process of discovery”. Disruptive and incremental innovations are orienting poles for a much more messy continuum in between.

innovation⁴⁷.

The importance of societal frames, thirdly, does not only pertain to the economic actors and their preferences but also to science. All approaches to innovation presented in the prior sections are associated with ideas of society and their trajectory: economic development and a raising standard of living, economic growth and national competitiveness, health and the integrity of systems etc. Many innovation researchers point out that (social) innovations are neither good nor bad as such, even if many actors from practice will say otherwise. But there is also a need to be aware of the societal ideas transported by research. They have direct and indirect normative implications. They pertain to central societal issues about what “ought to be done” and that directly touch on the well-being and living-together of people. They cannot be taken as “given” either; as good, bad or neutral. Rather, they too call for analysis and reflection. A scientific approach that seeks to play an active role in practice – as much of innovation research does via copious amount of policy recommendations – and also a self-reflective science must acknowledge that its frames have societal consequences (with a view to innovation studies see Lundvall 1992, 6-8). They help orient policy-making and what kind of issues are selected as relevant for discussion, what counts as an innovation to be studied, and potentially supported etc.. The relative popularity of the resilience approach to social innovation can be explained partly by its switch of societal idea. It takes seriously a widely perceived societal challenge, i.e. the overall health and sustainability of society, whereas the old societal ideas of limitless economic development and economic growth are widely perceived as ideological, and insufficient for dealing with central challenges of our age. However, if the old frames can no longer be taken for granted, then their discussion is called for, they cannot be taken as “given”. This point also pertains to the alternative societal ideas!

An approach to entrepreneurship and innovation that takes seriously these points emerging from our brief genealogy requires a richer interdisciplinary and ethical toolbox than the standard account has to offer. Yet, a brief genealogy does not yield deductively an alternative. It creates a space of orientation regarding issues that have to be addressed. With a view to the questions and purposes of specific research projects, it provides the soil and materials for creative inferences to a better explanation and for an improved reflective framework. In the remaining paragraphs, I therefore sketch the contours of such an alternative approach to the standard approach for a research project that actively seeks to respond to societal challenges and to entrepreneurship and innovation as proposed solutions to these challenges.

With a view to the ethical challenge, the genealogy suggests that approaches are required that can reflect on and make explicit the ethical dimension of societal ideas associated with innovation. In a first step, this suggest the need for ethics, i.e. ethical theories of justice and development to provide concepts and justifications for a value-reflexive innovation studies. In a second step, it can be proposed – and this proposal relies on a long discussion within ethics – that the capabilities approach may offer a particularly suitable approach as it has emerged via a critical discussion both of the idea

⁴⁷ However, it should be added that also in innovation studies the societal ideas frequently also taken as given (in terms of growth and national competitiveness), implausibly suggesting that these frames, and their normative elements, cannot themselves be analysed and discussed. But see Lundvall 1992 for a clear statement of the problem.

of economic growth and development as well as of the major theories of justice (Sen 1999, Nussbaum 2000). The capabilities approach and its account of human development offer a language and an explicitly normative idea that creates space for the discussion of justice and sustainability challenges rather than subsuming them under a *given* frame that takes ethics out of the analysis⁴⁸. The capabilities approach shares ethical individualism with the standard economic approach. It proposes the inclusion and impact on individuals as the focal point of ethical reflection on innovation. It differs from the standard approach in that it does not interpret this individualism in terms of themselves unanalyzed preferences but in terms of capabilities defined as the heterogeneous doings and beings that people have reason to value. It also differs from the standard approach in that it is not committed to explanatory individualism, i.e. approaches that seek to explain all economic and social phenomena in terms of individuals and their properties (Robbyens 2005, 107f). This leads to a second element of a conceptual alternative to the standard approach.

It is a lesson of innovation studies from Schumpeter to the study of innovation systems that we cannot explain social change in terms of individual action only. Already Schumpeter seeks to explain the dynamic of capitalism via reference to a central social relation: that between the capitalist and the entrepreneur. It is this relation that fuels the “gale of creative destruction”. Subsequently, innovation systems studies have done much further work to uncover the social relations between both public and private organizations in innovations processes. Describing, and ultimately explaining innovation processes, therefore calls for a focus on social relations. It calls for a focus on the actor networks - in traditional innovation systems research for example universities and firms - as well as on the institutions that provide the rules that enable and constrain organizations and individuals⁴⁹. The point is already anticipated in Schumpeter’s discussion of the “protective political stratum” in the emergence of capitalism (Schumpeter 1942). However, as noted, Schumpeter’s account – for our purposes – suffers from a reductive focus on the economy oriented by the idea of economic development and national competitiveness. This limits his explanatory account of innovation. Again, however, the genealogy provides space for attempts at improved explanatory frameworks. *Prima facie* innovation is possible everywhere in the social world, and its “spheres” and “systems”. Therefore, comprehensive explanatory accounts of social forces in history are called for. In parallel to the theory choice in ethics, there is at this point a moment of choice as various sociological and historical theories can be drawn on. For example, a general model of social forces is provided by Michal Mann and his account of the political, military, ideological, and economic sources of power in world history. “Ideological power derives from the human need to find ultimate meaning in life, to share norms and values, and to participate in aesthetic and ritual practices with others . . . economic power derives from the human need to extract, transform, distribute, and consume the produce of nature . . . I define military power as the social organization of concentrated and lethal violence . . . political power is the centralized and territorial regulation of social live” (Mann 2013). Drawing on, and further developing⁵⁰ this account of social forces in the light of a dynamic social reality,

⁴⁸ See also the contributions by von Jacobi, and by Sebastianelli, Chiappero and von Jacobi in this report.

⁴⁹ The distinction between networks and institutions as further elements (in addition to cognitive frames) for the analysis of social change is due to Beckert (2010).

⁵⁰ Michal Mann rejects explanatory individualism but his own account comes close to methodological

prima facie promises a more adequate model of social explanation for an epistemically less biased study of innovation and entrepreneurship.

In conclusion, we need general models that include ethics as well as sociology and history for the study of entrepreneurship and innovation⁵¹. Specifically I have referred to the possibility of an economic-sociological model for human development as a creative inference to a better explanation and societal idea in the light of the shortcomings of the standard approach. This specific approach draws on ethical theory to create space for the explicit discussion of the normative presuppositions and implications of the framing of innovation discussion, and it draws on an interdisciplinary sociological-economic model for the analysis of social change processes that seek to account for the relations between innovators, their supporters and opponents in a institutional setting and oriented by societal ideas (Nicholls and Ziegler 2014 and papers in CRESSI Deliverable D1.1). It is important to stress the creative element in this inference to the alternative model. As we have seen, there are both with a view to the ethics, as well as to the explanatory frameworks moments of theory choice, and hence of conceptual alternatives. The value of an alternative approach therefore cannot derive only from a critique of the standard approach but will depend on its effective capacity to explain innovation processes, and to do so in a way that is reflective of the normative dimension of this task.

I conclude with two last points on economy and innovation. If we replace the neoclassical assumption of given preferences that are to be maximized, and replace it with a focus on heterogeneous doings and beings that people have reason to value, then the definition of economy also changes. In neo-classical economics, the assumption of subjective, unlimited preferences in a world of given goods and services leads to a focus on scarce means. The primary task of economics is the analysis of allocation efficiency. In the present account, the assumption is that we can assume a central category of human ends in terms of capabilities but that we cannot assume maximization, because capabilities are internally heterogeneous and because they require choice⁵². With choice rather than maximization, reflection and discussion become part of what economics is about. The means – goods and services – also are not given: the available means constantly change in the process of innovation, and what ought be used *as* means is subject to ethical reflection. Therefore economics is – paraphrasing Mann – the study of the central human capability to extract, transform, distribute and consume the produce of nature⁵³.

Innovation, in the abstract and classic formulation of Schumpeter, is the carrying out of

nationalism, a serious limitation for the analysis of supranational political entities such as the European Union. Also – as Mann hints at in his later work (Mann 2013) – his sources of power do not deal sufficiently with natural and artefactual power (Heiskala 2014).

⁵¹ This conclusion reached here via a genealogy is reached via an analysis of social innovation projects carried out in the past in the EU: Jenson and Harrison (2013) draw from their analysis of these projects the recommendation to better include ethics as well as history in social innovation research. More problematically, they also recommend not to focus on the societal macro-level, yet it is at this level that societal ideas no doubt play an important role!

⁵² Capability does not refer to the functioning (for example being in good health) but to the opportunity to enjoy the functioning. Sen therefore also speaks of real freedoms (Sen 1999).

⁵³ “Central” here refers to the idea that this capability is constitutive of the human condition; capability refers to the moment of active choice that is in principle, if not necessarily in practice, there and that includes our reflection on nature as part of the exercise of this choice.

new combinations. Such innovative action is not limited to the economy but also possible with a view to other spheres of life such as the arts, politics, science or civil society. The product focus of much economic innovation studies is just a specific possibility of a more general human action potential. It is this action possibility that provides a shared yet abstract ground for innovation studies. In any specific historical context, this possibility requires detailed filling out in terms of societal ideas, institutions and actors relations.

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4. How Does Social Innovation Challenge Neo-Classical Economic Assumptions Regarding Technological Innovation?

By Attila Havas⁵⁴

4.1. Introduction

Various economics paradigms treat innovation in fundamentally different ways. This paper focuses on neo-classical economics, in comparison with classical economics along their major assumptions, notions, research questions, and methods from the point of innovation in general, and social innovation, in particular.

The paper is structured as follows. Section 4.2 recalls briefly that innovation had been a major theme in classical economics. Then Section 4.3 shows that neo-classical economics essentially abandoned all research questions concerned with dynamics, and instead focused on optimisation. In this framework only certain types of innovations can be analysed.

Given abundant empirical findings and theoretical work on firm behaviour and the operation of markets, mainstream industrial economics and organisational theory has relaxed the most unrealistic assumptions of neo-classical economics, especially perfect information, deterministic environments, perfect competition, and constant or diminishing returns. Yet, several major shortcomings have remained: (i) institutional issues are not addressed satisfactorily in these branches of economics, either; (ii) a very narrow concept of uncertainty is used; (iii) no adequate theory is offered on the creation of knowledge used in innovation activities and technological interdependence amongst firms; and (iv) the role of government is not analysed in a way that would provide a sound and constructive guidance to policy-makers. (Fagerberg et al. eds., 2005; Foray ed., 2009; Lazonick, 2013; Lundvall and Borrás, 1999; Smith, 2000) Evolutionary economics of innovation – drawing also on institutional economics – rests on radically different postulates compared to mainstream economics. These latter schools, however, are not discussed in this contribution.

The main question of this paper, that is, how social innovation challenges neo-classical economic assumptions regarding technological innovation is addressed in the concluding section.

Innovation is a modern term – first applied extensively in economics by Schumpeter –, and thus authors belonging to classical and neo-classical economics have not used it. For the sake of simplicity, however, this notion is ‘retrospectively’ introduced in certain parts of this paper.

⁵⁴ Institute of Economics, Centre for Economic and Regional Studies, Hungarian Academy of Sciences. Contact address: attila.havas@krtk.mta.hu; +36-30-816 4266 (mobile).

4.2. Technical, organisational and institutional changes: a subject in classical economics

Although classical economics cannot be regarded as a paradigm – in terms of having shared axioms, basic notions, research questions, methods, postulates or main theses – it can be safely generalised that major classical economists had put a strong emphasis on technical, organisational and institutional changes when analysing “*the Nature and Causes of the Wealth of Nations*”, the “*Principles of Political Economy*”, or “*the Principles of Political Economy and Taxation*”. More generally, these authors had paid attention to historical developments (long-term issues) and thus to the dynamic nature of the economy and considered it embedded in political and social structures.

A fundamental notion in *Adam Smith*'s theory is the division of labour, that is, an organisational innovation, using modern terminology. In developing his arguments, further aspects of innovations are also explained – such as learning, introduction of machinery, better organisation of production processes – and various sources of innovations are mentioned.

“This great increase of the quantity of work which, in consequence of the division of labour, the same number of people are capable of performing, is owing to three different circumstances; first to the increase of dexterity in every particular workman; secondly, to the saving of the time which is commonly lost in passing from one species of work to another; and lastly, to the invention of a great number of machines which facilitate and abridge labour, and enable one man to do the work of many. (...)”

(...) the invention of all those machines by which labour is so much facilitated and abridged, seems to have been originally owing to the division of labour. Men are much more likely to discover easier and readier methods of attaining any object, when the whole attention of their minds is directed towards that single object, than when it is dissipated among a great variety of things. But in consequence of the division of labour, the whole of every man's attention comes naturally to be directed towards some one very simple object. (...) A great part of the machines made use of in those manufactures in which labour is most subdivided, were originally the inventions of common workmen, who, being each of them employed in some very simple operation, naturally turned their thoughts towards finding out easier and readier methods of performing it. Whoever has been much accustomed to visit such manufactures, must frequently have been shewn very pretty machines, which were the inventions of such workmen, in order to facilitate and quicken their own particular part of the work. (...)

All the improvements in machinery, however, have by no means been the inventions of those who had occasion to use the machines. Many improvements have been made by the ingenuity of the makers of the machines, when to make them became the business of a peculiar trade; and some by that of those who are called philosophers or men of speculation, whose trade it is not to do any thing, but to observe every thing; and who, upon that account, are often capable of combining together the powers of the most distant and dissimilar objects.” (Smith, 1776/1904; sections 1.1.5; 1.1.8; 1.1.9)

Just to mention another ‘modern’ issue, Smith (1776) also devoted a chapter to describe the co-evolution of transport technologies, markets, and division of labour, leading to economic development. His examples stretch from the case of ancient Egypt to his contemporary Holland in time and cover Africa, Asia and Europe in space. (Book I, Ch. III)

John Stuart Mill also identifies various types of innovations – technical, managerial and organisational, and financial –, and distinguishes invention from innovation (practical use) and incremental innovations during diffusion. Using modern terms, he also speaks of product and process innovations. Finally, he stresses the importance of diffusing new knowledge.

“§4. The third element which determines the productiveness of the labour of a community, is the skill and knowledge therein existing; whether it be the skill and knowledge of the labourers themselves, or of those who direct their labour. No illustration is requisite to show how the efficacy of industry is promoted by the manual dexterity of those who perform mere routine processes; by the intelligence of those engaged in operations in which the mind has a considerable part; and by the amount of knowledge of natural powers and of the properties of objects, which is turned to the purposes of industry. That the productiveness of the labour of a people is limited by their knowledge of the arts of life, is self-evident; and that any progress in those arts, any improved application of the objects or powers of nature to industrial uses, enables the same quantity and intensity of labour to raise a greater produce.

One principal department of these improvements consists in the *invention* and *use* of tools and machinery. (...)

The use of machinery is far from being the only mode in which the effects of knowledge in aiding production are exemplified. In agriculture and horticulture, machinery is only now [1852] beginning to show that it can do anything of importance, beyond the invention and *progressive improvement* of the plough and a few other simple instruments. The greatest agricultural inventions have consisted in the direct application of *more judicious processes* to the land itself, and to the plants growing on it (...). In manufactures and commerce, some of the most important improvements consist in economizing time; in making the return follow more speedily upon the labour and outlay. There are others of which the advantage consists in economy of material.

§5. But the effects of the increased knowledge of a community in increasing its wealth, need the less illustration as they have become familiar to the most uneducated, from such conspicuous instances as railways and steam-ships. A thing not yet so well understood and recognised, is *the economical value of the general diffusion of intelligence among the people.*” (Mill, 1848/1909, Book I, paragraphs 1.7.9-1.7.12)

In his major book, Ricardo has also analysed major marketing and technological changes, for example “Sudden Changes in the Channels of Trade”, “the influence of machinery on the interests of the different classes of society”, on output, trade, profit, and employment. (Ricardo, 1817/1821, chapters 19 and 31)

The way, in which Karl Marx has addressed technological changes and economic development is analysed in detail by many authors, most notably by Schumpeter (1942) [cf. Rosenberg, 2011], as well as by contemporary scholars of economics of innovation (e.g. Clark and Juma, 1988; Mazzolini and Nelson, 2013), and thus there is no need to stress here that Marx had paid attention to innovation.

To conclude this brief overview, it is worth stressing that classical economists had not paid a particular attention to the allocation of scarce resources. Following Kaldor (1972), two functions of decentralised markets are identified by Dosi and Orsenigo (1988, p.14): allocation of resources and transmission of impulses to change. To generalise, classical economists had inclined to focus on the latter one.

“Fundamental dynamic properties such as the relationship between expansion of markets, division of labour, and productivity growth in Smith, or the ‘increasing organic composition

of capital' in Marx, are examples of a class of propositions argued on the grounds of the *irreversible transformations* originated by processes of what we could call 'dynamic competition'. Moreover, their neglect of explicit microfoundations was justified on the grounds of what we may term a 'holistic' or 'macroinstitutional' assumption about behaviour: it seemed obvious to them that, for example, given an opportunity, capitalists were ready to seize it, or that their 'institutional' function was to invest and accumulate the surplus." (*ibid.*, emphasis in the original)

4.3. Technical, organisational and institutional changes: exogenous factors in neo-classical economics

Neo-classical economists abandoned the classical tradition at least in two crucial aspects: (i) they put allocative efficiency into the centre of their analysis, that is, a short-term issue; and closely related to this rupture, (ii) neglected technological, institutional, behavioural and organisational changes. Their main new objective was to develop sophisticated models of general equilibrium and by doing so to turn economics into a 'hard science', exemplified by Newtonian physics in the 19th century. Walras (1874/1954, p.71), for example, perceived "the pure theory of economics or the theory of exchange and value in exchange" as a "physico-mathematical science like mechanics or hydrodynamics". (cited in Clark and Juma, 1988, p.206)⁵⁵ In other words, a rich set of historical analyses offered by classical economics was replaced by an ahistorical, highly abstract theory.

Since the late 19th century, however, economists – representatives of various schools who criticise each other, on the one hand, and methodologists and historians of economic thought, on the other – use the label of neo-classical in various ways. Two different approaches can be distinguished. (Lawson, 2013) First, this school is defined in relation to classical economics, assuming both continuity (in some aspects) and discontinuity (in others). Many of the authors following this approach establish that hardly any continuity can be found, and thus counter-classical or anti-classical would be more appropriate designations.⁵⁶ Second, other authors seek to define common analytical features of writings labelled as neo-classical, that is, continuity with classical economics is not an issue in this (classification) approach. There is a non-negligible

⁵⁵ For a more detailed account on this 'zeal' and its repercussions, see, e.g. Allen (1988, pp.96-97), as well as Clark and Juma (1988, pp.204-207). In his Nobel memorial lecture, Herbert Simon (1978, p.367) also touched upon this issue: "The social sciences have been accustomed to look for models in the most spectacular successes of the natural sciences. There is no harm in that, provided that it is not done in a spirit of slavish imitation. In economics, it has been common enough to admire Newtonian mechanics (or, as we have seen, the Law of Falling Bodies), and to search for the economic equivalent of the laws of motion. But this is not the only model for a science, and it seems, indeed, not to be the right one for our purposes." It is also worth stressing that the "role model" for neo-classical economists already changed its "course": "By the time Jevons and Walras began laying the cornerstones of modern economics, a spectacular revolution in physics had already brought down the mechanistic dogma both in the natural sciences and philosophy. And the curious fact is that none of the architects of 'the mechanics of utility and self interest' and none even of the latter-day model-builders seem to have been aware at any time of this downfall." (Georgescu-Roegen, 1971, pp.2-3, cited in Clark and Juma, 1988, p.207)

⁵⁶ Lawson (2013, p.948) offers an overview of these claims, including a particularly vivid one by Schumpeter: "there is no more sense in calling the Jevons-Menger-Walras theory neoclassic than there would be calling the Einstein theory neo-Newtonian". One could add, though, that Einstein's theory seems to be much more relevant in explaining phenomena in physics than neo-classical economics in analysing economic developments.

diversity even inside this 'camp', however.⁵⁷ For instance, the equilibrium states are quintessential for some authors, while for others are not. Moreover, there is some disagreement whether equilibria are supposed to always prevail axiomatically, or only their possible existence is among the main research questions. Just to mention a few attempts, the neo-classical school has been defined in the following ways (all cited by Lawson, 2013, p. 949):

“(1) an individualistic perspective, a requirement that explanations be couched solely in terms of individuals; (2) an acceptance of some rationality axiom; and (3) a commitment to the study of equilibrium states.” (Hahn, 1984)

“1. People have rational preferences among outcomes. 2. Individuals maximize utility and firms maximize profits. 3. People act independently on the basis of full and relevant information. Theories based on, or guided by, these assumptions are neoclassical theories (Weintraub, 2002).”

Neo-classical economics “(1) assumes rational, maximizing behaviour by agents with given and stable preference functions, (2) focuses on attained, or movements towards, equilibrium states, and (3) is marked by an absence of chronic information problems (Hodgson, 1999, p. 29).”

From the point of analysing innovations, the following neo-classical assumptions are essential: homogenous products, diminishing returns to scale, technologies accessible to all producers at zero cost, perfectly informed economic agents, perfect competition, and thus zero profit. In this framework, technological changes were treated as exogenous to the economic system. Thus, uncertainties were not considered, either; the underlying notion related to innovation was risk, assuming that the probability distribution of all possible events can be known *a priori*. The major actor in these models is the 'representative agent', that is, a single person who – regardless of his or her field of activity – has no specific characteristics. In brief, innovation became a non-issue in neo-classical economics.

Building upon the neo-classical framework, Nelson (1959) and Arrow (1962) started a systematic analysis of firms' in-house R&D activities. In this way, a certain type of technological innovations, that is, the ones based on intramural R&D results could be considered.⁵⁸ It is an important 'class' of innovations, no doubt, but at least equally important ones were disregarded. These include: (a) innovations based on the results of extramural R&D projects conducted in the same or other sectors, at public or private research establishments, home or abroad; (b) all other technological innovations based on non-R&D type of knowledge, e.g. stemming from various other sources, such as design, scaling up, testing, tooling-up, trouble-shooting, and other engineering activities, ideas from suppliers and users, inventors' concepts and practical experiments, as well as collaboration among engineers, designers, artists, and other creative 'geeks';⁵⁹ and (c) non-technological innovations, such as organisational, managerial, marketing, or

⁵⁷ A further issue, namely the confusion between neo-classical and mainstream economics is not discussed here.

⁵⁸ The first models of innovation, developed by practitioners – policy-makers or managers of in-house R&D units of large firms – and natural scientists also regarded R&D as the principal information source of innovations. These are the so-called science-push models of innovations. To describe their origin and features in detail, as well as subsequent linear and non-linear models of innovations is beyond the scope of this contribution.

⁵⁹ Further, innovative firms also utilise knowledge embodied in advanced materials, other inputs, equipment, and software.

financial ones, as well as new business models.⁶⁰ Non-technological innovations are all the more important; as innovation studies have shown technological innovations can hardly be introduced without organisational and managerial innovations.⁶¹ Moreover, to latter ones – together with marketing innovations – are vital for the success of the former ones.

The pioneering work by Nelson and Arrow first looked as a promising extension of neo-classical economics, e.g. leading to economics of information, but in light of Nelson's later major contributions, can also be seen as the first step opening up fundamentally new avenues, namely evolutionary and institutional economics of innovation.

4.4. Social innovation and the assumptions of neo-classical economics

Social innovation is defined by the CRESSI project as follows: The development and delivery of new ideas (products, services, models, markets, processes) at different socio-structural levels that intentionally seek to improve human capabilities, social relations, and the processes in which these solutions are carried out.

Clearly, the theoretical framework of neo-classical economics cannot accommodate social innovations for several reasons. Just to highlight some of the most important ones, for social innovators the major goal is not optimisation in a strict economic sense. Second, social innovators do face uncertainty, too, not only calculable risks. Third, dynamic aspects are crucial, e.g. changes in the environment, in which social innovations take place; moreover, to induce this change is indeed among the major goals of social innovation. Fourth, various types of changes – economic, technological, organisational, social (e.g. structural, behavioural) and political – are endogenous from the point of view of social innovations, and co-evolve. Policy governance sub-systems and the level of governance need to be considered, too. In other words, these changes and co-evolutionary processes cannot be treated as exogenous. Fifth, social innovators are neither 'representative agents', nor do they act on their own. They have their own specific features, partly shaped by the context, in which they operate, and they need to interact with several other actors, and often form formal or informal networks to do so.

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⁶⁰ More recently, non-technological innovations often rely on technological elements or building blocks, too, e.g. on information and communication technologies (both hardware and software).

⁶¹ As already stressed, not all technological innovations are based on R&D results. Certain organisational, managerial, marketing and financial innovations, in turn, draw on R&D results (but usually not stemming from R&D activities conducted or financed by firms). For these two reasons it would be a mistake to equate technological innovations with R&D based innovations.

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5. Neoclassical Economics and Innovation – An EU Policy Making Perspective on Legitimising R&I Policy

By Klaus Kubeczko⁶²

No doubt neo-classical economics has been strongly influencing policy making regarding research, technological development and innovation over the last decades and even up to now. This part will therefore focus on some implications of neo-classical economics on the way policies are supposed to be legitimised in democratic processes. The question, how social innovation challenges neo-classical economic assumptions regarding innovation, is addressed from this perspective.

Nearly all initiatives in the European Union require a formal Impact Assessment⁶³ in which the executive bodies have to provide arguments showing the legitimacy of the proposed initiative, before political decisions are made. Impact Assessments have to address three categories of rationales: (a) the existence of market failure, (b) regulatory failure, as well as (c) discrepancies between fundamental goals of the EU Treaty and the status quo.

This holds true for any kind of research and innovation oriented (R&I) policy measures supporting technological development and it is also a fact for Horizon 2020 and hence for social innovation related parts of it. Although increasingly other (sustainability) criteria for supporting R&I-policy instruments are becoming more prominent, up to now the main criteria in defining the problem is market failure.

Based on neo-classical economic theory, three fundamental problems are pointed out: uncertainty, inappropriability, and indivisibility (Hauknes and Nordgren 1999; Arrow 1962; Nelson 1959). As those characteristics make it irrational for a homo-oeconomicus to produce any kind of good or service, public intervention is justified.

It is frequently argued that market failure provides sufficient legitimation for political action addressing R&I. We must, however, ask first which “market” is referred to. Are we talking about *markets for products and services* (including artefacts, technologies and solutions for societal challenges) or *markets for knowledge*? Arrow (1962) and Nelson (1959) originally considered failure of “scientific knowledge markets” as a sufficient legitimation for science policy intervention (meaning basic research) (Kubeczko and Weber 2009). Many authors since have followed suit, as such failure is also frequently cited in the wider R&I policy context. Although the understanding of markets is not made explicit by most authors, markets for knowledge and innovation, will probably describe best what they are referring to. Neo-classical economist will understand marketable knowledge as equal to codified generic information and data which can be commercialized by economic actors (Chaminade et al. 2009). This can be traded in the form of licenses for patents or other intellectual property rights and play a key role in the case of the endogenous neo-classical growth model Paul Romer (1990).

However, as research and innovation involve uncertainty since, (a) research activities do

⁶² Innovation Systems Department, Austrian Institute of Technology.

⁶³ “Impact assessment will be applied to the major initiatives presented by the Commission in its Annual Policy Strategy or its Work Programme, be they either regulatory proposals or other proposals having an economic, social and environmental impact.” COM(2002) 276 final

not inevitably lead to new knowledge or innovations, and (b) markets are not always responsive to innovations. In both cases, the main problem is incalculable risk and thus the absence of investments in the light of uncertainty. Inappropriability of knowledge involved in innovation is a problem related to the public good nature of knowledge production and the externalities it entails. State intervention, for instance, is justified on grounds of expected knowledge spillovers from basic research. Finally, the indivisibility of knowledge makes it difficult to find a formula for sharing the expected profits, which substantially reduces the willing individual companies to invest in knowledge production.

As can be seen from the Impact Assessment Guidelines provided by the European Commission (EC 2009), neo-classical economic arguments are key for reasoning the existence of market failure. The following problems are described as market failure:

1. Market prices do not reflect the real costs and benefits to society ('externalities')
2. Insufficient supply of public goods
3. Missing or weak competition (including abuse of market power)
4. Missing or incomplete markets
5. Information failures, such as imperfect information or lack of access to information for decision takers (including consumers and public authorities), unless caused by a regulatory failure

This shows that there is a strong focus on market solutions when defining the problem and a perfect market is seen as the ideal state. Clearly these market-failure arguments are mainly related to product and service markets including public goods but only to a lesser extent to knowledge. It is particularly the case with respect to how the problem has to be defined in the Impact Assessment. But, it would be misleading to reverse the market failure argument and claim that any policy initiative has to be solved by proper "market-solutions". On the opposite, Arrous (1962) and North (1959) - who showed that the preconditions for a market solution are not met in the case of knowledge provision - recommended substantial public investment and support of scientific institutions. They understood basic research as an area where market solutions do not work. Also later neoclassical economists with an endogenous model of technological change like Romer (1992) are critical of constructing models showing markets providing optimal level of research.

Once the problem has been defined and the corresponding objectives are set in the Impact Assessment the neo-classical arguments put forward are mainly focusing on ideal markets or on why a market is not established. They are rarely specific enough or appropriate to guide policy maker in developing policy options at an operational level apart from direct financial interventions. Therefore, the door is open for a broad range of theoretical approaches and heuristics to be used to develop effective, efficient and coherent policy options. This includes solutions fostering technological as well as social innovation. This is also acknowledged by the Impact Assessment guidelines (EC 2009) which describe several other instrumental options such as self-regulation, open methods of coordination, information, guidelines, co-regulation, standards, framework directives and prescriptive regulatory actions.

For the above mentioned market failure with respect to imperfect information, this can be illustrated by one of CRESSI's cases of social innovation aiming to improve

financial literacy. Equally the missing of markets for social housing could be the starting point to suggest social innovations. Which policy options are investigated in the Impact Assessment and which methods are used to analyse the impact of policy options will depend on several criteria, including power relations in the administrative units involved. But in the end adequate theoretical underpinnings and heuristics provide the convincing rational arguments for a policy option, and have the power of legitimise policy initiatives in deliberative policy making.

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PART 3

Task 1.5:

What incentive structures or types of motivation best suit social innovation addressing the marginalised?

6. Aristotelian Economics and Modern Finance

A consideration of the true counterpart to today's financial markets

By C.W.M. (Ro) Naastepad and Christopher Houghton Budd (31st January 2015)

6.1. Introduction

Are marginalisation and social exclusion related to the motivating forces that belong to what have come to be accepted as the foundation of our economic theory, policy and institutions? To many, marginalisation and exclusion are unfortunate side effects of economic efficiency and (exogenous) technological change. To others, however, they are a sign that we are not yet capable of managing the consequences of our quest for freedom, characterised as it has been to date by a striving for the absence of external constraints over our lives. Is this motivation, and its associated tenets and policies, part of the problem, therefore, and can its modification become part of the solution?

In search of a solution to problems of marginalisation and exclusion, some advocate the creation of a 'social sector' which picks up the pieces left by 'free' markets' and unbounded technological progress. This may involve changes in our economic, financial and political systems and a return to laws and rules that reflect our collective responsibility. Others aim for 'market solutions' such as the creation of financial investment instruments (e.g. 'social impact bonds') aiming at linking social benefit and private return. Opposite as these two solutions – 'state' and 'market' – may seem, both are built on the same view of the human being as driven *only* by self-interest and unable, out of himself,⁶⁴ to engender socially responsible conduct. Hence he has to be subjected to discipline, whether market competition or state regulation. Both solutions, however, limit our hard-won and dearly-cherished power of self-determination.

A third possibility – one that does *not* imply a return to some external force that repudiates such self-governance – would be to broaden our understanding of freedom, self-determination, and rationality. In such a perspective, proposed by, for example, the economist Adolph Lowe in his under-appreciated *Has Freedom a Future?*, the solution would not be to go back to old constraints, but "to free ourselves from one more constraint, perhaps the most pertinacious of all: ignorance of our true nature." Unless we understand the wider nature of the human being and the purpose of human life, we shall not be able to define the boundaries of the economy or assign to capital its proper role in society. Since the second pair of categories amount to the same thing as the first, it is difficult to see how, without revisiting them, solutions to marginalisation and exclusion cannot but remain elusive.

This paper explores how Aristotle's concepts of *τέλος* (*telos*, purpose)⁶⁵ and *ἦθος* (*ethos*,

⁶⁴ Notwithstanding the political correctness currently associated with gender in the English language, in this paper when referring to the human being the words 'man' and therefore 'he' are understood to be general to all human beings, since 'man' derives from the Sanskrit root 'man' which refers to the faculty of thinking (Barfield 1967).

⁶⁵ A *telos* (from the Greek *τέλος*) is an end or purpose. It is the root of the term 'teleology', roughly the study of purposiveness, or the study of objects with a view to their aims, purposes, or intentions.

character), or the inner sense of what is right and worthy in human life)⁶⁶ can help in defining the boundaries of the economy, and, more specifically, in finding a counterpart for the ‘superabundant liquidity’ which, according to many⁶⁷, not only marks but also prolongs today’s continuing global financial crisis.⁶⁸ For unless we can identify the true counterpart to today’s excess liquidity – a phenomenon one could also describe as ‘too much capital’ – marginalisation and exclusion will prove to be inevitable.

6.2. Background

Responses to the financial crisis are predominantly of three kinds. A first set of proposed solutions centres around ‘more regulation’, ranging from closer surveillance and regulation of banks (e.g. Roubini & Mihm 2011, Stiglitz 2010) to full reserve banking proposals for abolishing fractional reserve lending and the creation of money by banks (e.g. Benes & Kumhof 2013, based on Fisher 1936 and Phillips 1995; for ‘positive money’ variants, see Jackson & Dyson 2013, Huber & Robertson 2000).

A second set centres around ‘more market’ and includes proposals ranging from financial innovation (e.g. Shiller 2012) to ‘free banking’ (based on Hayek 2007). A third set of responses focuses on ‘greed’ as the cause of the crisis, and on ‘moral attitudes’ and ‘virtue ethics’ in economic relationships as the solution (e.g. Bowles 2011, 2012; Bowles & Gintis 2011, Hodgson 2012) without, however, specifying what ends these virtues serve or how they are to influence our behaviour from now on.

In our view, such solutions do not address the root of the problem. The disturbances we witness in our society relate to the foundation of our economic theory and its related economic institutions, and will not be solved until we rethink some of the most fundamental questions of economics, particularly with respect to capital. What are the economy and capital for, and is the answer to this question today different from what it was in the 18th and 19th centuries, when the currently prevailing axioms and prescriptions of economic theory were formulated?

The ‘superabundant liquidity’ associated with the financial crisis is not a transitory phenomenon. It requires us to understand more carefully the relationship between ‘excess liquidity’ and the real economy. To this end, let us pause for a moment and consider afresh the meaning of ‘real’ and ‘financial’. Whereas today’s discourse is often framed in terms of the real versus the financial economy, implying that financial is unreal (and that real is unfinancial!), it is more concrete to think in terms of the physical economy (ultimately predicated on and valued in terms of goods) and the non-physical economy (related to creativity). The physical economy comprises the work (labour) necessary to produce goods that meet human needs. The non-physical economy comprises the inventive and creative capacities – ideas, mental work – that improve

⁶⁶ Concerning character, for Cheffers and Pakaluk (2007), for example, character is about having virtues, being virtuous. In this sense, one is or is not characterful, has or does not have character. Thus, character might be said to mean having an inner sense of what is right and worthy in human life, at which point it becomes important to ask whether this sense is innate or can be learned and cultivated. (See also the later discussion under ‘Telos and ethos’.)

⁶⁷ For example, Adair Turner in *Prospect*, September 2009. See full discussion in Houghton Budd (2011).

⁶⁸ Hereafter, references to ‘the financial crisis’ mean the global financial crisis, which began in 2007 and in various guises continues to this day, with no clear end in sight.

production (e.g. the organisation and capital intensity of the production process) and the productivity of the physical economy (the goods economy). Thus, one can see the real economy as spanning a continuum between two poles (physical and non-physical), rather than being one of the poles, and that the financial economy reflects this continuum (rather than being its other pole).

Here some further precision is perhaps needed. A human being needs to eat, be clothed and housed whether he labours in the fields all week or preaches a sermon once a week on Sundays – to use a picture from agrarian society which typically would also be religious. Labour creates goods, which are typically of focused and finite use. Ideation on the other hand is typically of general and infinite use. Over time, the proportion of people who work to produce goods directly (e.g. a wheel) has progressively declined relative to the proportion of people doing mental work that produces ideas (e.g. the idea of a wheel), which has increased correspondingly. The physical or goods economy feeds, clothes and houses both groups – those who work to produce goods and those who do not produce goods directly, such as doctors whose skills return patients to the workplace sooner or inventors whose gadgets enable us to ‘stretch’ the work done by those who make things directly. While labour enables us continually to produce the goods we all need, ideation or capacities contributes to humanity’s development via its positive impact in terms of inventions and innovations, etc. Thus, not only labour, but mental development also has value in itself.

Reframing the discussion in this way has enormous consequences for our understanding of what is nowadays taking place. Historically, the non-physical economy grows vis-à-vis the physical economy, reflecting the progressive emancipation of the human being from the need to work for physical livelihood. Human beings are increasingly free to rise above the material; work can increasingly take on a mental quality. One can therefore ask: Is the growth of ‘excess liquidity’ a reflection of (and meant to enable) this structural change?

The remainder of this paper will explore this thought further. For example, it is the rule rather than the exception today for an asset to be seen only in financial terms – considered as an investment ‘in play’ until it can be sold for financial gain – rather than as something that supports the real economy, whether physical or non-physical. What are the actual consequences, intended or otherwise, of this financialism? In particular, does it continue or undo our emancipation from material drudgery hard-won over centuries?

6.3. A first attempt at quantification

The volume of global financial assets has expanded at a rapid pace since 1980, while the rate of growth of world output of goods and services has slowed down. Has ‘superabundant liquidity’ grown over time as a result of structural changes in the relationship between the physical and the non-physical economy?

By 2010, according to IMF estimates, the economy’s physical asset base had grown to USD 210 trillion, or three times global GDP worth USD 63 trillion (implying a capital-output ratio of about three, which corresponds to other estimates). However, by 2010, the value of global *financial* assets had swollen to around USD 600 trillion, tripling over

the past two decades. Today, total financial assets are nearly 10 times the value of global output (Bain & Company 2012, Figure 1.1; see the Annex to this paper). What is the counterpart of these financial assets?

The estimate of USD 600 trillion refers to the notional value of the derivatives market. The more relevant measure for our purposes would be the (gross) market value corresponding to this amount, which is USD 21 trillion (BIS 2013, Table 19; see Annex), which still constitutes a sizeable share of total global assets. Chen *et al.* (2012) estimated global liquidity – approximated as the sum of financial sector liabilities of the G4, i.e. the Eurozone, Japan, the United Kingdom, and the United States – to equal USD 90 trillion in 2010-11, which amounts to 140% of the combined GDP of the G4 countries, or 130% of world GDP (Chen *et al.* (2012) Figure 1; see Annex). The amount spent on buying financial assets (USD 21 trillion) would then amount to close to one-third of the GDP of the G4. What is the relationship between these assets and the real economy? If this amount is not needed to support the physical base of economic life, what could be the reason for its existence?

The measurement of financial assets is fraught with problems. As financial systems move away from traditional deposit-based funding ('core funding') to capital and, more recently, collateral-based markets ('non-core funding'), standard monetary aggregates become less suited to capture movements in global financial capital. In recent years, for example, much work has focused on capturing the role of the shadow banking system, which provides a fast-rising share of total liquidity. Poszar, Adrian, Ashcraft, and Boesky (2010) and Poszar (2011) find that the volume of credit intermediated by the shadow banking system has far exceeded that of the traditional banking system since the mid-1990s. The liabilities of the shadow banking system are estimated to equal USD 22 trillion in 2007, as compared to about USD 14 trillion for the traditional U.S. banking system. As Mayer (2000) put it – credit now 'comes from all over', issuing increasingly from outside the banking system.

What share of financial capital, estimated in one of the above ways or otherwise, is 'excess liquidity' in the sense of capital that is not needed to finance investments in the physical economy? Is the amount of capital that is not needed in the physical economy growing (absolutely and as a share of total capital)? A conservative estimate of 'excess liquidity' in this sense is, perhaps, the size of global institutional cash pools, as estimated by Poszar in his IMF report. Global institutional cash pools increased from USD100 billion in 1990 to between USD 3.5 trillion and USD 3.8 trillion in 2007 (Poszar 2011, Figure 1; see Annex). To use the figures mentioned earlier, these cash pools are used predominantly for financial investments in derivatives markets (notionally valued at USD 600 trillion). A less conservative estimate of 'excess liquidity' puts it at USD 21 trillion, equivalent to the estimated gross market value of the derivatives market, an amount that roughly equals the size of the shadow banking system.

If excess liquidity – 'too much capital' – mirrors an underlying transformation of economic life, the three types of solutions mentioned above will not be sufficient to deal with the consequences. The solution, as tentatively explored here, will be to raise our awareness so that we see that something in our economic system has changed fundamentally (that 'something' quite possibly being our understanding itself), thereby to find a perspective that enables us to identify the counterpart of the excess liquidity

that has been, and will presumably continue to be, created.

6.4. ‘Too much capital’ and ‘the real values of life’

Economists of various persuasions have long since warned that financial capital would, over time, increasingly separate itself from the physical economy, and subsequently cause problems to the physical economy through speculative activities. “Loose funds may sweep the world, disorganizing all steady business,” as Keynes succinctly put it.⁶⁹ If this is what is happening today, the question today’s on-going financial crisis poses is: What is the counterpart of the loose capital that is continuously created and accumulated? To what can it tie itself so as to lead us forwards not backwards? Will the counterpart show how – for example, by being spent out – this capital can be stabilising instead of disorganizing?⁷⁰

The problem that caused the financial crisis, we suggest, is not the loosening of capital from the physical economy *per se*, but the lack of a perspective which tells us how this loose capital can be used productively. Again, that this question would, in due course, throw up serious problems, was foreseen by Keynes when, in his 1930 essay *Economic possibilities for our grandchildren*, he estimated that within less than a hundred years, standards of living would have risen more than enough to cover material necessities. If average living standards were eight times higher in 2030 than in 1930, Keynes speculated, people would have enough income to turn their attention to other things in life besides material subsistence. Humanity would have solved its economic problem. Beyond this point, the accumulation of capital for economic purposes would make no sense.

What will humanity do, asked Keynes, once it has solved the problem which was hitherto the primary, most pressing problem of the human race – the struggle for subsistence:

If the economic problem is solved, mankind will be deprived of its traditional purpose. Will this be a benefit? If one believes at all in the real values of life, the prospect at least opens up the possibility of benefit. Yet I think with dread of the readjustment of the habits and instincts of ordinary man, bred into him for countless generations, which he may be asked to discard within a few decades. To use the language of today – must we not expect a general “nervous breakdown”? (Keynes 1963: 366).

More than eighty years after *Economic possibilities for our grandchildren*, the most productive parts of the world have come close to Keynes’s goal in terms of per capita incomes. If today’s ‘excess liquidity’ reflects incomes that are more than sufficient to cover material necessities, how will we spend the excess?

Obviously, a justified objection would be that today many household incomes, even in

⁶⁹ J. M. Keynes, *The Post-War Currency Policy*, 8 ix 41 *The Collected Writing of John Maynard Keynes*, Vol. XXV.

⁷⁰ Spend-out or spend-down foundations are increasing, as those responsible for them see the merit, indeed social wisdom and economic sense, in ‘losing’ capital into education, seed-funding and so on, rather than preserving their capital in today’s increasingly unstable financial markets. The difference is not a loss of efficiency, but that the benefit accrues to society generally rather than to the provider of the funds. A good example is to contrast the benefit to society of a young generation indebted by student loans and one set free by grants.

the rich countries of the world, are not sufficient to cover material necessities because, while economic growth has boosted the per capita income of contemporary western societies, median incomes have stagnated (Skidelsky 2010: 143). Most people in western societies earn much less than the average income, and part of the ‘excess liquidity’ accumulated in the past three decades results from a redistribution of national income from lower incomes towards the top of the income scale (rather than from increases in production).

Such liquidity is not truly excess, if by ‘excess liquidity’ one understands money that the physical economy cannot accommodate and has no use for. Money that is withdrawn from necessary income formation is needed within the economy and hence not ‘excess’. Indeed, capital that is formed by withdrawing money from necessary income formation is not truly capital, if by capital we mean wealth that originates in the ingenuity, creativity and inspiration, that is, in the productive mental activity that gives rise to and guides economic activity.

This is the focus of our thesis regarding the counterpart of ‘too much capital’, namely, that it originates in human ingenuity. Humanity’s ever-increasing ingenuity and self-awareness result in (most often labour-saving) improvements in production processes and drive up economic productivity. When labour productivity increases, the same amount of labour can be used to produce more goods, or the same amount of goods can be produced with less labour. This gain in the form of either more goods or more free time is known as the *productivity dividend*.

When living standards are low, the productivity dividend tends to be used for expanding the capital base of the economy – what von Mises called ‘seed corn’ for the physical economy – and thereby the (potential) quantity of goods produced. However, with humanity’s ever-increasing self-consciousness, the amount of (physical plus financial) capital created by human ingenuity has grown out of proportion to the need for physical capital; an increasingly large segment of capital created is not needed (as physical capital) in the physical economy and cannot be predicated upon or forced into it.⁷¹ To the extent that today’s ‘excess liquidity’ represents money that is not needed to maintain material existence, how do we spend (this share of) the productivity dividend?

6.5. Humanity’s ‘permanent problem’

Rephrasing Keynes, what will humanity do with the productivity dividend once productivity increases have solved the problem of material existence?

“...for the first time since his creation man will be faced with his real, his permanent problem – how to use his freedom from pressing economic cares, how to occupy the leisure, which science and compound interest will have won for him, to live wisely and agreeably and well.” (*ibid.* p. 367)

⁷¹ Obviously, today, even if per capita and median incomes in the rich parts of the world were sufficient, for large segments of the world’s population the problem of material existence has not yet been solved. Doesn’t this prove that Keynes was premature in his attack on *homo economicus*? We believe not, because even material uncertainty in developing countries is an integral part of the problem of excess liquidity. Replacement of *homo economicus* with a more virtuous successor would arguably channel capital that now accumulates in abstract cash pools and financial markets to places where it is genuinely needed, including covering the as yet unmet material needs of much of the world’s population.

With dread, Keynes wondered whether humanity would be able to find anything more amusing to do than continue to chase money and capital. Shall we be able to

“rid ourselves of many of the pseudo-moral principles which have hag-ridden us for two hundred years, by which we have exalted some of the most distasteful of human qualities into the position of the highest virtues”?

Shall we be able to “afford to dare to assess the money-motive at its true value”, and to recognise the love of money as a possession for what it is,

“a somewhat disgusting morbidity, one of those semi-criminal, semi-pathological propensities which one hands over with a shudder to the specialists in mental disease. All kinds of social customs and economic practices, affecting the distribution of wealth and of economic rewards and penalties, which we now maintain at all costs, however distasteful and unjust they may be in themselves, because they are tremendously useful in promoting the accumulation of capital, we shall then be free, at last, to discard.” (*ibid.* p. 369–370)

What are we to do with the free time *and* the free capital which are at our disposal once humanity has solved its economic problem? Keynes knew very well that unto itself economic theory does not provide answers to such questions. He himself hinted at qualities of life beyond material existence – suggesting, indeed, that these are more ‘real’ than the struggle for material existence itself – which would solve the problem of *free time*.

In *Keynes – the Return of the Master*, Skidelsky (2009:134) draws attention to Keynes’s Aristotelian underpinnings – especially the idea that “we cannot ... do fine actions if we lack resources.” It is in these terms, ultimately, that Keynes understood ‘the economic problem’. However, he failed to formulate a full answer, because it seems not to have occurred to him to relate what he recognised as the ‘real values of life’ to *freed capital* – i.e. the capital that is freed by productivity growth (see later discussion).

6.6. Rethinking growth

The disproportionate capital formations that characterise today’s financial markets are a special case of the proposition, inspired by a particular interpretation of Darwin that has been widely accepted, that human life consists of a struggle for subsistence. Developed in the total conviction that it constituted a valid and full worldview, and ignoring its self-evident materialist bias, this interpretation has been ‘acted out’ on a massive scale and has stamped itself on our psyche as well as on our economic system as the guiding principle of economic life. That it might have limited or specific rather than universal or general application – for example, competing against oneself to be a more effective person (and so of more value to society) rather than competing against one another in the economic realm – seems not to have been considered.

It is competitive struggle in the economic realm that has resulted in large formations of financial capital, which then seeks returns as if it can behave in regard to the physical economy in the same way it can in regard to the non-physical economy. In today’s physical economy, capital seeking financial profits increasingly meets with a major obstacle: saturation of demand, the obverse of over-production. One obvious way to circumvent this double constraint is to invent an endless stream of new commodities,

including new versions of existing commodities that render older, but still functional, versions obsolete ('planned obsolescence'; see Slade 2007). Another way is to spend massive amounts of money on increasingly sophisticated and often unscrupulous advertising techniques, in order to push commodities into the hands (or down the throats) of saturated consumers (Schor 2005, 2010).

Since the physical needs of human beings are limited, competition to maximise financial profits increasingly 'mines' souls and minds for financial returns, lulling potential consumers into believing that genuine soul and spiritual needs – such as confidence, admiration, respect, friendship, belonging, comfort, ego-strength, even a sense of meaning and direction in life – can be met through consumption.⁷² This type of growth is forced growth, growth for its own sake, not genuine economic growth.

Growth for its own sake is shaped by forces of narrow self-interest, originating in the particular interpretation of Darwin referred to above, and in Benthamite ideas. In this paper, this kind of self-interest is qualified as narrow, in order to allow the notion that it is not the only form of self-interest, nor are we necessarily trapped by it. We can widen our self-interest to include the entire human family.

Indeed, what else, when seen in terms of its own *telos*, does the division of labour – the basis of economic progress – imply, but that each one of us serves the rest of humanity, just as the rest serves each one of us? When looked at from this perspective, isn't 'self-emulation' or competing against oneself to be a more effective person (and so of more value to society), rather than competing against one another, the more appropriate maxim in the economic realm?

It does not take much imagination to see that down the path of narrow self-interest lies a society wherein people exist to provide – via work and consumption – a return to capital, itself now subject to increasingly abstract forms of ownership that are increasingly removed from economic activity. For in today's financial markets, which is the greater amount: directly owned or agent-managed capital? In the words of the American economist Williamazon (2012, 2004), capital is no longer 'committed'. Most capital owners have become recipients of profits that others – managers and workers – realise for them. Millions of people invest in funds with the aim of achieving a return on their capital, without having any idea what their money finances. Better, surely, is a society in which capital exists to serve humanity, and does so consciously, rather than the other way round.

An explanation of 'growth for its own sake' is simple enough: that a logic that belongs to the non-physical economy is misapplied to the physical economy. In the physical economy of carrots, cars and castles, needs – when genuine – are permanent but not infinite. But in the non-physical economy of aspirations, of bettering oneself, of intuitions, growth is indeed endless. The problem is that we apply this version of growth to the physical economy also – where, however, it can only be false and falsifying, requiring the cultivation of false decay ('obsolescence') and the repudiation of any constraints on physical growth. But what is the reality? Can one simply and without further ado conflate material and non-material needs? Or does this imply, in the end, falling out of harmony with the true nature of life?

⁷² See, for instance, the documentary *The Merchants of Cool. A Report on the Creators and Marketers of Popular Culture for Teenagers* (<http://www.pbs.org/wgbh/pages/frontline/shows/cool/>).

Capital seeking merely financial returns turns the traditional end (*telos*) of economic activity – to provide for the material needs of society – into a means (*techne*⁷³) for serving isolated private goals. Thought to be a universal virtue rather than a deliberate choice, the intermediate goal of modern economics, profit maximisation, takes precedence over its ultimate goal – to raise standards of living. Not only consumers' purchasing power, but also production factors (land, real estate, financial 'instruments') are directed to generate returns on financial capital. The results are over-investment in economically unnecessary expansions of physical production, and property deals and other preservations of capital which upset the economic system. Assets cease to represent the means of production, becoming instead 'in play'. Factories are not built as places in which to make things, but as places in which to stash surplus cash pending its opportunistic liquidation.

Such an approach, characterised by growth only for its own sake, channels resources away from meeting the needs of large sections of the world population. It splinters economic life into separate and unrelated economic processes, creating islands of wealth amidst shortages of capital for meeting genuine needs – all a consequence of confusing ends and means, *telos* and *techne*, in economics.

Associated with this undifferentiated concept of growth is the belief that there are not, or should not be, boundaries in economic life. This idea originates in a vision of the nature of existence wherein a body-only view of the human being (the 19th-century materialist conception of man) has eclipsed the classical philosophers' trichotomous view of the human being having three aspects – body, soul, and spirit. Reducing spirit and soul to epiphenomena of the body gives rise to the widely held but uncertain modern idea that psychological and spiritual needs can be met in material ways.⁷⁴

If instead it were agreed with the ancient philosophers that the human being consists of a *σῶμα* (*soma*, body), a *ψυχή* (*psyche*, soul), and a *πνεῦμα* (*pneuma*, spirit or consciousness), it would be clear that the task of the physical economy is to produce and distribute the goods required to sustain the material livelihood of human beings – meaning, of course, *all* human beings – and that the physical economy is not the appropriate instrument for addressing non-material needs. Non-material needs, such as enjoying a play or listening to music or studying mathematics or philosophy, are met outside the physical economy.⁷⁵ Such activities are financed by the surplus generated in the physical economy. For all those who work in such fields (of culture, education, reflection) have to be remunerated.

Are the many references to Aristotle in the recent economic literature, however cursory and incomplete at times (e.g. Blaug 1991; Sen 2001; Van Staveren 2001; Meikle 2002; Cheffers & Pakaluk 2007; Pack 2008, 2010; Skidelsky 2010; Nussbaum 2011; Grant 2011; Sedláček 2011; Sandel 2012; Skidelsky & Skidelsky 2012), a sign that the classical trichotomy is being rediscovered and deserves fresh examination? Is it time to

⁷³ *Τέχνη* (*techne*, skill, method) means the rational method involved in producing an object or accomplishing a goal or objective. It is often translated as 'craftsmanship', 'craft', or 'art', but more subtly as listening, and is distinct from *ποίησις* (*poiesis*, art) inasmuch as *techne* connotes earthly necessity.

⁷⁴ See fascinating discussion in Kenneth Lux (1990).

⁷⁵ We do not eat, inhabit or wear a concert!

think again in terms of ‘fine actions’ (τό καλόν)⁷⁶? How can capital be led to serve the full needs of human beings when understood trichotomously? Is the deeper purpose of modern capital – indeed, of the financial crisis – to remind us, albeit in cogently economic terms, of the non-bodily aspects of human existence linked to creativity – in particular, imagination, inspiration and intuition – even to give them earthly expression?

6.7. In search of the ‘invisible hand’

For a long time, economic theorists have regarded economic phenomena as subject to the same properties that govern nature. “Wealth was essentially a property of the physical world; the principles that governed its growth and distribution were said to be natural and could be augmented much as a forest might extend its reach into a meadow. Wealth was readily equated with the fruits of the earth and sea,” and in early modern conceptions of wealth the goal of economic activity was to permit humanity to “restore the abundance and complete leisure of the Garden of Eden” (Schabas 2007). The expansion of the economy was constrained, if not by a clear perception of the task and purpose of the economy, then by natural limits.

By the eighteenth century, this view had given way to the idea that economics is the result of the operation of laws governing human behaviour – the pursuit of happiness or utility (Schabas 2007). This new, individualistic and materialistic, utilitarian view of human nature – with its origins in Thomas Hobbes’s pleasure-pain (then appetites-aversions) psychology – raised a problem of social order. How could this self-seeking human proclivity be constrained? For its possible negative consequences were obvious. Hobbes emphasised the universal war that would ensue from man’s impulse to self-preservation, and saw very clearly that happiness as he conceived it involves continual desire, restless movement from one object to another; there is no such thing as static happiness (Hobbes 1651). The solution proposed by Hobbes was to let the human being’s inborn selfishness be checked by the state through laws and regulation. In the social contract, all individuals give up some of their freedom – their ‘natural rights’ – in favour of rules which restrain everybody and put an end to war.

Most seventeenth- and eighteenth-century writers, however, rejected Hobbes’s absolutist social contract, for fear that the state itself would fall prey to passions, particularly avarice and love of power. A long line of philosophers, from Bernard de Mandeville (1714, *The Fable of the Bees*) and Francis Bacon (1605, *The Advancement of Learning*) to James Steuart (1767, *An Inquiry into the Principles of Political Oeconomy*), De Montesquieu (1793, *De l’esprit des lois*), and Adam Smith (1776, *An Inquiry into the Nature and Causes of the Wealth of Nations*), defended the idea of self-equilibrating free markets – the idea, whose history is intriguingly described by Hirschman (1997), that self-interest will countervail itself.

Contemporary mainstream economic theory is still squarely based on the assumption of full-blooded pursuit of self-interest, despite the fact that economists never succeeded in

⁷⁶ The Greek τό καλόν (to kalon) means morally good, noble, complete human personality, harmonious in mind and body. According to Corbin Page (2010) “Aristotle is famously vague on what exactly *to kalon* is, but it is clear that what is fine is closely connected with what is virtuous (*ne* 1104b30-35). In the *Eudemian Ethics*, Aristotle says that ‘fine things are the virtues and the deeds resulting from virtue’ (1248b37).”

finding the force that – whether despite or thanks to self-interest – moves the system towards stability. General equilibrium theorists in particular racked their brains wondering how (a model based on) utilitarian human behaviour could bring about general equilibrium – a concept derived from nineteenth-century natural science (Mirowski 1991). Even the assumption of perfect markets does not lead an economy to equilibrium. The many attempts to build a model of general equilibrium all failed to find the ‘invisible hand’ that harmoniously integrates self-seeking individual actions into a coherent whole. The canonical effort by Kenneth Arrow and Gerard Debreu (1954), whose aim was to prove the existence of a general equilibrium, only showed that, *under restrictive assumptions regarding competition and so-called rationality*, there exists a set of prices at which supply equals demand. However, no one was ever able to find a force or tendency within the economy that would actually move prices towards this level. All that was found was “just a set of prices that might balance supply and demand if by some chance it happened to occur” (Schlefer 2012). Equilibrium does not come about unless an ‘invisible hand’ is set in motion – a coordinating ‘auctioneer’ or ‘central planner’ external to the model, who continually settles the economy (which, when left to itself, would spin out of control at the slightest disturbance) back into a path that leads to equilibrium. Frank Hahn (1984; quoted in Schlefer 2012) sums up the attempts to model the economy’s pre-supposed self-propelling forces towards general equilibrium: “We have no good reason to suppose that there are forces which lead the economy to equilibrium.”⁷⁷

Despite theoretical as well as empirical-evidence including the current financial crisis, economists continue to lecture and give policy advice based on the axiom of general equilibrium – perhaps because the shock of the new and unknown is too overwhelming (Mirowski 2013).

What does it require to get even a perfect-market economy to work and produce harmonious and stable results? Where is one to find the ‘invisible hand’ that will produce the price vector that will move the economy towards equilibrium? It will not be found in the physical realm, unless the modern economy, as seems not to be possible, can be shown to be ruled by physical laws. Will it be found in the animal realm, that is, in pleasure-pain psychology, an aspect of the human being that is shared with the animals – which probably explains the many references to the animal world (‘bull market’, ‘bear market’, ‘animal spirits’) in economics? Unlike with animals, however, in human beings such drives readily become insatiable. In an economy governed by the pursuit of utility, the *intermediate* goal of economics – the *techne* of profit maximisation – soon eclipses its *ultimate* goal, its *telos* or end point (Skidelsky 2010, Atkinson 2011).

Is there a way to *lead* our drives – keeping *telos* in view – rather than be led by them? Is there a solution to the boundless expansion of the economy and financial capital – for example, a solution that uses financial capital to create space for the immaterial aspects of human life? Is that solution to be found in the human, rather than the physical or animal realm: for example, by adding responsibility to freedom – or, better put, by discovering the responsibility implicit in freedom?

⁷⁷ For a discussion of the relevance of equilibrium theory, see also George Soros (2003) *The Alchemy of Finance – Reading the Mind of the Market*. New York: Wiley.

6.8. Freedom, responsibility, character and capital

The financial crisis has led many to question the idea that *homo economicus* – this restless, insatiable being always calculating his personal gain – is the optimal foundation for our economic and social order, the guarantor of efficient and harmonious progress. However, since an alternative is hard to find, any discussions on the efficiency and morality of *homo economicus* tend quickly to subside.

Debates regarding solutions to the financial crisis also keep returning to the familiar dilemma: the choice between ‘the market’ – the idea that the economy can and should be shaped from private market forces driven by narrow self-interest, because it will check itself; and the state-led alternative, which does not share the market economists’ optimism regarding narrow self-interest as a civilizing medium, and tries to influence the economic whole through collective action and coercion from above or outside.

Opposite as the two alternatives may seem, they in fact share an important conviction: Both are built on the same view of the human being as one driven only by narrow self-interest. The pessimistic belief is that human beings are unable, out of themselves, to engender ethical, characterful conduct. Hence man has to be subjected to discipline, whether of the market or of the state.

The view taken here is that the answer to this dilemma lies neither in more freedom for markets, nor in more regulation from outside, but in the free development of morality *within* the economy itself. In a word, enlarging our self-interest. This requires expanding *homo economicus* to include character.

Of course, placing character, or *ethos*, centre-stage in this way may be regarded as quixotic and naïve, even hopeless. With Francis Bacon – who was not only a scientist but also an experienced politician and statesman – we may be critical of “holding out the examples of Good, Virtue, Duty, Felicity” while altogether passing over the question as to “how to attain these excellent marks, and how to frame and subdue the will of man to become true and conformable to these pursuits” (Bacon 1605 / 2011 p. 418). Bacon was one of the first to formulate the idea, which still sounds familiar today, that order in a capitalist society could be maintained by utilising one set of relatively harmless passions to countervail another set of more dangerous and destructive passions (Hirschman 1997). David Hume also felt very attracted to the idea of controlling the passions by playing one off against the other, and he, too, forcefully rejected the possibility of engineering a social order built upon, or directed towards, man's higher qualities:

“Whatever may be the consequence of such a miraculous transformation of mankind as would endow them with every species of virtue, and free them from every species of vice; this concerns not the magistrate who aims only at possibilities. Very often he can only cure one vice by another; and in that case, he ought to prefer what is least pernicious to society.” (Hume 1752)

As ‘practical’ people, neither Bacon nor Hume believed that attempts at transformation would have any effect. In contrast, Baruch (or Benedict) de Spinoza, who also formulated the idea of countervailing passion (1670, *Tractatus Theologico-politicus*), never intended to advocate restraint of the passions by setting one against the other. For

Spinoza, the final destination of human beings was to realize the triumph of reason and “love of God” over the passions. Although in his theory of the passions, he gives central place to the power of the affects, and to the idea that “an affect cannot be restrained nor removed unless by an opposed and stronger affect” (1677, *Ethica*, Part IV, prop. 7), he does so chiefly to warn those who intend to realize their final destination against the difficulties they will meet on their way (Hirschman 1997).

If, as King Solomon (and, later, Spinoza) said, without vision the people perish, surely this is also true of character.

The matter is less abstract if, instead of merely speaking of character, one speaks of the kind of economy that character would give rise to. In particular, characterful individuals would take direct responsibility for economic life, so that financial life would become the field *par excellence* for enabling the unfolding and development of the very trait – character – on which it then depended. We would have lifted ourselves up by our own bootstraps. Then, rather than capital serving the economy, the task of the economy would be to generate the capital required to finance both physical production *and* the unfolding of the human development (essentially meaning everything that can be called the economics of education in these words’ largest sense).

6.9. A twin value theory for capital

The proposition of this paper is that the root of the problems we are facing with ‘too much capital’ is our failure to understand capital fully, itself a consequence of our failure to understand fully the human condition. Our current concepts do not generate a satisfactory solution to the questions posed by the financial crisis because they throw light on only one aspect of capital – its role in financing physical production – and miss the other aspect: capital as the enabler of human capacities, Keynes’s ‘real values of life’.

Completing today’s incomplete theory of capital so that it can incorporate both aspects cannot be done unless we rethink the nature and purpose of capital so that within the totality of today’s capital we distinguish between the capital that pertains to the physical economy (classically, savings = investment) and the capital that is free of the physical economy and cannot in fact be linked to it in any direct sense.

If a dual role for capital (its role regarding the physical economy and its role in terms of human capacities) is accepted, it will stand to reason – not to fancy or speculation – that capital as the enabler of human capacities is the true counterpart of excess liquidity. The true value of excess liquidity inheres in the total amount of unsatisfied, unquantified and as yet uncapitalised aspiration in the world today, whether at the level of individual human beings, entire peoples, or humanity as a whole.⁷⁸

If this appears quixotic, one way in which the relationship between capital and human capacities becomes understandable, even visible, is when we observe how capital originates. In conventional economic theory, all forms of capital are lumped together, regardless of their origin. However, capital is generated in different ways, from a

⁷⁸ That said, it is a moot point whether at this level or point in economics one can or even needs to identify quantities. It may be enough, for example, to say someone is ‘very imaginative’ rather than ‘75% imaginative’.

variety of sources⁷⁹: (1) via profits in the sphere of physical production (for instance as a result of productivity increases made possible by technological change – that is, the formation of capital in the traditional economic and accounting sense); (2) through voluntary savings in the sphere of consumption (in accounting terms, unspent money ‘stocked’ on the balance sheet as capital); and (3) by the creation of money by commercial banks. These three types of capital formation arise from what one might call the straightforward functioning of the economy.

But in addition capital can be created out of profits that arise through (4) untoward price increases (‘forced savings’⁸⁰); (5) the withholding of necessary income formation (e.g. the withholding of income for purposes of countering inflation that was not caused by wage pressure⁸¹); and (6) property and other deals linked to speculative accumulation of merely financial capital.

Observing the first three types of capital formation, we may see that they have a common origin. The first source of capital formation, productivity growth, is the result of (indeed reflects a growth in) human creativity and inventiveness. In conventional economics, savings (the second source of capital) are generally looked at from the perspective of the saver, who supposedly optimises consumption over his life-time. However, savings are meaningless unless there are ideas requiring funding. Just so, when banks function ‘properly’ they create credit in response to the productive ideas of their borrowing customers (which begs the question: do the banks in fact create credit, or do their borrowers?). Thus, the *origin* of the three straightforward forms of capital formation can be said to be to be human creativity, or the development of human consciousness, which grows incrementally and exponentially as history proceeds.⁸²

In contrast, the fourth, fifth and sixth types of capital formation arise from sources which – as brought home recently by the financial crisis – are frequently monetarily and economically disequilibrating, and in that sense also untoward. Unfortunately, conventional economic theory does not distinguish between straightforward and untoward sources of capital formation, because it lacks a clear understanding of their nature.

⁷⁹ See, for instance, Wilken (1982).

⁸⁰ For example, price increases which do not reflect an increase in production costs, or in the quality of the product, but which force consumers to spend a larger share of their income on an unchanged product.

⁸¹ E.g. S. Storm & C.W.M. Naastepad (2012) *Macroeconomics Beyond the NAIRU*, Cambridge (MA): Harvard University Press; S. Storm & C.W.M. Naastepad (2010) Paying for inequality: the costs of NAIRU-based macroeconomics, *Global Labour Column* 37 (November) (<http://column.global-labour-university.org/2010/10/>

[paying-for-inequality-costs-of-nairu.html](#)); José Gabriel Palma (2009) The revenge of the market on the rentiers. Why neo-liberal reports of the end of history turn out to be premature, *Cambridge Journal of Economics* 33, 829–69.

⁸² A relationship between capital and the creative human mind can also be found when we study the origin of the word ‘capital’, which is derived from the Latin word *caput*, meaning ‘head’. This is not surprising, perhaps, because the head refers to the ability to think, which is characteristic for the human being and distinguishes him from the animal. Indeed, when we say “we can’t get our head around something”, we really mean our mind. Cf. Sanskrit ‘man’ – the faculty of thinking (see note 59). Considered in this way, the word ‘capital’ suggests that it relates to the mind, to thinking, to inventiveness, in a phrase, to human creativity.

6.10. Freed capital

The development of human consciousness, including the growth of human knowledge and inventiveness (capacities), generates continual productivity growth. In modern capitalist economies, productivity grows at around two per cent per annum on average. This productivity growth obviates labour, freeing people from the economic round; and the money that was previously spent on the wages of those who become redundant also becomes free. The capital that is freed from the economy by productivity growth – which in our argument has its origins in human creativity – is free to be used for novel purposes. One can call this capital *freed capital*. But what is its counterpart? What are the novel purposes to which it can be put?

In a sense, it is because we do not understand this problem that freed capital becomes footloose capital. In consequence, today's increasing productivity gains are appropriated by capital; they manifest as 'too much capital' and 'cash pools' when they could simply be spent, to finance the aspirations of human beings, peoples, and humanity as a whole that arise when we experience more than just material existence. If this were to be our (chosen) lot, we would simultaneously abandon such things as planned obsolescence – a turn of events in human understanding and behaviour that would be in the truest sense teleological.

Conventional economic theory prescribes that the allocation or *destination* of freed capital be determined by profit maximisation. Profit maximisation, it is said, will lead capital to destinations with the highest *financial* returns. However, conventional capital theory – including the 'efficient markets' hypothesis, especially when applied to finance – is a product of an incomplete theory of value, which recognises value only in terms of the satisfaction of bodily needs, and does not have an eye for 'higher faculties' and the needs associated with them.

The latter come into view only when two kinds of capital are distinguished, related to two kinds of worlds: physical and non-physical or, to refine our discussion, material and immaterial. Then it becomes obvious that only part of freed capital is needed to finance the production that is required to produce the goods necessary to meet people's material needs (von Mises' 'seed corn'). The remainder would flow towards meeting people's immaterial needs, providing education for example.

From the perspective of an economic theory that focuses only on the former and that has a bias towards industrial, as distinct from agrarian or cultural, production,⁸³ this may appear revolutionary. But is it? After all, it has antecedents in the minds of some of the greatest thinkers in economics.

6.11. The 'unfinished symphony' of Marshall, Keynes, Mill, Smith and Marx

Scattered throughout the writings of various great thinkers, references can be found –

⁸³ Modern economics generally sees an opposition between agrarian and industrial economics, which is historically false. The real opposition is between agriculture and culture, with the Industrial Revolution (IR) as a misleading step on the way. It is fascination with the IR and its methods and focus on material production that distorts economics into a physical bias.

however hesitant and unfinished – to a perspective on the human being that is not only much more encompassing than *homo economicus*, but also dynamic rather than static.

Alfred Marshall saw powerful elements of morality in capitalism. Although economics was bound to treat material want satisfaction as a datum, Marshall was convinced that, as wealth increased, wants would become increasingly ‘moralised’ (Skidelsky 2010: 141):

“In all economic questions, considerations of the higher ethics will always assert themselves, however much we try to limit our inquiry for an immediate practical purpose.” (Marshall, quoted in Maloney 1985, p. 199)

“No doubt, men, even now, are capable of rendering much more unselfish service than they generally render; and the supreme aim of the economist is to discover how this latent social asset can be developed more quickly and turned to account more wisely.” (Alfred Marshall, 1890, *Principles of Economics*)

Keynes, on the other hand, “rejected all this as a fudge, accepting Nietzsche’s view of utilitarianism as a shopkeeper’s philosophy” (Skidelsky 2010: 141).⁸⁴ Keynes rejected the possibility that capitalism might be evolving, out of itself, a morality or ethics that is more mature than the utilitarian ‘love of money’ to which it owes its success. Future human advancement would depend on the ability to discard this ‘neurosis’ and to discover that what we desire is not necessarily desirable:

“Keynes’s little essay *Economic Possibilities for our Grandchildren*” can be interpreted as Mill Revisited in a Moorean ethical framework. ... Moore’s ethics raise a central issue concerning the connection between happiness and goodness. It cannot be readily assumed that what we desire is desirable. ... The solution urged by many ethicists (including John Stuart Mill) is to improve the quality of our desires to the point that they become desirable.” (Skidelsky 2010: 135)

Keynes did not believe in an automatic connection between pleasure and goodness. The future of humanity would depend on our ability to “improve the quality of our desires to the point that they become desirable” – a transition that, according to Keynes, would not be self-propelling.

Despite the differences between them, both Marshall and Keynes align with John Stuart Mill in his rejection of crude Benthamism. After his mental crisis in 1826, Mill came to the conclusion that happiness is not attained by seeking it directly. One finds it by striving after some goal or ideal other than one’s own happiness or pleasure. Although, in his own view, remaining a Benthamite, Mill’s distinction between ‘lower’ and ‘higher’ pleasures, and the parallel distinction between unenlightened and enlightened self-interest, “strained the Benthamite framework to such an extent that it would perhaps have been more helpful if he had radically refashioned or abandoned it” (Copleston 2003d: 26).

Foremost among the ideas introduced by Mill was that of intrinsic qualitative differences between pleasures; that pleasure resulting from the development of the

⁸⁴ In the German-speaking world, utilitarianism initially found little resonance. Nietzsche simply said: “Der Mensch strebt nicht nach Glück; nur der Engländer thut das” (1889, *Götzen-dämmerung. Sprüche und Pfeile*). Suffering, not happiness, uplifts the human being: “Ihr wollt womöglich – und es gibt kein tollereres ‘womöglich’ – das Leiden abschaffen; und wir? – es scheint gerade, wir wollen es lieber noch höher und schlimmer haben, als je es war! Wohlbefinden, wie ihr es versteht – das ist ja kein Ziel, das scheint uns ein Ende!” (1886, *Jenseits von Gut und Böse*).

higher faculties is higher than physical-sensible pleasure. In his essay *On Liberty* he remarks that “I regard utility as the ultimate appeal on all ethical questions; but it must be utility in the largest sense, grounded on *the permanent interests of man as a progressive being*” (Mill 1859: 9; italics added). Mill does not hesitate to refer to man’s “higher faculties” (Mill 1959: 13 and 16), and in *On Liberty* he explicitly admits that something other than happiness is intrinsically desirable – individuality. He quotes with approval the statement of the German philosopher Wilhelm von Humboldt that “the end of man is the highest and most harmonious development of his powers to a complete and consistent whole” (Mill 1859: 50, quoted in Copleston 2003d).

Mill’s insights concerning the human end evoked heated debate about whether they were consistent with the hedonistic end of utilitarianism. In *Utilitarianism*, written in defence of Benthamism, Mill reverted partially to hedonistic ways of thinking. But even here he seems to be suggesting that the *ultimate end is the full development of human potentialities* (Downie 1966; emphasis added). It may be argued, as is commonly done, that the two ends – the full development of human potentialities and the hedonistic end of utilitarianism – come to the same thing, for is not the justification for commending self-development simply that it will produce more pleasure for the “self” concerned? But the justification for making self-development the end does not lay in the pleasure which may accompany its attainment, and self-development is still commended even if it occasionally causes pain rather than pleasure:

“It is better to be a human being dissatisfied than a pig satisfied; better to be a Socrates dissatisfied than a fool satisfied. And if the fool, or the pig, are of a different opinion, it is because they only know their own side of the question.” (Mill 1863: 9)

Self-development has nothing to do with the balancing of pleasures and pains, but is a need or at least propensity found in all human beings; it is incumbent on the human being to make his nature flourish, irrespective of whether it causes pleasure or pain. For human nature

“...is not a machine to be built after a model – but a tree, which requires to grow and develop itself on all sides, according to the tendency of the inward forces which make it a living thing.” (Mill 1859: 117)

Life has no goal beyond its own perfection. Unfortunately, Mill does not provide a clear and full account of what he means by human nature. He lays stress on the perfecting and improving of human nature, emphasising the idea of individuality without, however, fully explaining what he understands by that term. Neither does he distinguish clearly between perfection and fulfilment – the latter being a less ambitious and therefore more achievable expectation than perfection. He makes clear that individual self-development does not mean for him a surrender to any impulses which the individual is inclined to follow, but fulfilment of the ideal of harmonious integration of all one’s powers. As a matter of fact, Mill does introduce a standard other than pleasure itself, appealing to man as “a being capable of pursuing spiritual perfection as an end; of desiring, for its own sake, the conformity of his own character to his standard of excellence, without hope of good or fear of evil from other source than his own inward consciousness.” (1865–75, Vol. I: 358–9) Indeed, Mill praised the Greek ideal of self-development, and it is to the philosophers of Greek antiquity that he came very close indeed.

This excursion into the philosophical underpinnings of modern economics may be

thought unfashionable, anachronistic and even redundant, insofar as the prevailing economic paradigm assumes the matters that played so crucially in the minds of Mill and others have long since been resolved. But any critique of the status quo especially regarding our understanding of capital cannot but revisit such topics, even at risk of contradicting the science of rationalism with the science of hindsight.

In fact, however, the problems are with us still, unless, that is, we are serious in thinking that today's financial system and the understanding of capital on which it is predicated is an unqualified success story. And that the global financial crisis is merely some massive pain precedent to some equally or more massive gain – as might be argued by Smithian diehards such as the Adam Smith Institute or even documented by its critics, see Philip Mirowski's *Never Let a Serious Crisis Go Waste. How Neoliberalism Survived the Financial Meltdown*. But do Adam Smith's advocates read him as widely as they could? Was he – or would he have remained – the champion of rude self-interest that their take on life requires him to be?

In other words, can Mill be reconciled with Smith, who laid stress on the innate propensity of human beings towards the pursuit of interest as the propelling force in all advancement? In *The Wealth of Nations*, Smith focused on the pursuit of self-interest, which he regarded as the basic and dynamic faculty of the individual, thereby according to it the status of a moral principle providing the foundation of the system of natural liberty. In the historical context of commercial (mercantilist) society, this was deemed 'natural and obvious'. But it appears that Smith's advocacy of liberty as conducive not only to wealth but also to social well-being, needs to be understood within a more complex formulation of human development in relation to an evolving society. While Smith believed and advocated that the self-interest of individuals could, in a system of natural liberty, lead to greater wealth and prosperity as against the then-existing system of restrictions and unfreedom, he was equally aware that the course of accumulation would have to be guided by the development of a consistent morality and the creation of supporting institutions (Bharadwaj 1989, Rosenberg 1960, Viner 1927).

Although Smith advocated an economic order based on the pursuit of narrow self-interest, he also believed that the human being is endowed with qualities and propensities which qualify him for a social existence, such as the faculties of sympathy, of judging himself as much as others, based upon imagination and reflection. Indeed, close to the end of his life he revised *The Theory of Moral Sentiments* to allow for a less self-centred image of the human being.⁸⁵ In the context of a liberal society, benevolence or sympathy acted as a modifier, a countervailing interest, taming the aggressive spirit of self-aggrandizement. Importantly, for Smith, sympathy is an original sentiment of human nature. It is often excited so directly and immediately that it cannot reasonably be derived from self-interested affection, that is, from self-love (Copleston 2003b: 356). Thus, on the moral and ethical plane, there is a balancing of two distinguishable and opposing sets of propensities, 'selfish' and 'social' (Bharadwaj 1989) or as we would put it, narrow and enlarged self-interest. This distinguishes Smith from utilitarianism, which tends to reduce the moral judgement to a statement about consequences.

The above remarks notwithstanding, the puzzle remains: How are we to reconcile

⁸⁵ See again discussion in Kenneth Lux (1990).

Smith's *Theory of Moral Sentiments*, in which he put sympathy centre-stage, and his *The Wealth of Nations*, in which self-interest is emphasised not only as the primary motive but also as the propelling force of all advance? In order to solve this problem, some argue that Smith saw his work as integrally embedded in a wider notion of history, in particular, a stadial view of the development of society, occurring through successive stages, each characterised by a specific mode of subsistence associated with its own social, political, legal, and moral structures that make for a viable social existence. Parallel to the mode of subsistence there is an individual psychology that endows individuals with propensities and codes of conduct that befit them to maintain the social state. Society as a collectivity becomes viable through the progress of morality, and a harmonious 'natural order' can exist where the propensities of the individual befit the social processes.

A stadial view of society and the human being developing through successive stages is also found with other philosophers of the Scottish and French Enlightenment, from whose works emerges a view of the human being as one who has both the freedom as well as the existential will to develop as a moral being, in *mutual interrelationship with* a society which, too, develops in stages. Both, obviously, advance through successive stages, the transition visible through changes in conditions of production and exchange; and the need for each stage of social existence to be guided by the evolution of a consistent morality (Bharadwaj 1989).

Much less optimistic regarding the human development potentialities of the modern capitalist system was Karl Marx – the later Marx, that is. The earlier Marx was a happier soul, able to recite Shakespeare plays to his children, before he became (understandably) jaundiced⁸⁶ by his treatment by those whose interests he questioned, as also by the superabundant 'evidence' for his views that he encountered in 19th century England. Although Marx's analysis is conventionally interpreted as an analysis of the capitalist system – an analysis of how the system's economic properties, through a falling rate of profit, periodic crises of over-production, and concentration of capital, bring about its own destruction – at the root of the contradictions of the capitalist system are the commodification of labour and its associated alienation. Contrary to Smith, Marx came to believe that healthy human development was hampered, not helped, by capitalist relationships. The way the capitalist system organises labour makes people work for money and themselves, rather than for one's own and the others' development. Marx's critique of religion can also be understood in this light – as a critique of the particular, distorted form that spirituality takes in capitalist conditions. Religion, in capitalist society, reflects or expresses the distortions in capitalist society. When man's political, social and economic life is incapable of fulfilling his true self, he creates the illusory world of religion and seeks happiness therein, so that religion is man's self-administered opium. Man creates the illusory world of the supernatural and projects into it his own true self only when the way the socio-economic order is organised does not allow him to realise his true self – his spirituality – in the here and now.

In these respects, Marx may not be as contrary to capitalist economics as some would like him to be. Marx's theory is first and foremost a philosophy of man (Copleston 2003c). The overthrow of the capitalist system by the proletariat that he advocated is not

⁸⁶ According to John Kenneth Galbraith, in his 1973-4 television series, *The Age of Uncertainty*, it is one of history's interesting details that Marx suffered from boils.

merely a case of the replacement of one dominant class by another. The dictatorship of the proletariat is a temporary phase which prepares the way for the universal, classless communist society from which self-alienation will be absent for everyone – not just the proletariat. Although (particularly the later) Marx focused on material conditions, Marx had a mission which can, perhaps, be interpreted in non-material terms. The overthrow of the capitalist system is not primary. The primary thing is the unfolding and development of the individual, which Marx, however, could not envision as part of a capitalist system. To put it in terms of Marx's own poetry: Can labour cease to be a moment of capital without capital becoming a moment of labour?

6.12. *Telos* and *ethos*

According to the philosopher Alasdair MacIntyre (2007, 2009), the rejection of a conception of human life as having a goal set by human nature came with the Enlightenment. This implied a rejection of Aristotle's conception of morality. For Aristotle, human beings have a specific nature that determines their proper goal, or *τέλος*, in life. This goal is *εὐδαιμονία* (*eudaimonia*) or happiness, which is not the same as following whatever is pleasurable (Copleston 2003a). To be moved by pleasure is to be motivated by the senses and by narrow self-interest. Such self-interested action does not lead to true happiness, however, because the desires of the senses are not permanently satisfiable. True happiness results from exercising *ἀρετή* (*arete*, virtue). Our desires need to be transformed so that they become virtuous, which they do through *ἐπιστήμη* (*episteme*, insight or knowledge). Thus, knowledge, virtue and happiness – *episteme*, *arete* and *eudaimonia* – are one. Even so, they do not come about automatically; they need to be learned and exercised, brought to consciousness. This requires character.

The history of moral philosophy from the Enlightenment onwards is, as MacIntyre paints it, a history of attempts to ground moral requirements in something other than the human *telos*, as, for example, Hume attempted to do by arguing that moral judgements are grounded in our capacity for fellow-feeling. These attempts, MacIntyre claims, have all failed. He concludes that it is only by trying anew to formulate an end for human life in the Aristotelian tradition that we can hope to arrive at a standpoint from which we can *rationally* evaluate claims about what is morally required.

Similarly, unless we arrive at a standpoint from which we can determine an end⁸⁷ for human life, it will prove impossible to bring the problems experienced with financial capital to a solution. If human life has a *telos*, a state of fulfilment or completion, then so, too, will the modern economy and its essential expression – capital. Put in other words, the economy will thrive best and capital will be most truly capital the closer human beings come to their fulfilment. It is in terms of this fulfilment that we understand character (*ethos*).

6.13. Two kinds of capital; two concepts of liberty

From the vantage point of *telos* and *ethos* there are two kinds of capital – one financing

⁸⁷ In the sense of purpose. But not finalism.

the production of goods required to sustain livelihood, and one serving capacities, implying the building of character and unfolding of purpose. Correspondingly, there are two tasks for the economy: to generate the goods required for material livelihood and well-being, and to generate the capital that will enable people to realise their life purpose and to do so with character. For not only do those things not come automatically, they do not come cheap or without cost! Whether defined as ‘spiritual perfection’, individual fulfilment, excellence of character, the harmonious integration of all one’s powers, self-realization, or the attainment of knowledge, virtue and happiness, they have to be schooled by practice. But, *pace* the argument that artists work best when starving in a garret, such things cannot be cultivated unless the learning process is financed, that is to say, capitalised – provided with the capital needed, for example, to pay for post graduate research or to build, own and staff schools.

This will not happen unless economics’ currently negative concept of freedom is replaced with a positive concept. In contemporary economics, freedom – as in ‘free market’ – means freedom *from* constraints on one’s behaviour (Berlin 2002). Milton Friedman, Nobel prize laureate and author of *Free to Choose*, defines clearly what he, as an economist, means by freedom:

“Few trends could so thoroughly undermine the very foundations of our free society as the acceptance by corporate officials of a social responsibility other than to make as much money for their stockholders as possible.” (Friedman 2002)

Freedom here means, “the absence of obstacles to the fulfilment of a man’s desires.” (Berlin 2002) The utilitarian moral philosophy that constitutes the foundation of contemporary economic theory views the human being as driven by forces originating in the body. Freedom in this context means freedom from obstacles to acting out these drives. Utilitarianism rejects freedom in the sense of free will and autonomous reason – free from compulsion by the drives that come from the body. The will is nothing but another passion, and reason is subordinate to will. However useful such Benthamite utilitarian morality has been in promoting the accumulation of the capital required to raise living standards, does it provide an adequate answer to the financial, social and ecological problems we are now facing in the 21st century?

From Aristotle onwards, freedom *from* constraints on one’s behaviour – freedom in the negative sense – has been contrasted with freedom or liberty in the positive sense: the freedom *to* act in responsible or humane ways. This, however, requires the human being to become emancipated from the bodily drive to pursue pleasure and avoid pain, from neurotransmitters, genes and hormones. Challengingly perhaps, one can wonder whether the ‘freedom’ so essential to laissez-faire capitalism might be a fiction – in the sense that someone slave to his instincts can hardly be called free. The reality is that to be free, the will has to be trained, ennobled, made conscious and social, not spontaneous and self-referencing, if *telos* and *ethos* (the inner sense of what is right and worthy in human life) are to prevail over hedonism, pragmatism and moral relativism.⁸⁸ If today’s quest for such things as ‘corporate social responsibility’ and ‘responsible innovation’ is

⁸⁸ In the immediate aftermath of the crisis, top managers from various large banks pleaded the US government to regulate them, because at that point of shock they saw very clearly the consequences of acting out utilitarian drives. Simultaneously, apparently, they shrank from the effort it would take to educate their drives from within (rather than having them regulated from outside). Later, clearly, most preferred to forget all about it – the regulation as well as the self-education (see Charles Ferguson (director) (2010) *Inside Job* (a documentary on the financial crisis).

to be taken seriously, this is perhaps not as controversial a statement as it may appear.

6.14. Capital = capacities

Also in the modern literature, the development of character (e.g. Grant 2011; Sandel 2012; MacIntyre 2007, 2009) and capacities or capabilities (Sen 2001, Nussbaum 2011) are highlighted as the highest human goal. As increased living standards push humanity up Maslow's pyramid, the source of happiness increasingly lies in immaterial factors. The real need of human beings whose material needs have been satisfied is the fulfilment of higher goals in life, particularly the development of higher capacities – including morality, creativity, and a self-actualization that includes responsibility for others (Hodgson 2012, Bowles 2012, Marglin 2011).

Increases in living standards raise (or should that be 'derive from'?) people's aspirations – the switch from material to immaterial fulfilment. Human beings increasingly also find value in the satisfaction of higher human needs. Yet, in economic theory, value is found only in the consumption and possession of material goods – and capital has been entirely related to this value. As a result, capital and needs are often (and increasingly) in different places. Poverty more and more means: lack of resources to finance the development and deployment of one's capacities. When capital is not freed for this purpose, how can Aristotle's 'fine actions' develop?

To date, the relationship between the development of desired human qualities and financial markets has not been systematically investigated. Yet, unless moral qualities and creative capacities are financed (capitalised), they cannot unfold. Again, it stands to reason – not to fancy or speculation – that the crisis we experience today mirrors our failure to grasp the relationship between capital and humanity's myriad and variegated aspirations; the need of people everywhere to discover, unfold, carry out, and ideally complete the tasks and goals they feel are truly theirs – as distinct from what they do merely to earn money, or even just to subsist. Understanding the link between capital and capacities in this sense requires a quantum leap in our consciousness, a leap we are capable of but one that does not allow thought and will to live separate lives. Not so much a leap, therefore, as a closing of the gap.

This is the dimension of capital that today's economics has (as yet) left out. Understandably so, because from the earliest Greek writers through to those of the modern age, almost without exception money and capital have been looked at with suspicion, as the breeders of avarice, lust for power, and usury (Hirschman 1997). Aristotle warned that as soon as money comes in, trade for its own sake, the pursuit of money-making, arises (Roll 1992). For Thomas Aquinas, too, trade – which enables people to 'make money' – is unnatural, and those who engage in it risk falling from Grace. Trade could only be justified if the profit from it were 'just', implying that it not be 'privatised' to the individual but devoted in some way to public benefit. While goods are fruitful, money is barren; it produces nothing. Making money is therefore usurious; it has no counterpart in any real value.

Also post Aquinas, the theory of value for a long time remains 'unfriendly' towards capital. For Marx, all value originates in labour; capital originates in profit or surplus value, that is, in alienation. For neo-classical economists, all value originates in

exchange; neither goods, nor capital (nor land and labour) have any value other than the price they realise in the market.

All these great thinkers fail to grasp the true nature of money and capital, because they view capital merely in the context of the satisfaction of physical needs. Regarding capital *accumulation* – which inevitably takes place given the tendency for productivity to rise, itself a consequence of the evolution of consciousness – they do not seem to sense that this can mean more than wealth acquisition. Indeed, when not seen in terms of personal riches, capital accumulation can be understood as a societal event, a kind of financial commons that needs to facilitate and benefit human beings and society generally.

Yet, a study of economic history does reveal a link between capital and the development of the human being.

6.15. Capital and the emancipation of the human being

After the Middle Ages, drastic societal transformations took place. Trade, mercantilism, and the first industrial revolution unfolded, and with it, their primary agent and expression, capital, came to the fore. Capitalism arose. As old social and economic systems disintegrated and opened up to a larger world governed by capitalist principles, capital became the basis of the emancipation of the human being. Capital gives human beings a basis on which they can stand on their own, independent of the restraints set by tradition – family, class, caste, state, and church – permitting them to pursue their own individual task in life.

Here it becomes visible that capital is connected not only to the production of goods for material livelihood, but also to the fostering of human capacities. The loosening (emancipation) of capital from production, made possible by trade and industrial productivity growth, serves – indeed mirrors – the emancipation of the individual.⁸⁹

Conventional economic theory does not allow for such an analysis, because it admits neither to an evolutionary view of economic life, nor to a similar perspective on human consciousness.

Could the financial crisis and the excess liquidity which caused it acquire a new meaning, therefore, when looked at from a perspective of evolution and transformation? Could it be that the loosening of capital from the physical economy is the crown or flower of processes that have long been in train: the liberation of capital, intended to serve the liberation of the human being? And that a financial crisis – ‘crisis’ in the sense of chaos and not knowing what to do – arises when this is not understood? Crisis (*κρίσις*) really means decision time, and decisions are always easier to make when one understands what is at issue.

Today’s financial life is still predicated on concepts and theoretical constructs that are essentially atomistic, and that would have us continue to believe that economic life as a

⁸⁹ A consideration reflected in economic historian, Niall Ferguson’s observation that ‘Financial markets are like the mirror of mankind, revealing every hour of every working day the way we value ourselves and the resources of the world around us [so that] it is not the fault of the mirror if it reflects our blemishes as clearly as our beauty.’ – Niall Ferguson.

whole benefits when capital is privately accumulated by individuals who do not take into account or make conscious to themselves the full effects on society as a whole. The classical idea of free markets, however, and the reason why classical economists sought to create them, was that they would help to free industrial capitalism from the legacy of medieval and ancient privileges, including the land rent, monopoly rent and banking charges levied by the so-called *rentier* class (Palma 2009; Hudson 2012). Is industrial capitalism now being rolled back towards a neo-feudal reaction defending *rentier* interests? Or does the financial crisis signal that a new wave of reform is about to unroll?

The question is whether financial markets as we know them today are a stage in human evolution, or the destination. Could it be that financial liberalisation is the last stage in a long process intended to rid humanity of its ancient constraints, rigidities and inefficiencies? Is globalised finance a development that is the culmination of emancipation and individuation? Could it be that this is the logic of a centuries-long history of ‘outgrowing’ guilds, of enclosures, of undermining the power of unions, of lifting restraints on the movement of capital?

Is it part of this emancipatory development to break down, remove or subvert all boundaries until economic life is fully open and all-of-a-piece? But then open to what in the end? To trade with some other world? Or to the recognition that there is only one economy – that of the world as a whole – and that a one-world economy entails a severalty of all the world’s peoples and individuals, a ‘choir of cultures’ whose progress and welfare depend on each people identifying its global comparative advantage, meaning what it can especially, even uniquely, bring to humanity’s table? Open, that is, to the recognition that this also implies co-ordination and co-operation rather than competition and beggar-thy-neighbour economic policies, and a supranational understanding of finance that enables each culture and each individual to sound its/his/her own note while also including the tones of all the others?

In economics, objects cannot be studied independently of their subject, for every observer is simultaneously an actor in the economy (*cf.* Soros (1994)’s *reflexivity* and the propositions of quantum theory, insofar as both claim that the observer affects the thing observed). Economic phenomena depend on the consciousness of the observer who, inevitably, is also a participant in the economic system. The financial system is an expression of the level of consciousness of human beings, and the monetary-financial order currently prevailing influences how people think and act with respect to money. It is thus our ideas or level of consciousness that determine the role of capital in society.

Critiques of capitalism arise because capitalism is failing to undertake its own further development. Self-centred, rather than self- *and* other-centred, the financialism of modern capitalism can be seen as an adolescent stage in human evolution. The over-riding need, therefore, is to widen our self-interest until it includes the entire human family. To grow up, in other words.

6.16. Conclusion

As indicators of the untoward aspects of today's, largely financial, economic life, marginalisation and social exclusion stand testament to too-narrow an understanding of capital and of the meaning and possibilities created by technological progress. What, then, is the counterpart of the excess liquidity created by the productivity growth resulting from the growth of human consciousness? Answering this question requires acknowledgement of the two dimensions of capital. One is to serve the production of goods. The other, of which we must now become conscious, is to serve human capacities, human creativity. In this way, one would be able to give concrete expression to Amartya Sen's 'capabilities'.

The source of capital is human ingenuity, creative intelligence or spirit (using the word in a non-religious sense). This should also be the destination of capital. It is thanks to human creativity that capital is created. Vice versa, further human creativity cannot develop unless capital is freed to finance it.

Unless we become conscious of the non-physical, immaterial dimension of capital and release capital to support human capacities, 'excess liquidity' can only create untoward rather than straightforward growth, which in turn continues to corrode society with crises and a legacy of debts, marginalisation and social exclusion that impede the further development of human capacities.

Recurrent or continuous financial crises are inevitable unless finance switches from being a means whereby people (via the economy or via financial markets) serve their own ends, to becoming the promoter (created with the help of the economy) of further human development – that is, by linking the resources freed by productivity growth to destinations and uses that enable the development and flourishing of *future* human capacities and creativity. This problem can only be brought to a solution when we acknowledge that capital has two dimensions, related to two kinds of value and, indeed, two kinds of world, each with its own logic – the one material, the other immaterial.

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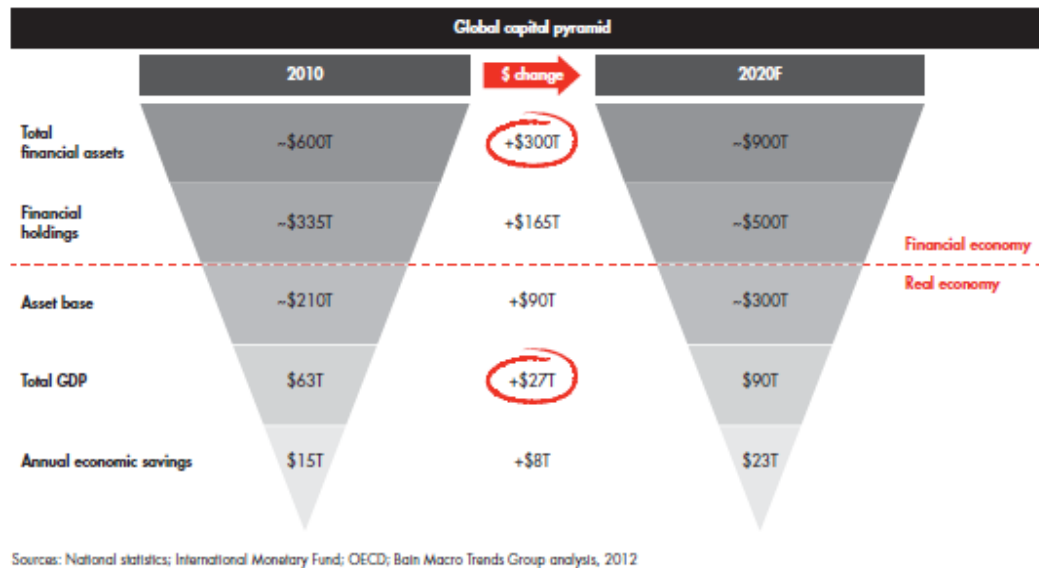
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Statistical Annex

Figure 1.1: A \$27 trillion growth in global GDP will support a \$300 trillion increase in total financial assets by 2020

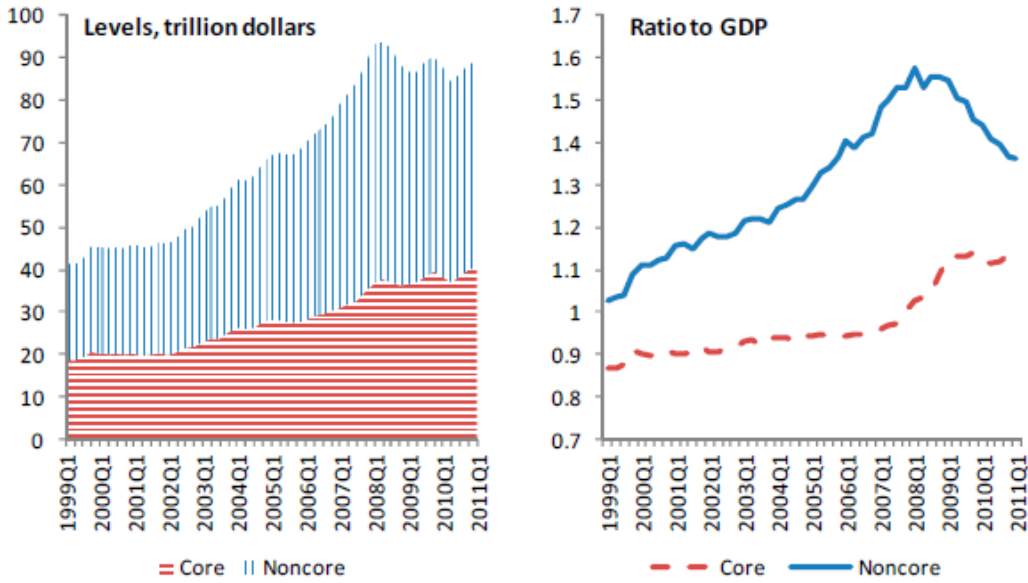


Source: Bain & Company (2010) *A World Awash in Money. Capital Trends through 2020.*

Risk Category / Instrument	Notional amounts outstanding					Gross market values				
	Dec 2010	Jun 2011	Dec 2011	Jun 2012	Dec 2012	Dec 2010	Jun 2011	Dec 2011	Jun 2012	Dec 2012
Total contracts	601,046	706,884	647,777	639,366	632,579	21,296	19,518	27,278	25,392	24,740
Foreign exchange contracts	57,796	64,698	63,349	66,645	67,358	2,482	2,336	2,555	2,217	2,304
Forwards and forex swaps	28,433	31,113	30,526	31,395	31,718	886	777	919	771	803
Currency swaps	19,271	22,228	22,791	24,156	25,420	1,235	1,227	1,318	1,184	1,247
Options	10,092	11,358	10,032	11,094	10,220	362	332	318	262	254
Interest rate contracts	465,260	553,240	504,117	494,427	489,703	14,746	13,244	20,001	19,113	18,833
Forward rate agreements	51,587	55,747	50,596	64,711	71,353	206	59	67	51	47
Interest rate swaps	364,377	441,201	402,611	379,401	369,999	13,139	11,861	18,046	17,214	17,080
Options	49,295	56,291	50,911	50,314	48,351	1,401	1,324	1,888	1,848	1,706
Equity-linked contracts	5,635	6,841	5,982	6,313	6,251	648	708	679	645	605
Forwards and swaps	1,828	2,029	1,738	1,880	2,045	167	176	156	147	157
Options	3,807	4,813	4,244	4,434	4,207	480	532	523	497	448
Commodity contracts	2,922	3,197	3,091	2,994	2,587	526	471	481	390	358
Gold	397	468	521	523	486	47	50	75	62	53
Other commodities	2,525	2,729	2,570	2,471	2,101	479	421	405	328	306
Forwards and swaps	1,781	1,846	1,745	1,659	1,363					
Options	744	883	824	812	739					
Credit default swaps	29,898	32,409	28,626	26,931	25,069	1,351	1,345	1,586	1,187	848
Single-name instruments	18,145	18,105	16,865	15,566	14,309	884	854	958	715	527
Multi-name instruments	11,753	14,305	11,761	11,364	10,760	466	490	628	472	321
of which index products	7,476	12,473	10,514	9,731	9,663					
Unallocated	39,536	46,498	42,610	42,057	41,611	1,543	1,414	1,976	1,840	1,792
Memorandum Item:										
Gross Credit Exposure						3,480	2,971	3,912	3,668	3,626

Source: Bank of International Settlements, *Quarterly Review*, June 2013.

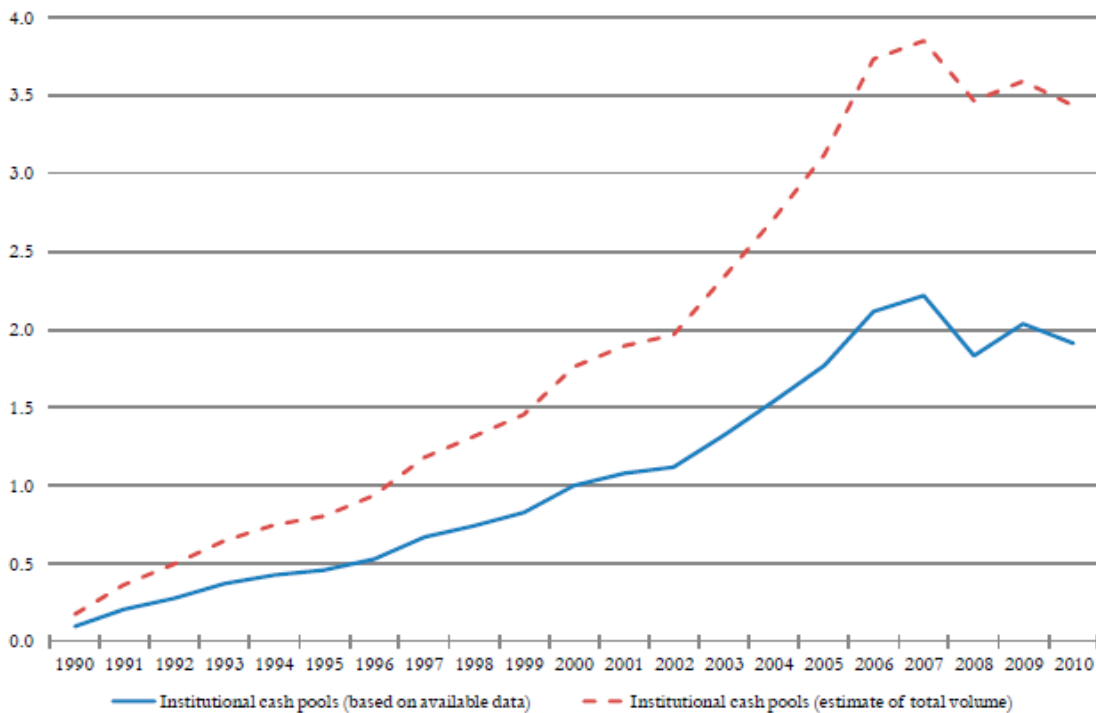
Figure 1. Total G4 Liquidity in Trillion Dollars and As a Ratio to GDP



Sources: Haver and Fund Staff calculations.

Figure 1: The Secular Rise of Institutional Cash Pools

\$ trillions



Source: CapitalIQ, RMA, ICI, BIS, *The Economist*, Pozsar (2011)

Source: Pozsar, Zoltan (2011) Institutional cash pools and the Triffin Dilemma of the U.S. banking system, *IMF Working Paper 11/190*.

7. Commitment to Social and Ecological Objectives: Crucial in Generating Social Innovations for the Marginalized?

By Justus Lodemann

7.1. Introduction

Intuitively, the answer to the questions seems ‘yes, commitment to social and ecological objectives is crucial in generating social innovations for the marginalized.’ Without such commitment it is hardly imaginable that these social innovations become established. As a qualification one might add that this holds true at least in cases in which the social and ecological objectives are inherent parts of the ideas that might become the social innovations⁹⁰. Our image of social innovation is associated with images of persons who are dedicated to a strong vision and, though facing manifold barriers like strong political or ideological opposition, bureaucratic obstacles or restricted access to financial resources, promote these visions until these approaches lead to and/or become raw models for societal change (comp. Ziegler et al. 2014).

“Commitment stands at the intersection of at least three of sociology's core dialectics: continuity and change, agency and constraint, and self and society.” (Ulmer 2000)

This rough positioning of the term commitment by Ulmer points to the potential role of commitment in the analysis of social innovation. Following the working definition used by CRESSI, social innovation is “the development and delivery of new ideas (products, services, models, markets, processes) at different socio-structural levels that intentionally seek to improve human capabilities, social relations, and the processes in which these solutions are carried out” (CRESSI, project proposal). Social innovations seem to occupy the same intersection as commitment.

To gain a better understanding of commitment we will first have a closer look on the potential target(s) of commitment: commitment to *what*, to *whom*? What is the role of commitment for a) the social innovator (individual or group) and b) the target group (referring to CRESSI that means the marginalized)? What is the role of commitment in shaping the relations between the social innovator, the target group of the social innovation and further stakeholders (institutions, other groups, society)? And, vice versa, in how far does the relation between the social innovator, the target group and further stakeholders of the innovation matter for commitment?

Novelty is one element of social innovations, i.e. „changes in social relations, configurations and processes that can have effects at various socio-structural levels“ (Nicholls and Ziegler 2014). What aspects might a concept of commitment contribute for the understanding of these changes?

The paper will tackle these questions regarding commitment in more detail. The paper aims at advancing our understanding of social innovation. Not all topics are discussed extensively; however, the ideas presented hopefully inspire further discussion.

⁹⁰ This paper will not consider cases in which social or ecological objectives are included as add-ons to the central ideas of social innovations. If objectives are not aligned with central ideas this can lead to conflicts in resource allocations (time, money etc.), change of perception by target groups (Newman et al. 2014) etc.

7.2. Definition of commitment

The term commitment has been used in a variety of (sometimes overlapping) research disciplines, but its primary roots are in sociology (e.g. Becker 1960) and social psychology (e.g. Kiesler 1971). It has gained prominence in the organizational behavior literature for the analysis of topics like (employee) commitment to a company, job performance and the role of business ethics (e.g. Choi and Jung 2008, Cole and Bruch 2006, Meyer et al. 2004). The examples given are by no means exclusive. However, despite (or because of) the fact that the term commitment is used in several contexts, the concepts behind often remain somewhat blurry. In some cases, it even seems to be assumed by the authors that the reader already knows or intuitively understands what is meant by commitment – a problem that has already been discussed by several scholars and still holds true (e.g. Becker 1960, Ulmer 2000). This non-specification of the term might lead to oversimplification in many ways, e.g. it might imply that whether one is committed to something or someone is a yes-or-no-question and that commitment is a state of mind that cannot be differentiated further. Moreover, we have to differentiate carefully between “making a commitment” and “being committed”. Whereas the first phrase refers to an action or an acted-out behavior, the latter refers to a state or mindset. If we derive from the former – the committed action or behavior – to consistent lines of action, the use is obviously tautological (Becker 1960). However, different approaches have been made to define commitment (see e.g. review by Meyer and Allen 1991). In the following discussion, I will try to analyze and define the term further, looking at potential antecedents and important factors of commitment as well as understanding the possible target(s) of commitment.

According to Locke et al. (1981), the term commitment describes the determination to try or keep trying for a goal⁹¹. The goal’s origin (self-set, participatively set, assigned) does not matter, but the goal must be accepted and adopted as a priority of the committed social entity. This definition follows one line of our main intuitive understanding of commitment. The other line of intuitive understanding normally includes others: being committed to another person, the family, a company etc. Being committed to another social entity implies that one adopts the goals of the social entity and acts accordingly – in contrast to e.g. sympathy which does not (automatically) involve an active component.

In the context of research on workplace commitment, Meyer and Herscovitch (2001) propose the following definition: “Commitment is a force that binds an individual to a course of action that is of relevance to a particular target “. Or, slightly changing the focus: “commitment is a force that binds an individual to a target and a course of action relevant to the target” (Meyer et al. 2006). These definitions stress the idea of *being bound* and by that offer a distinction to the term ‘motivation’. *Being bound* implies that a line of action or a relationship is followed though there are consciously known and available alternatives (Becker 1960, Leik and Leik 1977 in Burke and Stets 1999)⁹². In

⁹¹ In this paper ‘goal’ is used to describe a clearly defined ends (of a course of action).

⁹² Sen (1977) introduces the possibility to define commitment „in terms of a person choosing an act that he believes will yield a lower level of personal welfare to him than an alternative that is also available to him“. Sen claims that commitment „drives a wedge between personal choice and personal welfare“ and opposes this claim with the notion of traditional economic theory that personal choice and personal

distinction to ‘intention’ (which is exclusively cognitive), it becomes an urge or need to perform the behavior linked to the target for the committed social entity (Inauen et al. 2014). However, commitment has a voluntary component; it is not initiated by merely recognizing responsibilities⁹³, obligations or simply to avoid punishment (Welch 2012). However, during the course of action a degree of obligation might develop for the committing social entity (Bandura 1986 in Locke et al. 1988). I will come back to this aspect later on. For the purpose of this paper, I will use the definition as proposed by Meyer et al. (2006).

Commitment shows up in different forms and with different foci. First, we will have a closer look on the latter: What are the targets of commitment? In this paper, I assume that targets can be goals (of action) or social entities (individuals or groups⁹⁴).

Castelfranchi (1995) differentiates between three categories of commitment:

- *Internal commitment* links the dedication of an individual agent to a line of action with a one-act line of action being the limiting case. A set of behaviors is organized around and furthers the course of action to attain a chosen and specified goal. The strength of internal commitment moves along a continuous line of degree – as is the case for the other categories of commitment.
- *Social commitment* is relational. It describes the commitment of an agent to another social entity (individual or group) to do an action in the interest of the latter. Castelfranchi (1995) argues that social commitment has reciprocal components⁹⁵. The social entity must be aware of the agent’s intentions (mutual knowledge) and the entity must agree with these intentions (implicitly or explicitly). Social commitment forms obligations, which we will discuss in detail later on.
- *Collective commitment* refers to the commitment of a collective agent⁹⁶ to attain the same specified goals. In so far, the term collective commitment is synonymous with ‘internal commitment of the group’ (goals do not necessarily have to be identical with the ones of the individuals who form the group). In this case the role of social commitment between the members of the group depends on the kind and nature of the group (Castelfranchi 1995).

In this paper I will make use of these categories as for the leading question this distinction seems to offer some meaningful aspects. However, I am well aware that other approaches to and differentiations of commitment have been made (e.g. Kanter 1968, Johnson 1973, Meyer and Allen 1991, Burke and Reitzes 1991⁹⁷).

welfare cannot be separated, refusing to accept pure gains-maximization as an axiom of human behavior. However, this claim strongly depends on the definition of personal welfare.

⁹³ Though it might be linked to the perception of responsibilities; anyhow, the requirements have to be intentionally adopted as personal values (Welch 2012).

⁹⁴ The term ‘group’ will be used in a broad sense in this paper, including informal groups of individuals, teams, organizations, institutions etc.

⁹⁵ In distinction to e.g. sympathy.

⁹⁶ Groups in the broader sense; by some authors also called ‘social agent’. I use the term collective agent to avoid confusion about the term ‘social’.

⁹⁷ For example, Burke and Reitzes (1991) propose an approach without linking commitment to consistent behaviors, other individuals, or organizations in the first place. In their view commitment refers to the

The relation between commitment and performance has been a topic of discussion in the literature as research results have been ambivalent in the past (Locke et al. 1988). The main reason for the ambivalence of result might have been that in many studies goal commitment had been easily achieved (Locke et al. 1981). As several studies have shown an effect of commitment on performance (comp. Locke et al. 1988), I strongly assume that they are positively correlated; however, the *strength* of commitment plays an important role for performance. Individuals are committed to many targets and have to make choices regarding prioritization. Commitment has manifold sources with different characteristics, each of them potentially having a different effect on performance. Moreover, other factors might play a role in initiating, fostering or decreasing commitment.

Various potential determinants of commitment have been described and categorized in different schemes. Locke et al. (1988) e.g. divides into three categories: external influences (authority, peer influence, and external rewards), interactive influences (participation and competition) and internal factors (expectancy and internal rewards). Hollenbeck and Klein (1987) describe personal (need for achievement, endurance, type A personality, ability, past success etc.) and situational factors (publicness, volition, explicitness, social influence, task complexity, performance constraints etc.) and link them to goal attainment attractiveness and goal attainment expectancy⁹⁸. In the following some selected factors of commitment are shortly discussed that tend to reappear in the literature respectively that might be of relevance in the case of social innovation.

- The importance of *identity* of the committed social entity for establishing and constraining commitment has been stressed by many scholars (e.g. Burke and Reitzes 1991, Sen 1985, Welch 2012). Any individual has diverse identities, depending on the perspective respectively on her view of herself in the specific context (gender, family status, profession, ideological direction, nationality, race etc.). Identities are constructed in interrelation; meaningful relationships are not to be violated. Sen (1985) argues that, depending on the context, these identities shape the individual's view on 'self welfare, goals, or behavioral obligations'. Any targets or courses of action that are not at all coherent with the individual's narrative authenticity (Welch 2012), or, put differently, do not support the individual's identity, will hardly create any commitment. Obviously, it is very difficult to make a general statement about a person's narrative authenticity and how she views herself. Any approximation by an outside reflection of the person's history or background cuts short⁹⁹.

connection of a person to a stable set of self-meanings (identity); the apparent ties to actions, person etc. are products of this connection. Though this concept seems plausible the paper will draw on a multicausal approach (including the concept of identity).

⁹⁸ They claim that goal attainment attractiveness and goal attainment expectancy are the major variables in commitment (Hollenbeck and Klein 1987, Klein and Kim 1998), forming the knot between personal / situational factors and strength of commitment. They state that low expectancy of goal attainment leads to lower commitment than high expectancy, even if the goal attainment is attractive (and vice versa); low attractiveness of the goal attainment normally leads to lower commitment than high attractiveness, even if the goal attainment is expected to be high (and vice versa).

⁹⁹ Often foundations like Ashoka and the Skoll Foundation seemingly draw on the biography of the social innovator in the evaluation of the initiative in order to grasp commitment, also in regard to future activity. This takes little account to the fact that people might more or less disruptively change their opinions,

- *Volition* plays a twofold role: First, commitments are based on volition by definition, at least in their beginnings. As already mentioned, volition serves as distinctive feature to acting in response to responsibility or obligation. Second, volition can become a determinant of commitment; the freedom of choice to be committed to a target can change in the course of action due to raising social or internal¹⁰⁰ pressure to achieve¹⁰¹. Castelfranchi (1995) argues that social commitment makes it more difficult to drop the course of action than it is the case when no other social entity is involved. The social entity, that the individual is committed to, acquires – so Castelfranchi – rights like to control, to demand and to protest in regard to the ‘promised’ activities. Thereby social commitment creates interpersonal obligations. However, as their origins are based on volition, Welch (2012) claims that commitment enhances social freedom¹⁰².
- *Ability* and *constraints* play a major role in expectancy (see below). However, at least two aspects seem to be noteworthy in the context of social innovation. (1) To a great amount individual abilities and constraints in regard to choices, resources etc. are shaped by social relations, institutions, the environment etc. (Mann 1986, Welch 2012, Chiappero and von Jacobi 2014). Social innovators with complex ideas that require a high amount of resources for implementation like time, money and knowledge might be constantly confronted with limits and restrictions. Therefore it seems crucial that goals are aligned to avoid conflicts in resource allocation. (2) Challenging constraining institutions might be a direct or indirect target of a committed social entity.
- Commitment increases or decreases with *expectancy* of achievement (Hollenbeck and Klein 1987, Locke et al. 1988, Klein and Kim 1998). Ideas that potentially lead to social innovations always inherit a great amount of uncertainty as there is no or only partly approval that these ideas will work out. Therefore expectancy of achieving to implement these ideas might be rather low. Moreover, the degree of complexity of the ideas has influence on expectancy as well: a simple idea might be easier implemented than a more complex one¹⁰³. However, expectancy of achievement always depends on the perception of the social innovator. Bird (1988) argues that traditional entrepreneurs are often strongly anchored in the present¹⁰⁴, not thinking much about the future. Thus, expectancy would play a minor role in building commitment in the beginning of the initiative. If the social innovation has been already implemented, the success might motivate to scale the innovation on a higher / broader level as expectancy of achievement increases.

values and, hence, behavior. Reasons for such a change are manifold, e.g. other identities become prioritized.

¹⁰⁰ Creating a feeling of compulsion.

¹⁰¹ This might be one of the reasons for escalating commitment, i.e. the course of action is still followed though achievement is obviously not possible any more.

¹⁰² Social freedom as “the freedom to choose and act with and through other members of the community and to partake in the construction of the values, norms, and institutions of that community that shape one’s own daily life.” (Welch 2012)

¹⁰³ Commitment in the face of uncertainty might also be a ‘complexity reduction technique’. Therefore it would help to carry out ideas.

¹⁰⁴ Nevertheless, Bird (1988) claims that envisioning the future plays an important role for success of entrepreneurial activity.

Why is a social innovator committed to a goal or a group¹⁰⁵ in the first place? Obviously, reasons might be manifold and hidden deep in the individual's personality, making it impossible to make a general statement¹⁰⁶. Factors like emotional affection, sense of responsibility (Koe Hwee Nga and Shamuganathan 2010) and the above mentioned ones – especially identity – might hint at reasons and, depending on the context, have an impact on the strength of commitment.

7.3. Commitment and social innovation

“Thus, when I speak of the ‘social’, I have in mind real encounters and interactions with others as the context for exercising an expanding freedom.”
(Welch 2012)

What is meant by the term ‘social’ in social innovations? Drawing on the already mentioned working definition of social innovation as used by CRESSI (project proposal), the aim is to “improve human capabilities, social relations, and the processes in which these solutions are carried out”. Social innovations have social ends. They take place in and reshape (part of) societies, which are built by networks of social interaction (comp. Mann 1986). Following the working definition of CRESSI, the target group of social innovations are human beings.

In cases in which ecological objectives are main components of the social innovation, we have to differentiate further: Are ecological objectives aimed at because ecosystem services for human beings are endangered (in its end a human-focused goal)? Do they serve no anthropocentric reasons, but, appointing intrinsic value to nature, aim at improving specific aspects or the overall state of ecosystems? Or, taking a biocentric position, do these objectives tackle conflicts between the needs of different beings? Though we might talk of ‘commitment to nature’, or, including human beings, ‘commitment to the biosphere’, there is a difference to social commitment as defined above: the establishment of relations between species with its implications like mutual knowledge, agreement and creation of rights and duties as inherent components seems difficult or even impossible. Therefore I propose to make a clear distinction to social objectives at this point. In this paper I will stick closely to the working definition by CRESSI (project proposal) which - so far – focuses on human beings. Nevertheless, it might be important to reflect on CRESSI's definition of social innovation regarding ecological objectives.

What are the different roles of the three categories internal, social and collective commitment in social innovations? I assume that many social innovators draw on a hybrid form of commitment: partly being committed to a social entity, partly being committed to their vision. The ratio might change and poses the question of legitimacy.

¹⁰⁵ In our specific case that means marginalized human beings; the social innovator might or might not be part of the group.

¹⁰⁶ There has been a long tradition of debate in disciplines like philosophy and sociology on whether human behavior is driven exclusively by egoism or not. In traditional economic theory the notion that egoistic behavior even leads to general good is still prominent although there is an increasing amount of critics. To ridicule this notion, Sen (1977) tells a little story: ““Where is the railway station?” he asks me. “There,” I say, pointing at the post office, “and would you please post this letter for me on the way?” “Yes,” he says, determined to open the envelope and check whether it contains something valuable.” In this paper, I will not follow this line of thought further.

I will first turn to social commitment. For the case of social entrepreneurs¹⁰⁷, Ziegler et al. (2014) stress the local embeddedness of these entrepreneurs and their close ties to the affected communities, at least in the beginning of their initiatives. The authors claim that this kind of local embeddedness creates social accountability, i.e. the social entrepreneur can be held responsible for her actions by the community. Ziegler et al. (2014) contrast this approach to power that is exerted by outside experts. This line of thought is mirrored in social commitment. As mentioned above, social commitment creates a reciprocal relation between the individual and another social entity (individual or group), including rights and duties on both sides. Both parties enter the relation on a voluntary basis. Hence, social commitment is linked closely to direct democratic empowerment and is contrary to any form of ‘power over’. Marginalization is created actively by social entities, be it aggressively or via ignorance, disrespect or deprivation of necessities. Social commitment is diametrically opposed; it is changing power hierarchies.

Regarding the success of social innovations, social commitment to the target group (in our case marginalized people) seems to be of crucial importance for several reasons¹⁰⁸:

- Social innovators enhance their credibility from the viewpoint of the target groups if their activities stay coherent and consistent over time (which comprises the negation of alternatives). This might lead to further acceptance and trust in return, which might foster a feeling of togetherness and/or – in case of active consent – cooperation (Ruppel and Harrington 2000). Thereby the development of collective commitment and, hence, collective power (power to) might be initiated¹⁰⁹.
- Social commitment establishes and improves human relations. Capabilities of the target group are enhanced by increasing opportunities (to choose). In that respect social commitment for the marginalized becomes a social objective in itself.
- A close connection to the target group makes it more difficult for the social innovator to exit her activities as social pressure is higher than in the case of solely internal commitment¹¹⁰.

Internal commitment differs as it does not (necessarily) involve interpersonal relations. Following a strong vision might enable to be sensitive to opportunities to act (Koe Hwee Nga and Shamuganathan 2010); the social innovator might be able to respond faster to changing contextual variables. Anyhow, not being committed to the target group (the marginalized) might make it more difficult to develop a deep understanding of the group’s needs and to draw on social accountability as a source of authority.

7.4. Summary

¹⁰⁷ I assume that social entrepreneurs are a subgroup of social innovators.

¹⁰⁸ Granted the target groups are aware of the goals and activities and accept them.

¹⁰⁹ Drawing on Mann (1986), dominant power structures can be challenged by emerging power networks. When collective power reaches the extent that existing institutions are put under pressure, changes in power relations might be possible, thereby enhancing the situation of the marginalized (in the context of this paper).

¹¹⁰ Even in the case that the goals have been made public.

“Commitment is a force that binds an individual to a target and a course of action relevant to the target” (Meyer et al. 2006).

Commitment can refer to a relation between an agent and an action (internal commitment), agents can be committed to each other (social commitment) and agents can be committed to an action together (collective commitment).

For theorizing about social innovation for the marginalized, development of an understanding of this categorization of commitment – especially of social commitment – might offer further interesting aspects, also in relation to Mann’s concept of social power (e.g. in regard to collective power and interstitially emerging power networks). Social commitment to the marginalized – beyond being a social objective in itself – seems to enhance the chances of success in various ways. Furthermore, social commitment creates social accountability. As social objectives are allocated in the social sphere it seems difficult to imagine the success of social innovations without social commitment. The case might differ for ecological objectives. Ecological objectives can have different foci (anthropo-, eco- or biocentric) which have to be understood in detail.

This paper highlights several factors that might play an important role in the initiation and development of commitment. Can we manipulate commitment in the sense of nudging or further ‘social engineering’? Though that may be partly true, there are two aspects that might be opposed to this notion. Firstly, the initiation and development of commitment seems to be dependent on a complex net of individual factors, making it rather difficult or even impossible to calculate the effects of nudging or social engineering. Secondly, a better understanding of commitment does not automatically imply that it should be manipulated – especially coming from a capabilities’ perspective. If so, it should be for (social) commitments that people have reasons to value – including a reflective approach that is not inherent in traditional incentives. This topic should be discussed and understood in more detail.

So far, the intuitive answer ‘yes’ to the leading question – “Commitment to Social and Ecological Objectives: Crucial in Generating Social Innovations for the Marginalized?” – seems to be mostly right. However, to avoid confusion and tautologies, the term ‘social’ needs further clarification for the various contexts¹¹¹.

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¹¹¹ Social objectives, social innovation, social commitment etc.

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8. From Rational Agents to Human Diversity

By Marco Sebastianelli¹¹², Enrica Chiappero and Nadia von Jacobi¹¹³

8.1. Introduction

The comparison between Neoclassical economics and the Capability Approach is asymmetrical for two main reasons: first of all the privileged position held by the first as the dominant economic paradigm in the western world, and more importantly, the identification of the second as an integrated intellectual community, a feature which is lacking in Neoclassical economics. Although the dispersed and disorganised nature of the many theoretical frameworks convening in the mainstream paradigm hinders the task of tracing its conceptual borders, an agreement can be found in the literature (Lawson, 2013; Hahn, 1984, 1985; Weintraub, 2002; Arnsperger and Varoufakis, 2006) around three key features of Neoclassical economics:

- a) individualistic perspective with a focus on the contribution of single rational agents to the outcome of economic phenomena rather than their interaction;
- b) instrumental nature of rationality which relies on a postulated set of axioms that impose the congruence of preferences with utility maximisation;
- c) self-interested nature of economic agents who act independently on the basis of perfect and relevant information.

In addition, from the methodological point of view, the systematic recourse to mathematical modelling, and the ensuing focus on equilibrium states of the economy, strongly characterises the Neoclassical approach.

Sen, in the formulation of the Capability Approach, takes distance from most of these assumptions and, in particular: the depiction of individual as homogeneous, maximising and self-interested agents; the assumption that utility provides a sufficient evaluative space for human wellbeing; and the interpretation of self-interest as the only driver of human behaviour. In order to enlarge the scope of socio-economic analysis, Sen and other contributors to the Capability Approach, resort to a set of theoretical and methodological choices, all linked by the acceptance of complexity rather than its simplification. These constitute the backbone of the Capability Approach and can be narrowed down to the following three elements:

- a) acceptance of human diversity (both in terms of personal features and contextual circumstances)
- b) recognition of a plurality of scopes, values and intentions that people might have in pursuing what they have reason to value
- c) employment of multiple evaluative spaces (functionings and capabilities) and well-being dimensions.

From the methodological point of view, the Capability Approach refuses specific formulas, a set of equations or given algorithms, nor is it aimed at identifying and analysing equilibrium conditions in the manner of Neoclassical economics. Instead, the

¹¹² Institute for Advanced Studies (IUSS), Pavia.

¹¹³ University of Pavia.

broad conceptual framework at the basis of the Capability Approach has proved to be a fertile ground for a wide range of normative, evaluative and empirical purposes. These, in turn, have triggered the application within Sen's broad theoretical architecture of a plurality of methodological strategies, analytical and statistical methods.

In this paper, attention will be restricted to a comparison between the intrinsic focus and the analytical purpose of Neoclassical economics and the Capability Approach, with a particular focus on the following aspects. In the first section, we will discuss the theoretical origins and implications of the two approaches. In the second section the paper will examine the definition of rational economic agents and the motivations behind individuals' choices and actions. In the third section the evaluative space and metric for measuring well-being will be taken into consideration. Finally, we will present arguments in support of the idea that the Capability Approach can offer a more appropriate theoretical platform for investigating the role and the impact of social innovation processes.

8.2. Comparing the two approaches

The Neoclassical economic paradigm and the Capability Approach differ in both the intrinsic focus and the purpose of their analysis. One fundamental a priori difference lies in the twofold, and sometimes ambiguous scope of Neoclassical models. Within the vast realm of studies conducted under the umbrella of Neoclassical economics, descriptive and normative stances have often been adopted equivalently, thereby raising more than a few eyebrows among economic methodologists and heterodox¹¹⁴ economists. This difference concerns the epistemological groundwork on which the two economic paradigms are built, which is in turn influenced by the models of reasoning employed by each of them. While Neoclassical economics focuses on the search for simplifications that allow to reduce the complexity of economic phenomena, the Capability Approach embraces such complexity and places it at the centrepiece of its analysis.

The Neoclassical paradigm was originally influenced by logical positivism, the same approach previously adopted by the natural sciences and by nineteenth century physics in particular (Johnson, 1996). This logical structure, formalised in the deductive model of explanation, implies the verification of a theory by means of evidence, running from the general to the particular. The most authoritative implementation of logical positivism within modern economic sciences is Milton Friedman's *instrumentalism*, according to which the value of a theory depends on the accuracy of its predictions rather than the reality of its assumptions (Friedman, 1953). In spite of Popper's critique concerning the need for scientists to switch from verification to falsification, the contemporary Neoclassical paradigm clings to a form of logical discourse according to which theories explain certain predictions, whose accuracy in turn confirms the theories themselves, thereby leading to a circular argument.

¹¹⁴ The term "heterodox" is used here to epitomise approaches characterised by greater degree of complexity than the Neoclassical paradigm, and generally dissatisfied with its assumptions - namely, the atomistic conception of individuals as rational agents who act in accordance with some theoretical axioms in order to maximise their utility.

In opposition to the neoclassical economic tenets there stands a body of knowledge categorised under the name of heterodox economics (which includes evolutionary and post-autistic economics, just to name a few). The different schools of economic thought coexisting under the heterodox paradigm share some common features which seem to arise from the form of argument they all employ: inductive reasoning. Inductive reasoning climbs from the particular to the general, inferring a conclusion as the most probable explanation of existing evidence. While the outcome of deduction is certainly true (insofar as hypotheses are true), induction generates conclusions whose truthfulness can be falsified, but never verified with absolute certainty. This feature of inductive reasoning makes it a more complex and fertile framework, but also reduces its explanatory power thereby giving birth to a scientific paradigm that seeks regularities and patterns while preserving the intricate nature of the observed phenomena. It can be argued, indeed, that the relative caution and modesty that inductive reasoning forces into the work of heterodox economists are precious allies in their pursuit of ultimate accuracy.

The Capability Approach does not lend itself to any of these two paradigms in a clearcut manner. While the most common interpretation sees it in stark opposition to the Neoclassical doctrine, some scholars (notably, Benicourt, 2002) disagree with such a conclusion (see also Robeyns, 2002 for a counterargument). Benicourt's argument follows the idea that while he has introduced elements of novelty in the economic discourse, including moral philosophy, Amartya Sen has largely drawn important elements of his framework from neoclassical architecture. The Capability Approach, and especially Nussbaum's operationalisation, follows indeed a rather deductive mode of reasoning, the clearest example of which is perhaps the identification of a specific list of human capabilities on which to evaluate the quality of people's lives. Nevertheless, the absence of three crucial elements of the neoclassical tradition (see Arnsperger and Varoufakis, 2006), allows one to draw a distinction between the latter and the Capability Approach. Such elements are: methodological individualism, methodological instrumentalism and methodological equilibration.

Methodological individualism, or ontological individualism to use the terminology used by Robeyns (2005) and others¹¹⁵, refers to the idea, common in Neoclassical economics, that all phenomena can be understood simply as the sum of individual contributions to them. This view negates that interactions between human beings are capable of generating outcomes that cannot be explained by multiple individual actions and implies that society is nothing more than the sum of all individuals. Arnsperger and Varoufakis identify this approach with the appropriate simile of a watchmaker who examines cogs and wheels separately and independently from their interaction. Sen, not only inherently rejects a similar interpretation of the economic discipline, but bases his whole approach on social interactions and multiple combinations of features, both personal and contextual, that intervene in the construction and evolution of social groups. Another element that brings Sen away from the Neoclassical tradition is the lack of methodological instrumentalism that is commonly employed to justify any human behaviour in the light of an overarching goal or end. According to the Capability

¹¹⁵ Some authors (Robeyns, 2005; Chiappero-Martinetti and Biggeri, 2013) use the term methodological individualism to identify the tendency to reduce human beings' inherent plurality and remodel people into homogeneous agents. More on this topic will be discussed in the third section.

Approach, and more generally in Sen's literature on the topic of rationality, instead, motivation for human behaviour can and must be sought in a wide range of motives, including those that might have an intrinsic rather than simply instrumental value. Finally, the issue of equilibration concerns the belief (once again, instrumental) that the economy lies in a state of equilibrium of some sort that is often a basic assumption of Neoclassical economic models. While Sen's position on this subject is only mildly critical of some of its applications (Sen, 1989), the Capability Approach does not rely on a theory of equilibrium to sustain any of its results.

The Capability Approach places the emphasis on the necessity to understand the nature of economic phenomena, with the purpose of producing knowledge-driven suggestions on how to improve people's lives. Knowledge of *micro*-level phenomena is therefore built by taking into consideration all degrees of complexity necessary to create a realistic portrait of the object under observation. Conversely, the Neoclassical paradigm relies on a body of simplifying axioms about economic agents - chiefly, their rational nature, self interested attitude, and maximising behaviour - employed to derive exhaustive depictions of reality at the expenses of the precision of its premises and assumptions. Despite the technical nature of its contents, the debate about the Neoclassical and alternative approaches has often touched upon ideological arguments which, over the years, have plummeted into disordered flag waving. A new interpretation of the economic discipline would arguably benefit from an impartial attitude towards alternative approaches, including their variable suitability to different domains of analysis. Economics, like other social sciences, is cursed by the impossibility to reproduce reality experimentally in a laboratory environment and by the heterogeneity of its objects of analysis: this implies a necessity to apply some degrees of simplification to the analysis itself. Crucial here, therefore, is to find the right balance between overly specific and excessively simplified depictions of the world, bearing in mind that different purposes will demand different degrees of specificity-abstraction. In this light the comparison between Capability Approach and Neoclassical economics can be understood as a trade-off between accuracy and explanatory power with a tendency for the latter to vary in intensity according to changes in the object of analysis and the approaches employed.

8.3. Economic agents

The logical-positivistic approach employed by Neoclassical economics, coupled with the commitment to provide clear-cut answers to economic dilemmas, imposes the implementation of a wide range of simplifications. Probably the most symbolic of them is the identification of the object of analysis (i.e. human beings) with a streamlined version of the object itself, namely the *representative agent*. The representative agent shall be interpreted as a figurative person whose features and behaviour reflect the observable actions of human being. While the latter constitutes a descriptive element of simplification (these features are in fact derived from observation, albeit oversimplified, of human behaviour), a normative element also contributes to the definition of what an economic agent is. This normative character of the representative agent has been

introduced in the previous section and imposes a set of axioms¹¹⁶ which conform to the assumption of perfect rationality. The Neoclassical interpretation of human beings, therefore, reduces them to homogeneous and abstract objects of analysis, whose interests and ambitions, although existent, are not taken into consideration for the purpose of economic analysis.

Sen and the Capability Approach shift the focus of the analysis towards the peculiarities of each individual and away from mainstream economics' typical simplification to a more complexity-prone framework. The heart of the Capability Approach is the individual, but the latter is taken into consideration from a holistic perspective, including both his complexities and those of the surrounding environment, which comprises social norms and institutions. Therefore, despite contrasting arguments, there appears to exist a mild agreement on the idea that Sen's approach follows a sort of ethical individualism, as opposed to the methodological individualism previously discussed (Robeyns, 2005; Chiappero-Martinetti and Biggeri, 2013).

The diversity in human nature is taken into account by the Capability Approach in two fundamental ways: first of all through the multiple evaluative spaces that can be considered and secondly through the multiplicity of factors that allow one to convert commodities into functioning (i.e. the ultimate achievements of people's lives) (Robeyns, 2005). The diversity is first of all accounted for by the fact that Sen recognises that people act and perceive on the basis of different objectives, values and priorities rather than reducing them to profit-seeking devices. The purpose of the Capability Approach is to provide an evaluative framework for human conditions and social arrangements on the basis of what people may have reason to value, a task that requires a much richer toolkit than mainstream approaches. The conversion factors, and the distinction between capabilities (potential achievements) and functionings (achievements themselves) is also crucial, since it allows one to dig deeper into the actual meaning that a particular condition might have for each individual¹¹⁷. Conversion factors constitute the junction between tangible and intangible resources and potential and actual outcomes, as they pay tribute to the importance of the individual's personal and external traits, both social and environmental.

8.4. Nature of rationality

The hypothesis of rationality supported by the two approaches is a key element of this methodological debate, since it has traditionally represented a central feature of both Neoclassical economics and the Capability Approach. In this regard, it is worth noting that the Capability Approach, albeit segmented in a multitude of multidisciplinary contributions, follows a uniform theoretical framework based upon the acceptance of and interest in the complexity of economic phenomena, while Neoclassical economics

¹¹⁶ The two basic axioms are completeness and transitivity of preferences. Different streams in the neoclassical literature have produced different twists to the basic assumption of rationality. For a thorough and critical analysis of these, see Kirman (2011).

¹¹⁷ A fitting example is the one concerning the difference that exists between a person who is fasting for religious motivations and one who is starving for lack of food. The two people do not differ in terms of final achievement (lack of nutrition) but their conditions differ very much from the point of view of their capabilities (Sen, 2000).

gathers a scattered collection of non-homogeneous contributions. For the purpose of this analysis, the most basic and traditional interpretation of “neoclassicism” will be taken into consideration, leaving aside different sub-approaches that might be classified under the same heading¹¹⁸. The major difference in the way rationality is conceived by the two paradigms concerns the role assigned to rationality, an element that somehow relates to the level of complexity allowed for in Neoclassical Economics and the Capability Approach: lower in the first and higher in the second.

Rationality enters Neoclassical economics in a purely instrumental manner: it is in fact constructed in a way that minimises difficulties in understanding such a crucial element - namely the origin - of human behaviour. It merely constitutes a step required in order to proceed with the analysis of higher level phenomena: rarely have the works of late nineteenth century Neoclassical economists have focused on rationality as a phenomenon *per se*, while a far greater deal of attention has been devoted to areas in which rationality only served as a means. The instrumental nature of the Neoclassical doctrine is primarily influenced by a strong predominance assigned to forecasting rather than explaining phenomena. Such an interpretation of economic science, in fact, requires harsh simplifications with the purpose of creating models of reality that allow straightforward answers to possible questions. This feature of Neoclassical economics has a sizeable impact on different elements of rationality, including the specific connotation of preferences and motivations that will be discussed more thoroughly below.

The Capability Approach, instead, is deeply concerned with the actual features of human rationality: throughout his career Amartya Sen has devoted a significant part of his literature to this field, in which he is recognised both as one of the pioneers and greatest experts. He and the Capability Approach stand against the Neoclassical interpretation of rationality as simple internal coherence of choice, maximisation of personal interest and maximisation in general (Sen, 1982). Rather than applying simplified accounts of human reasoning, Sen embraces its inherent complexity. The plurality of human nature lying at the epicentre of the approach, in fact, forces deeper investigation into the actual role and essence of rationality that in turn requires analysis from a non-instrumental standpoint.

Epistemological discussion of the two conceptions of rationality reaches its most critical expression in the debate on the drivers of human behaviour. The second part of this section is devoted to such debate and will be structured as follows: in the first subsection the role of preferences and values will be spelled out; the second subsection will concern the kinds of motivations envisaged by Neoclassical economics and the Capabilities approach.

8.4.1. Preferences and values

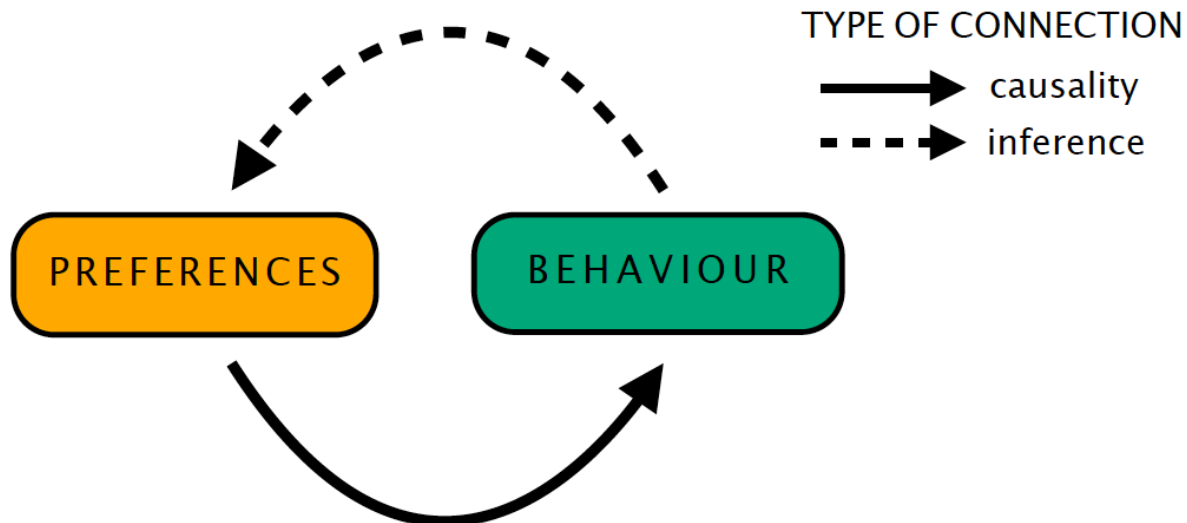
As a consequence of the aforementioned instrumental nature of Neoclassical rationality, the latter is assumed to be *perfect* for every economic agent, and as such characterised

¹¹⁸ The definition of Neoclassical economics was first used by Thorsten Veblen, whose archetypal version of the neoclassical school was the work of Alfred Marshall. In the present work, the term is used with the intention of separating mainstream approaches from those which might add external features (most notably elements of bounded rationality) to the neoclassical doctrine.

by *complete* and *transitive* preferences over alternative options. Completeness and transitivity are the two fundamental axioms that define rationality in a way that significantly simplifies the implementation of mathematical models in economics. Commonly considered a principle of operational elegance, the axiomatic nature of “neoclassical rationality” disregards much of what we know to be true about the way people think and act, and it does so in order to allow simple and meaningful conclusions. In fact, as Kirman (2013) points out, by simplifying human preferences through the axioms of perfect rationality, the Neoclassical economist is able to build a continuous demand function and prove the existence of an equilibrium which would otherwise be ruled out or at least very hard to define.

As Lawson (2013) points out, the definition of Neoclassical economics is inevitably entangled with that of mathematical deductivism, an approach epitomised by the enduring reliance upon methods of mathematical modelling with the aim of explaining all phenomena by means of laws and regularities. According to Lawson, the source of the problems of this paradigm lies in the incompatibility between this ontological presuppositions and the object of analysis which, being strictly “social”, does not lend itself to such event regularities. In the attempt to reconcile the two, Neoclassical economists then resort to an atomistic conception of the world, which is best interpreted as the aforementioned methodological individualism. Although not realistic, the latter allows one to draw simplified versions of social phenomena, which can then be described by means of mathematical laws.

Figure 1: Circular interpretation of preferences - Neoclassical economics



Source: Authors' elaboration.

Another feature of the Neoclassical interpretation of preferences concerns their methodological construction by means of inference from behaviour. With the innovation brought about by Samuelson (1938) and his revealed preference theory, Neoclassical economics attempted to free itself from the problematic element of utility, and to provide a rationale for human action without resorting to anything external to it. The latter is commonly referred to as the *internal consistency of choice* requirement: a

principle that would allow one to “explain behavior without reference to anything other than behavior” (Little, cited in Sen, 1993; p. 497). The road shaped by this simplification is paved with a few inconsistencies, the most salient being the circularity (Figure 1) of the relation between preferences and behaviour (Sen, 1982).

Due to the semantic overload (Dennis, 1998) affecting the economic discourse, the two terms are often employed within the Neoclassical paradigm in order to reinforce each other without a clear-cut logical hierarchy. A common oversimplification put forward by the Neoclassical literature consists in fact in explaining behaviour on the basis of preferences which are in turn axiomatically justified by the search for welfare, thereby originating a circular argument. Anderson (2001) ascribes this type of mistake to the dogmatic use of the concept of preference in the economic literature. She points out, following Sen’s line of reasoning, that ‘*one is not entitled to infer that a particular choice advanced the individual’s welfare just because she made it voluntarily*’ (Anderson, 2001, p. 22). Likewise, one is not entitled to infer her preferences from her choices either, because the latter might originate from a different source¹¹⁹.

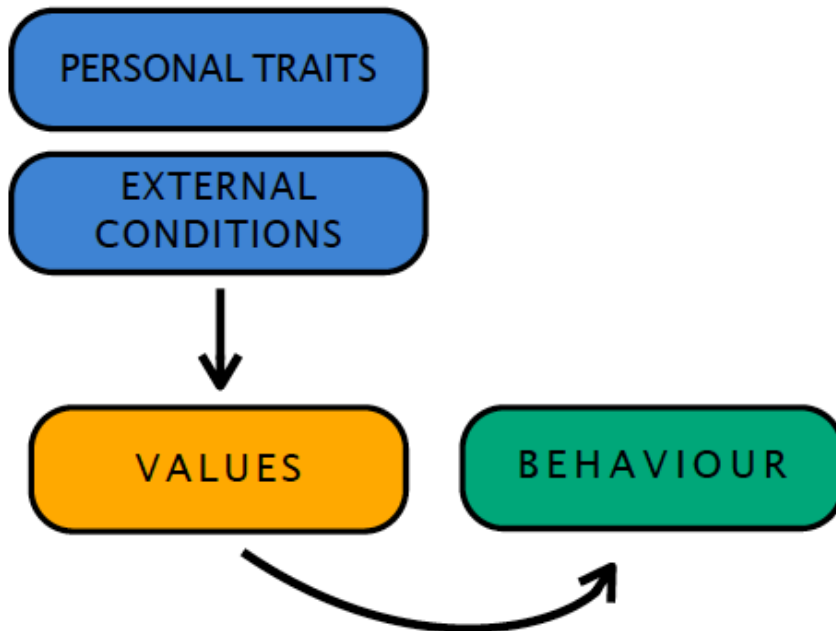
Within the Capability Approach, axiomatisation is entirely discarded, the only purpose of the theory being to capture actual reasons that people might have to act. Rather than inferring these reasons from either behaviour or any mathematical requirement, Sen argues in favour of the “inescapable need to go beyond the internal features of a choice function” (Sen, 1993; p. 487). The Capability Approach broadens the concept of preferences by expanding them to the idea of values. The latter can be interpreted as the drivers of action whose origins include all arguments that might lie at the basis of human behaviour. The Capability Approach’s commitment to expand the information basis of decision making can be traced to the fact that *agency* - one of the crucial elements of the approach itself - presupposes that reasons to act include purposes that might even conflict with one’s wellbeing but are part of her/his commitments (Osmani, 2009). The strong emphasis placed by the approach on freedom also implies a need to allow for a greater and more diverse account of rational principles that incorporate both their opportunity and procedural advantage. The procedural element of human behaviour is entirely overlooked by traditional economic approaches, whose sole focus lies on the “culmination outcome” of behaviour itself, while it gains importance in Sen’s discourse as an evolution towards a “comprehensive outcome” (Sen, 2002, p. 12) which includes the process through which culmination comes about. At the same time, Sen (2002) points out that freedom in its opportunity aspect cannot be motivated by focussing on the alternatives that one would axiomatically follow and choose, and that the focus should instead shift towards the things that individuals truly value.

Values are crucial in Sen’s work since they epitomise the freedom on which the whole theory is grounded: rather than “forcing” actors into a scheme of preferences - which he interprets as a basic denial of freedom of thought (Sen, 2002) - absolute predominance is given to their opportunity to choose the motivation of their action. Sen embraces Arrow’s broad characterisation of preferences, including an interpretation of human behaviour which assigns an action to people’s objectives and values, and is directed

¹¹⁹ One commonly employed example is that of the person invited to a fancy dinner who, facing the choice between one of many pears and the last apple in the fruit basket might choose the pear regardless of his/her preferences for apples. Inferring his/her preferences for pears on the basis of such choice would therefore prove misleading.

towards them: according to this view, individuals are able to build overarching opinions about their own objectives (Sen, 1982). This is essentially what Sen defines as *ranking of rankings* (Sen, 1977) and in Arrowian terms is defined as *values about values* (Arrow, 1951). According to Arrow, while market mechanisms only take into consideration tastes-based orderings, of equal importance are the values on the basis of which those orderings are originated.

Figure 2: Non-circular interpretation of values - Capability Approach



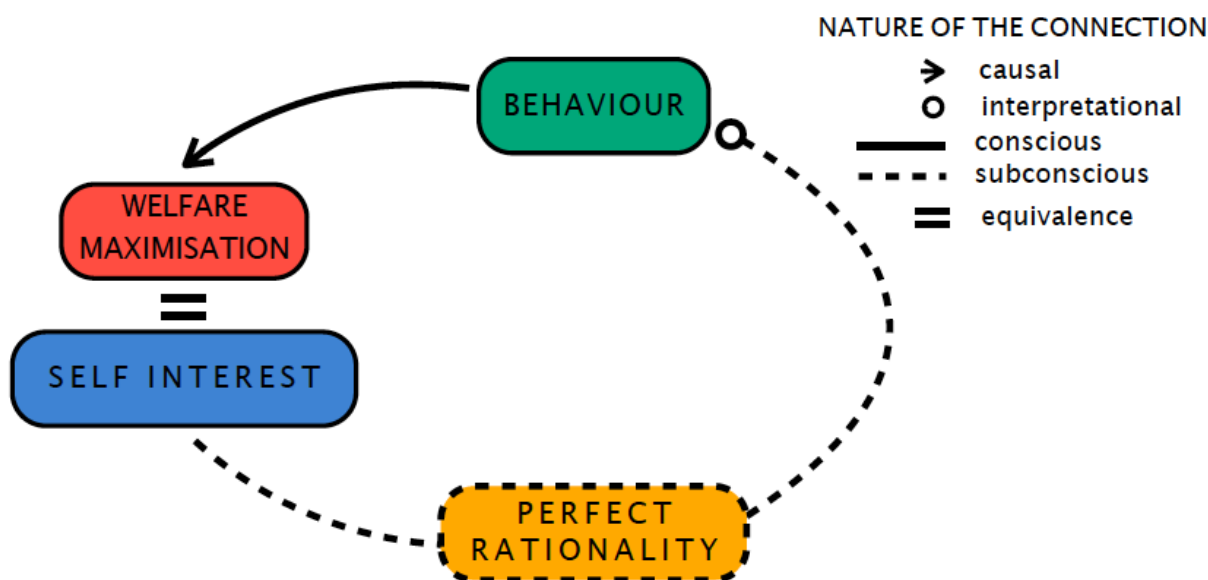
Source: Authors' elaboration.

As anticipated, the difference between tastes (or preferences) in their Neoclassical interpretation and what values represent in the Capability Approach also lies in the direction of consequentiality between each of them and human behaviour. Both of them are conceived in order to account for all possible drivers of action, but while preferences (at least in neoclassical terms) stem from behaviour, values are responsible for shaping the latter in the Capability Approach (Figure 2). Neoclassical economics avoids any descriptive analysis of the prior interpretation of preferences, which are modelled around the normative principle of utility maximisation; preferences are therefore deduced *ex post*, just like an archer who draws the target around the arrow after it has reached its destination. On the contrary, studies within the Capability Approach devote lengthy discussion to the formulation of a coherent body of drivers which take their ultimate form in the concept of values. These, in fact, shall be interpreted as the extension of preferences to a wider domain of reasons for action that cannot be fully captured by traditional types of motivations. As a result, a form of rationality that takes into consideration individuals' values, such as the one implied by the Capability Approach, can adopt a multitude of different shapes and adhere more faithfully to the reality of human behaviour, thereby bettering its chances of describing it more correctly.

8.4.2. Motivations

The issue of what is and should be the ultimate goal of human action is rather old and quite a central one in the debate on Neoclassical economics¹²⁰. The origin of the modern utilitarian interpretation dates back to Hume, according to whom decision making is divided into three modules: reason, beliefs and passions, and Bentham who pushed utility as the chief purpose in life. The Neoclassical interpretation of rationality, which inherited much of its argument from utilitarianism, is not only methodologically, but also conceptually instrumental with respect to the goals of human behaviour. The only conceivable goal under the Neoclassical paradigm is the maximisation of utility, and rationality is axiomatically set out in a way that makes every economic agent's choice a means to achieve such a goal (Figure 3). The outcome of this architecture of human rationality is the creation of a specie - i.e. *homo economicus* - who responds in machine-like fashion to analytical inputs such as prices and other monetary incentives. Also, the economic agent is deemed to be selfish, since it is from the maximisation of his own utility that individuals fulfil their goals.

Figure 3: Goal achievement under Neoclassical paradigm



Self-interest represents the overarching goal in life, and translates - by means of complete and transitive preferences (perfect rationality) - into a behaviour whose outcome is the maximisation of personal welfare (which coincides with the agent's goal).

Source: Authors' elaboration.

On the other hand, the Capability Approach allows for a much more diverse spectrum of

¹²⁰ It is worth noting that the confusion between “is” and “should be” (or the descriptive and normative nature of analysis) that often afflicts Neoclassical economics, is another important issue, which the introductory section has already touched upon, and is particularly crucial within discussions on goals and ends of human action.

motives to guide human behaviour which is both derived and triggered by a more complex architecture of rationality. Sen's contribution, in fact, can be interpreted as the critical answer to two major theoretical architectures, namely Bentham's utility-based and Rawls' commodity-based approaches. Dissatisfied with the way both of his predecessors had dealt with this issue¹²¹, he builds the Capability Approach around the freedom and diversity of individuals and conceives rationality in a way that preserves these characters throughout the analytical parts of the theory. As Alkire (2005) points out, by broadening the information basis of his analysis of welfare, Sen is forced to resort to a more sophisticated set of assumptions about human beings, which in turn carries within itself a new conception of rationality that is at the same time technical¹²² and ethical.

In his article entitled 'Rational fools: a critique of the behavioural foundations of the economic theory', Sen introduces a new categorisation of drivers which allow one to fully account for altruistic behaviour, a feature that could not adequately be carried out by means of Neoclassical conceptions of human motives. While Neoclassical economics had dealt with altruistic volitions by adding an element of generosity to the traditional (i.e. selfish) utility function, Sen (1982) demonstrates how such a solution fails to capture the intrinsic complexity of selfless action. He therefore proceeds to divide altruistic behaviour into two categories, one moved by *sympathy* and the other by *commitment*: the first relates to cases in which others' concern directly affects one's welfare, while the second indicates choices that are not best in one's personal interest but are considered more appropriate or rightful. While sympathy can be identified within an enlarged conception of self-interest, commitment "drives a wedge between personal choice and personal welfare" (Sen, 1977, p. 329) whereas the equivalence of the two has always been a stepping stone of Neoclassical rationality.

As Anderson (2001) points out, Sen is not particularly clear in specifying a justification for committed behaviour within one's preference scheme in cases of human interaction where non-cooperation dominates cooperation - i.e. those situations in which individuals tend to put their personal interests in front of those of the community. It can be argued, though, that Sen's favourite solution to the paradox of committed action¹²³ is to value the act in itself, and not because of the consequences it generates. The Capability Approach, therefore allows for multiple layers of possible motives, and especially introduces the possibility for drivers of action to have *intrinsic* as well as *instrumental* reasons. Intrinsic reasons for acting constitute a significant part of human rationality and deals with all cases for which the payoff does not derive from a consequence of the act but rather from the completion of the act itself, and can be conceived only within a framework that allows multiple types of goals for human action.

¹²¹ Sen's critique of Rawls' approach concerns the excessive emphasis posed on equal distribution, with the consequent commodity fetishism and the impossibility of solving the problem of interpersonal comparison. The basic critique of Bentham's "greater good" argument, instead, concerns the problem of distribution.

¹²² Alkire (2005) uses the expression "narrow technical or engineering rationality" quoting from the 1987 book by Amartya Sen entitled 'On Ethics and Economics', and it is probably to be interpreted as a synonym of the traditional mainstream usage of the term.

¹²³ With the term paradox of committed action (sometimes paradox of voting) Anderson (2001) describe prisoner's dilemma-like situations in which the choice to cooperate appears paradoxical from the standpoint of traditional scheme of preferences.

8.5. Evaluative space and metric

A distinctive element of Neoclassical economics is the narrow interpretation of the evaluative space and metric of its analysis. In fact, with its roots firmly planted in Benthamite philosophy, Neoclassical economics reduces human life to experiencing the greatest possible utility and all economic activity to a process of maximisation thereof. The metrics employed to assign a number to such evaluative space can be different and may vary across the vast neoclassical literature but it usually encompasses material wealth and more specifically monetary quantities. The syllogism employed by Neoclassical theories is the following: since human beings behave so as to maximise their utility, and since utility can be measured by means of income, then the latter represents an appropriate indicator of human conditions. Such syllogism brings about a twofold simplification: first of all the implied purpose of human life is reduced to utility maximisation, and secondly, in order to measure the abstract concept of utility, a unidimensional material indicator is employed as a feasible/useful proxy. This approach to the evaluation of economic phenomena has greatly influenced the way in which the economy has evolved and been guided, bringing about the predominance of the gross domestic product rhetoric in macroeconomic discourse and that of income at the microeconomic level. It is worth noting that the logical positivism employed by similar approaches has led to the contamination of the doctrine itself by its own findings, which has originated circularities that run from the centrality of economic gains, to the deduction of preferences from such centrality, to the explanation of actions by means of such preferences.

Also relevant to the comparison of the two approaches under observation, both the evaluative space and the metric adopted by the Neoclassical paradigm are substantially static and homogeneous across individuals. This is a direct consequence of the way in which economic agents are defined in Neoclassical models, and implies severe limitations to the plausibility of the conclusions reached by them.

The Capability Approach applies a very different evaluative space to its economic reasoning, which once again originates from the aforementioned basic elements of the theory, namely the kind of rationality and agents envisioned by it. The Capability Approach suggests two evaluative spaces that should be applied complementarily: capabilities and functionings. While a person's functionings represent what she succeeds in being and doing, capabilities indicates the ability to achieve such goals, even though she might choose not to employ such ability (Saith, 2001). A crucial element of Sen's theory is the great importance given to people's freedom, which constitutes its main difference from Neoclassical approaches, and particularly, freedom of thought which is essentially denied by axiomatic forms of rationality.

An evaluative space composed by capabilities and functionings allows for a more articulated analysis for two reasons: first of all they include multiple dimensions, and secondly they allow one to open up a debate on ethical issues. Capabilities and functionings are the beings and doings that people value and as such they include a broad variety of conditions that might be worth taking into consideration. While Martha Nussbaum, in her interpretation of the Capability Approach goes as far as suggesting a

definite list of dimensions to be taken into consideration, Sen does not support any similar restriction, thereby leaning towards a more bottom-up nature of the theory (Comim 2001). Moreover, by stressing the importance of the context in which economic phenomena take place, the Capability Approach offers a fertile framework for analyses that seek to investigate how just and enabling specific conditions are for human beings.

The inherent complexity governing much of the social sciences is once again the main focus of the Capability Approach concerning its choice of a proper metric. The translation of the richness of Sen's contribution into practical terms represents a challenge which includes, together with the selection of a list of dimensions, methodological strategies for their interaction (see, among others, Chiappero-Martinetti et al., forthcoming and Krishnakumar, 2014). Operationalisation of the theory for analytical purposes is in fact lagging behind the Neoclassical paradigm, due to both its greater difficulty and its comparatively recent origins. Since traditional methodologies appear in fact to cause the Capability Approach to lose much of its peculiarities, alternative ones have been tested, ranging from, among others, fuzzy set theory, an alternative logic based on the vagueness of variables and characters, and qualitative methods (Hollywood et al, 2012).

8.6. Conceptual space for social innovation

The previous paragraphs have highlighted a number of differences between Neoclassical economics and the Capability Approach. The Neoclassical approach presents some limitations for the analysis of social innovation and its role in reducing marginalization: on the one hand, Neoclassical economics may be appropriate for the analysis of market equilibrium but seems to neglect outsiders in general. In analyzing marginalization, therefore, Neoclassical economics may be limiting whenever the *rationale* and *way of functioning* of people is not directly reducible to the price system governing market rules. On the other hand, Neoclassical economics seems to be unable to account sufficiently for individual and for collective values, motivations and actions - elements that seem to be main drivers of social innovation processes.

Social innovation can emerge within or outside of market rules, can make or not make use of price mechanism allocation and may in general pursue values or be driven by motivations which can or cannot be monetized but may instead be oriented toward a positive and medium/long-term social impact. Neoclassical economics can hardly accommodate such broader and plural aims and intentions, which on the contrary seem to be quite easily incorporated in a Capability Approach perspective. This section briefly summarizes to which extent thinking in terms of capabilities can represent a more adequate conceptual backbone for understanding the emergence and the impact of social innovation processes. In what follows, the theoretical elements previously outlined are tested for their adequacy to provide a conceptual space for social innovation.

8.6.1. Allowing for collective agency/action

By recognizing that social interactions are not just the sum of individuals, but an

intricate and non-systematic combination of individual and relational attributes, the Capability Approach is potentially able to include and to understand phenomena of collective agency/collective action (Ibrahim, 2006; Ballet et al, 2007). Within Neoclassical economics, group behaviour needs to be understood as the sum of (identical) individual behaviours, therefore not allowing one to include elements such as power, cognitive frames or imitation and herding behaviour into the analysis. These however are elements that are likely to play a crucial role for the adoption and diffusion of innovative ideas and practices.

8.6.2. Shared intentions

If human motivations can in fact be different and - more importantly - not only instrumental for self-interest but also ends in themselves, we can imagine that *ideas*, as often embedded in social innovation processes, can move people in themselves - not only through their effect on self-interest. This is a fundamental hypothesis for understanding not only what brings social innovation processes about, but also *why* other people should believe in them, adopt them and follow a new solution or trend. The pursuit of some sort of common good, as often entailed by a social innovation, further requires individuals to embrace some sort of *shared intention*. The intention to preserve the environment, for example, may be an end in itself that actually requires some self-constraint. A person might indeed not be maximising self-interest when contributing to environmental protection¹²⁴. By sharing goals - that may or may not require self-constraint - collective action can come about. Shared intentions are expected to play a crucial role for collective agency, so if collective agency represents a necessary element of social innovation, shared intentions should find a conceptual space within the general framework used.

8.6.3. Social interactions

Herding behaviour and imitation were mentioned, but these are not the only mechanisms that shape and determine the content of exchange of social interactions. Social interactions are likely to play a crucial role for social innovation processes, be it through their influence on the shape and *mission* that particular networks assume, or be it through their role as *connectors* in transmitting ideas, proposals and solutions (Bikchandani et al., 1992; Banerjee, 1992; Manski, 1993, Postlewaite, 1998). Yet, social interactions are completely ignored in the motivation-framework of Neoclassical economics: indeed both, the monotonicity and transitivity axioms are likely not to be the only, the main or any driver of actions whenever the individual is embedded into a context of social interactions.

The Capability Approach tries to teach us 'complexity' in the analysis of drivers, motivations and actions of people. Yet, the conceptual framework is usually concerned with the choice-making and achievement process of the single individual. If we imagine how multi-faceted and complex the interaction between different actors can be, it seems

¹²⁴ See the special issue of the Journal of Human Development and Capability on The capability approach and sustainability edited by Rauschmayer and Lessman (2013, Issue 1, Volume 14)

to become even more necessary to take distance from a conceptual framework that reduces every type of action and decision into a precise regularity, namely one driven by maximization and by self-interest. When studying human actions within social interactions - as is the case when investigating social innovation processes - it is likely that complex combinations of factors actually 'modulate' or 'mediate' strict cause-effect relations - even when they may be true and relevant at the individual level.

8.6.4. More than preferences

The previous paragraphs of this study therefore seem to suggest that it might be insufficient - and highly limiting - to see in *preferences* the sole drivers of choices and actions. The social character of social innovation especially - directly implying relations, exchange and connectivity - requires a broader and more comprehensive view of drivers: in a world in which only self-interest and its maximization are determining human action, we might not in fact observe social interaction at all! In order to understand social innovation processes, it seems to be especially necessary to consider imitation, herding behaviour and shared intentions, more than individual preferences, as these - even if correct, may not tell us much about how social innovation is coming about or can be scaled up.

8.6.5. Commitments

Of course, collective actions may also produce individual returns, for which individuals express interests. For example, a social innovation in urban gardening might also produce an individual return for a flat that can now enjoy a 'greener' view from its balcony. Yet it seems more likely to be the value attached to the principle of a more enjoyable public space that brings people together - note that this seems to be the crucial point as a single individual intending to improve her view from the balcony will not be able to trigger any relevant change. So, while individual preferences are clearly a part of the picture of reality, they seem not to be too informative about *what brings people together*, the crucial point that makes a difference for a collective action to even start. The conceptual space for commitments that the Capability Approach provides seems to be more appropriate. This is particularly true when the commitment to a collective goal stands partially in contrast with personal wellbeing (or utility). As previously outlined, such self-constraining actions may occur either because of *sympathy* or because of *commitment*. We expect commitments to be more relevant drivers of social innovation processes than sympathy, especially when the innovation process succeeds in provoking a mix of different social groups or classes.

8.6.6. Overarching Principles

Of course a crucial question remains in which cases individuals actually shift from self-interest pursuing actions to broader commitments. As previously outlined, the Capability Approach allows for individuals to embrace some sort of 'overarching principles' that serve as drivers, whereas such forces of motivation are not foreseen by

Neoclassical economics. For the CRESSI project and its conceptual framework, overarching principles may be put into direct connection with cognitive frames, as these seem to modulate 'how we perceive reality' and therefore may constitute a cognitive structure as to how individuals analyse their surroundings, their options and their potential actions.

8.6.7. Values

From what has been stated so far it seems clear that a broad and complex base of possible human motivations needs to be considered or at least permitted in the analysis of social innovation processes. Getting back to the comparison with preferences, values may indeed allow for such a broader view, simply because an individual may *prefer* action A, but indeed be *doing* action B because of the role that certain values play for him or her. Of course, values may be viewed as an *ex-ante* matrix that somehow leads to final preferences. Yet, the simplification-driven framework of Neoclassical economics abuses the concept of preferences by placing an individual's action in between of - usually - two different options, which further requires to compare different options with the same metric, namely utility, or its maximization through self-interested behaviour. And yet, can common goals or shared intentions really be explained through self-interested maximization? Where do we locate the value of the act itself, e.g. the pride or sense of belonging to a certain group, or simply 'being there' at a greater event, like the fall of the Berlin wall or of Woodstock (these are just examples). Cognitive frames may indeed play a major role in explaining the value attached to 'belonging' or 'being there'. Through this, they are likely to help explain mass behaviour, new trends and collective requests for change. As none of this seems to be neatly and properly referable to the over-simplistic model of utility maximization, by allowing a greater degree of complexity, we are likely to discover more driving factors for the emergence and realization of social innovation processes.

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9. The Role of Incentives versus Intrinsic Motivation in Relation to Microcredit Activities

By György Molnár¹²⁵

9.1. Introduction

Neo-classical economics assumes rational (in the sense of consistent preferences), utility maximising individuals and profit maximising firms; economic actors' are motivated only by their myopic self-interest, and guided by price signals. If we remain within this paradigm, it can be shown that any equilibrium in a competitive market is – in a certain sense – unimprovable. It is only a short step from here to claim that if something is unimprovable then it is also optimal. “Being in the core [i.e. exchange equilibria – my addition, G.M.], however”, warns Sen (1977, p. 320), “is not as such a momentous achievement from the point of view of social welfare. A person who starts off ill-endowed may stay poor and deprived even after the transactions, and if being in the core is all that competition offers, the propertyless person may be forgiven for not regarding this achievement as a “big deal.””

Paradoxically, even those who do not think that the falling out of marginalised groups from society is acceptable often believe that the situation can be changed by using pure market instruments. They believe that a system of incentives should be established to motivate entrepreneurs to facilitate the employment of the poor and marginalised, while they become compelled to work. This latter perspective emerges mostly in developed or transition economies with existing welfare systems. This approach almost fully ignores the intrinsic motivations of the participants, and that ignorance may lead to a number of market and government failures.

From the 1980s on, economists and policy-makers intended to give a gradually growing role to microlending as an attempt to support the creation of micro-businesses providing job opportunities and thus a living for the active poor. Investigating microcredit activities, the problem of incentives versus intrinsic motivation arises at least from two aspects:

1. Why should a microlending institution be founded and run?
2. Why do marginalised people apply for microcredit if a welfare system exists?

In this paper, I will address the above questions. In doing so, I will refer to the experiences of Kiútprogram¹²⁶, a Hungarian non-profit organisation founded in 2009, specialising in social microlending. Kiútprogram provides microcredit and mentoring primarily to socially excluded Roma people. Two different types of microcredit can be distinguished: microcredit referring to microloans for business start-up, and *social microcredit*, that is small loans intended to assist excluded persons to borrow money for expenses facilitating their social and economic integration through self-employment.

¹²⁵ Institute of Economics, CERS-HAS.

¹²⁶ “Kiútprogram” means “Way out programme” in English. A detailed documentation can be found on the website of the programme at www.kiutprogramme.hu. More information about the activities of the programme is available at Audy *et al* (2013). Disclaimer: the author has participated in the design and operation of Kiútprogram.

The most important difference between the two types is the requirement to present – or not – any kind of financial collateral or assets (real property or other valuables). In the following, I will focus on social microcredit only, omitting “social” for simplicity’s sake.

9.2. Motivations in setting up microlending institutions

The “inventor” of microlending, Muhammad Yunus launched his experiments in 1976, providing unsecured loans of relatively small amounts to people living in deep poverty in order to enable income generation. He established the Grameen Bank in 1983 after processing and assessing the results of early initiatives and considering the fact that traditional commercial or investment banks are not willing to serve the poor. At the launch of his experiments, his motivation was clearly his empathy with the poor and his commitment to alleviate poverty (Yunus, 1999).

In his book, he outlined the concepts of two types of social entrepreneurship:

1. “Companies that focus on providing a social benefit rather than on maximizing profit for the owners, and that are owned by investors who seek social benefits such as poverty reduction, healthcare for the poor, social justice, global sustainability, and so on, seeking psychological, emotional, and spiritual satisfaction rather than financial reward.” (p. 274).
2. “Profit-maximizing businesses that are owned by the poor or disadvantaged. In this case, the social benefit is derived from the fact that the dividends and equity growth produced by the PMB will go to benefit the poor...” (p. 275).

The first type seems to move away from the neo-classical paradigm since it intends to build on the intrinsic motivations of investors, allowing for altruism. Although not obvious from the above quote, it is clear from the context and from his own practice that Yunus assumes that this kind of commitment is financially constrained: non-profit in the sense that it does not return a profit, however, it cannot be unprofitable in the long run, it should be – at least – sustainable.

In the second version, this condition is more transparent. However, another issue arises: are socially excluded people living in deep poverty capable of truly enforcing their ownership rights? I am not aware of any instances when this actually has worked successfully – except for some financial self-help groups consisting of at most a couple of dozen members. What usually happens is that the sponsors’ donations generate profit primarily for the management.

In both versions, apparently the implicitly assumed “psychological, emotional and spiritual satisfaction” gained by sacrificing the financial rewards fades away as soon as the capital starts to shrink; this seems to be a very unique ethical approach that financially curbs the degree of empathy. Thus the dissociation with neo-classical principles is only partial. I will get back to this issue later.

More or less parallel with Yunus’s model, the Indonesian microcredit system was born (Bank Rakyat Indonesia). Marguerite Robinson (2001) covered this initiative with a telling title and subtitle: the expression *sustainable* shows up in the subtitle, *Sustainable Finance for the Poor*. In reality, it’s not only about sustainability but also profitability. The title of the book, *The Microfinance Revolution*, refers to the “revolutionary”

development that Ira Lieberman, former CEO of the World Bank and author of the foreword describes as “providing financial services – *for profit* – to the working poor” [my emphasis – G.M.]. Or, as the author says: “The focus then turns to the recent shift in microfinance from government and donor-subsidized credit delivery programs to financially self-sufficient institutions providing commercial microfinance.” (p. xxxvi)

The author is clearly empathic with the poor with a strong sense of commitment, but also strongly committed to pure market economy-based solutions. The standpoint that the poor can be helped in a profitable way – and only in a profitable way – has soon turned into a neoliberal policy doctrine. Milford Bateman (2010) gives a lively description and criticises this process. “In short, commercialized microfinance appears to have *undermined* the long-term fight against poverty and underdevelopment in Bolivia” (p. 120) writes Bateman, referring to a concrete example, but later he generalises this statement. According to his opinion it is not more than a myth that microfinance directly helps the very poorest, empowers the poor and the women, or is self-sustainable. Bateman also highlights the fact that it is especially harmful if the loan recipients work in the informal economy, too.

Even if demand for profit has not, the myth of self-sustainability and the fundamentally neo-liberal ideas have deeply saturated into the thinking of EU decision-makers, too. Because of its typical approach, it is worth to quote a study on microcredit issued by the European Commission (2003) a little longer from; however, similar phrasing can be found in almost all EU documents on microcredit.

“Self-sustainability is a major issue for a microcredit fund. One way of achieving this goal can be to charge an above market interest rate. An above market rate is acceptable where the risk is higher. For example, in a pure subordinated loan, with no collateral at all by the micro-entrepreneur, the interest rate can be higher than for a traditional loan in order to cover all risks.” (p. 29.)

So in order to help the poor who can't present any type of collateral, they should be charged higher interest rates than the well-off.

Regarding consequences, this paragraph has a special significance: “In several European countries, a below-market interest rate practice (soft loan or even interest-free loan) still exists. According to different sources, however, these soft loan funds provided by private microcredit institutions should be regarded as being of limited value and further development of these funds should not be encouraged. Such private funds cannot be self-sustainable, and therefore independent of public subsidies.” (ibid. p. 27.)

Based on the related literature and a detailed description of an Indian case study, Ghosh (2013) thinks that the crisis swept away the belief in the poverty-alleviating function of microcredit once and for all: “However, the mushrooming of MFI's [microfinance institutions] of both non-profit and profit varieties was very quickly followed by crises in many of the same developing countries that were earlier seen as the most prominent sites of success, in the typical manner of most financial bubbles that burst.” (p. 1204).

According to the donors and designers of the above-mentioned Kiútprogram, the fundamental cause of microlending failures was the profit-oriented approach of MFIs and the requirement of self-sustainability. One of the primal causes of persistent poverty and the reproduction of social exclusion is the lack of capital, as Sen puts it in the

introduction, being “ill-endowed”.¹²⁷ Without providing capital, microcredit can only maintain the level of disadvantage even in the best case. In this sense, three types of capital should be mentioned here: financial, knowledge and social.

Kiútprogram provides knowledge and social capital by the continuous and intense presence of field workers and mentors. Training and assistance are provided to organise acquisitions and sales, and build a network with the non-Roma society. In order to integrate into the formal economy, in the first phase free accounting services are provided and the programme also covers a part of the social contribution payments. This is a high-cost, non-redeemable expense where self-sustainability is not an option. On the other hand, investment resources are provided as a loan – partly to avoid the crowding out effect. However, lending losses are unacceptably high from a purely market aspect, about 40%. From a different viewpoint, however, this means that 60% of the previously long-term unemployed people (mostly Roma people who face discrimination in the labour market) have got jobs as self-employed and become capable of providing a living for their families. Microlending combined with mentoring conducted by the Kiútprogram is cheaper and more effective than the government-financed public works programme.¹²⁸ There are almost no other effective labour-enhancing programmes in Hungary targeting the marginalised, or even more narrowly, the socially excluded groups.¹²⁹

In contrast to the concepts described in the above cited EU document, Kiútprogram is financed by private sponsors who are intrinsically motivated *solely* by the social commitment towards the poor, and who do not expect self-sustainability of the MFI.¹³⁰ They expect profitability not from the MFI, but the micro-businesses.

The lack of motivation for being profitable, the complete lack of financial incentives on the sponsors’ side contradicts the pure business logic so much that the Open Society Institute, a foundation financing several Roma programmes and managed by people honestly committed to social change, refused to sponsor the programme because of the lack of self-sustainability.

I do not cite this because this specific incident is so noteworthy but because there is a strange contradiction here. In case of purely philanthropic initiatives that target the alleviation of the symptoms of deprivation – but not suitable of enhancing social mobility – it is generally accepted that sponsors and volunteers are intrinsically motivated. This type of charity initiatives usually meet approval from the society and being financially profitable is not even a question.

However, if the aim of the initiative is to improve persistent marginalised living circumstances by integrating people in the labour market then considerations regarding financial incentives immediately come to the front. From the viewpoint of the sponsors of MFIs, the failure of microcredit is due to the mixing of financial incentives and

¹²⁷ For further details see Kiútprogram (2012).

¹²⁸ For further details see Audy *et al* (2013).

¹²⁹ There are some excellent educational programmes, but these only have long-term effects in terms of increasing the chances becoming employed.

¹³⁰ Kiútprogramme received considerable EU funding between 2010 and 2012. However, they did not receive it as a microcredit initiative, but through regional policy bodies, as a one-time financing of a pilot programme to facilitate the integration of the Roma: *Pilot Project Pan-European Coordination of Roma Integration Methods - Roma Inclusion*. See: http://ec.europa.eu/regional_policy/activity/roma/pilot_en.cfm

intrinsic motivation.

There is one more important lesson learnt from the short history of microlending described above: originally it was meant to be a social innovation facilitating the financial inclusion of people living in deep poverty. During its implementation it was proven that – if appropriate techniques are applied, which will be discussed below – loans can be provided to poor people contrary to earlier views. All this resulted in the foundation of organisations whose activities contributed more to the deepening than the alleviation of deep poverty.

9.3. The marginalised on the Hungarian labour market: incentives versus inner motivations

Compared to other European countries, employment rates are very low in Hungary; in 2013, 58% of the age group 15 to 64 was employed while the average figure in the European Union is 64%. The employment rate is negatively influenced by undereducated people (less than primary, primary and lower secondary education): only 27% is employed in this group – the EU average is 44% (Eurostat online database, tables named ‘lfsi_emp_a’ and ‘lfsa_ergaed’). The employment rate of the Roma in Hungary is essentially the same (Kertesi & Kézdi, 2011).

In this regard, various Hungarian governments based on a misconceived, vulgarised neo-liberalist ideology adopted the standpoint that unemployment – especially unemployment of undereducated people and the Roma – is mainly the result of factors on the supply side of the labour market. There is a widespread belief that jobless people think they are better off claiming benefits and working illegally when the opportunity arises compared to having a permanent job. Therefore, by reducing the amount and restricting access to unemployment-related assistance, jobless people can be encouraged to take up employment, while public works programmes – paid well below the level of national minimum wage – will instil better work ethic in people. In line with these ideas the amount and payment period of jobseeker’s allowance were reduced, eligibility for jobseekers’ benefit was tightened, the maximum amount of regular social assistance, employment replacement assistance and pay in public works programmes were cut in 2011. (For a detailed discussion on the Hungarian social policy in the last years, see Szikra, 2014.)

Most likely there has not been an experiment of this scale before. In 2014, already half of the registered unemployed participated in public works, while the probability of re-employment in the open labour market from public works programmes fell to 10%. The more often someone is involved in public works, the less likely they are to find a job; in 2013 more than half of people employed in public works programmes were “returning” participants. In terms of livelihood, it is beneficial for people who cannot find a job to take the opportunity to work in as many public works programmes as possible because the amount of employment replacement assistance is too low to live on and continued hardship has a negative impact on job-finding. In other words: once public works is available, simple calculation of a risk-averse jobseeker makes favouring it as the only rational choice. These effects create a special trap that is increasingly difficult to get out from. Public works employment was therefore clearly unable to deliver its promise of

rapid activation of the long-term unemployed on the open labour market.

The above described method of using financial incentives to drive people into the labour market has failed. Hungary is likely to head towards the development of a severely segmented labour market where – including family members, too – nearly one million people will have decreased chances to re-enter the primary labour market. *In brief, marginalisation is stabilised and reproduced, or even expanded* (Cseres-Gergely & Molnár, 2014).

The basic cause of the failure was the flaw in the original hypothesis. If the unemployed could easily get a job, but living on welfare was more beneficial to them, combined with working in the informal sector, then this fact should have also been shown in their life satisfaction. But the contrary is true. Model-based calculations proved that welfare recipients – even if the effects of other factors such as income level, education, health, etc. are filtered – are less satisfied with their lives than others. (Molnár & Kapitány, 2008). But this is not a Hungarian phenomenon, see for example Clark (2010) or Winkelmann & Winkelmann (1998). Being unemployed is not a benefit-maximising decision but a situation without choices.

This rather costly and failed social experiment offers a – sort of – positive function to policy-makers because it “proves” that they have done everything possible, used all available incentives, but *these people* still do not want to work. I use the phrase “positive” in the same meaning as Herbert Gans does in his paper, *The positive functions of poverty* (1972). It is worth citing a fitting quote here: „...the poor can be identified and punished as alleged or real deviants in order to uphold the legitimacy of dominant norms (...). The defenders of the desirability of hard work, thrift, honesty, and monogamy need people who can be accused of being lazy, spendthrift, dishonest, and promiscuous to justify these norms” (p. 280). Along these lines, the law regulating social benefits authorises local governments to revoke welfare benefits from those who are found not keeping their living surroundings clean and tidy by municipality officials.

In the previous paragraph I highlighted the phrase “*these people*”, because it hides a covert reference – yet clear to everyone in Hungary –, namely that it refers to the Tzigane.¹³¹ The implications are not true, of course: although the majority of the active-aged Roma is unemployed, the reverse does not hold true: the majority of unemployed is not Roma, not even the majority of the undereducated unemployed.

Prejudices and public opinion about the idle unemployed is further strengthened by the fact that there is really not enough meaningful public works for so many people. Public works participants who work in areas visible to the general public usually sweep the streets, clean the gutters, rake leaves, mostly in the same place, day after day. Obviously, these tasks are performed with little enthusiasm, trying to slack off as much as possible. A survey among public works participants showed that the average rate of life satisfaction was 20% higher among those who thought that they were doing a meaningful job in the public works programme than among those who found their work meaningless (Farkas, Molnár, & Molnár, 2014, p. 79).

¹³¹ I intentionally use the word “Tzigane” instead of the politically correct “Roma”, which is closer to the generally used Hungarian word (“cigány”). Interestingly, after a quick initial spreading of the word Roma, it stalled and it is now solely used in the public sphere; the vast majority of the Roma do not use it either. „If a politician comes here and says “Roma”, I immediately know that he is going to lie”, as a Tzigane woman told me in a remote village in the eastern part of Hungary.

As a result, it has become a general view even among experts that there are in fact several hundreds of thousand people who could not be re-integrated into the open labour market even in theory. The editor in chief of the periodical *Munkaiügyi Szemle* (Labour Market Review) posits in one of the editorials: "It is time to face the fact that unfortunately there is a reproductive social group of a significant size that fully and permanently dropped out of the labour market, or got too far away to be able to meet its hardening demands." (Munkaiügyi Szemle, 2013/1.)

The main ambition of the founders of Kiútprogram was to prove in a constructive way that this self-apologising train of thought is wrong. Their intellectual starting point is the same as Amartya Sen's: "With adequate social opportunities, individuals can effectively shape their own destiny and help each other. They need not be seen primarily as passive recipients of the benefits of cunning development programs. There is indeed a strong rationale for recognizing the positive role of free and sustainable agency – and even of constructive impatience." (Sen, 1999, p. 11.)

According to this approach, the main cause of the long-term unemployment of undereducated people is not the lack of willingness to work, but the lack of adequate job opportunities for them. As soon as an opportunity arises that *they see as realistic* to improve their own and their family's lives substantively and in the long run, their attitude towards work changes immediately. The vast majority of the participants of Kiútprogram (93%) said that they feel that they are able to do something to have a better future (Audy et al., 2014, p. 15), while the same figure was only 38% measured by the aforementioned survey among public works participants. This shows that intrinsic motivation is strong; to facilitate employment, actual opportunities are needed instead of crafty, artificial incentives.

But this is not so simple. If Kiútprogram offered some kind of employee status with a little more salary than public works then enthusiasm and interest would surely be lower. The main reason is the continuous failures of being employees in the clients' past, or, more generally, career failures, with additional discrimination in the Romas' case.

It is a well-known phenomenon that long-term unemployment undermines self-esteem and failures often lead to aggression (often in the form of self-aggression, e.g., alcoholism), or to the even more characteristic apathy, feeling of helplessness. During fieldwork, the team members of Kiútprogram often have come across the symptoms of "learned helplessness" (Peterson, Maier, & Seligman, 1993). In a part of the Hungarian Roma community, men often experience a strong frustration because they are not able to provide a living for their families.¹³²

To overcome this phenomenon, most potential clients need a strong motivation. The most effective incentive is the loan, which is a rarely seen, huge amount compared with the usual income of the family. In addition, there is no collateral in any form. These poor people had never got this level of trust in their lives. The main difficulty of starting the programme was that potential clients first could not believe that the conditions were real; they thought that there would be some trick or hoax in the background.

The role of trust is prevalent in two aspects. First, we trust the clients' honesty that they

¹³² During the history of Kiútprogram, the typical female dominance characteristic of the microlending practice in developing countries did not happen. In our practice, the clients of the programme are often not individuals, but families.

want to repay the loan; second, we also believe in their potential to succeed with the micro-business (including agricultural production) created with the help of the loan. In the previous section we mentioned that loans work better than capital injection because they do not have an excluding effect. From a different point of view, it is also more practical: free money does not build trust, provides no motivation to do everything for the business.

Kiútprogram is primarily not a microfinance institution, but a special active labour market and micro-enterprise development programme, where microlending is only one, not the most important, but still an indispensable tool.

The practical operation of Kiútprogram has several similarities to Roland Fryer's experiments to improve school performance among mostly black and Hispanic students. His results suggest that student incentives increase achievement when the rewards are given for inputs, but incentives tied to output are not effective (Fryer, 2010). The objective of such incentives is to help students start to learn – then the student has to make the efforts. According to Ruth Grant, financial incentives given to the students are fundamentally harmful, except for one instance that refer to Fryer's experiments: "Yes, incentives undermine intrinsic motivation – but in some circumstances, students may have little intrinsic motivation to begin with. In such circumstances, a child might try something, on account of the temptation of an incentive, that he or she *has been afraid to try* or has been uninterested in trying. Having discovered that success is possible, the child may no longer need the incentive. The incentive would work like a „jump start” for a dead battery." (2011, p. 119 – my emphasis, G.M.)¹³³

Beyond the relationship of incentives and intrinsic motivations, the parallel is further strengthened by the fact that in most cases (mostly in agriculture) our clients must learn the technology of production. Clients who didn't even finish primary school, and usually hate school because of their childhood humiliation are happy to learn while doing productive work for their own good. After the first year, they are able to apply the instructions of pesticides on their own.

The very objective of the incentive is to help clients become active, get started and after a two to three years' learning process they become capable of securing a better living for themselves and their families independently.

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¹³³ I'd like to thank Ro Naastepad who drew my attention to Ruth Grant's book.

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PART 4

Task 1.6: Synthesis and Sharing

10. CRESSI's Common Framework

*Christopher Houghton Budd, C.W.M. (Ro) Naastepad and Cees van Beers*¹³⁴

10.1. Introduction

The subject of this chapter is to frame the findings of the papers and the results of our sharing and discussion of them. It also provides their implications in terms of CRESSI's Common Framework,¹³⁵ comprising the perspectives of Beckert, Sen and Mann.

Thus, it provides a synthesis of this stage of the CRESSI project, and a (tentative) common theoretical framework as it emerges from the eight papers, which is to guide the case studies, measurement and analysis to be undertaken later in the project. Conversely, the work done in the remainder of this project will feed back into the common theoretical framework.

Section 10.2 starts with a succinct explanation of neoclassical economics, particularly elements of it that are most relevant to CRESSI's main theme: social innovation addressing marginalisation. Section 10.3 presents the findings of the papers. Section 10.4 concludes by presenting the implications of this stage of the work for CRESSI's Common Framework.

10.2. A succinct-as-possible explanation of neoclassical economics (NCE) in relation to social innovation addressing marginalisation

Neoclassical economics (NCE) will be easier to understand if we start by briefly investigating the historical and scientific context in which it emerged. While many of today's economic theories have roots in the work of classical economists such as Adam Smith (1723–1790), Thomas Malthus (1766–1834), David Ricardo (1772–1823), and Karl Marx (1818–1883), as well as in the work of the later economist John Maynard Keynes, and even in the economic work of ancient Greek philosopher Aristotle¹³⁶, NCE starts with the marginal revolution of the 1870s which involved a shift away from classical theories based on *substance* or 'cost-of-production' theories of value (Deane 1990; Weintraub 2002) and the central classical concept of social surplus (Bharadwaj 1986), towards the marginal emphasis on value as a *relationship* between costs of production and subjective elements in the person wanting to obtain the object ('consumer preference'). Henceforth, price was perceived as the outcome of the interaction of 'supply and demand'; "value is linked to unlimited desires and wants colliding with constraints, or scarcity" (Weintraub 2002). Leaving the relationship with the British historical context of an upcoming middle class and the growth of mercantile

¹³⁴ The authors are grateful to Rafael Ziegler, Nadia von Jacobi, Klaus Kubezko, Attila Havas, György Molnár, and Justus Lodemann for fruitful discussion and for valuable comments on an earlier version of this chapter. Any errors in this chapter remain the responsibility of the authors.

¹³⁵ Summarised at the end of D1.1 and also at the end of this chapter.

¹³⁶ In particular Aristotle's concepts of use value and exchange value.

capital for sociologists of science and economic historians to explore, attention shifted away from the study of actual, historical, dynamic processes of production taking place in space and time, to subjectivist (utilitarian) and ahistorical analysis of axiomatic concepts such as consumer preference and market equilibrium.

When, after about a century of ‘early neoclassical thinking’ – by William Stanley Jevons (1835–1882), Carl Menger (1840–1921), Francis Edgeworth (1845–1926), and Alfred Marshall (1842–1924) – neoclassical economics was finally established as a complete and consistent general-equilibrium system, efforts concentrated for some time on the question how utilitarian (self-interested) human behaviour and perfect competition could spontaneously bring about general equilibrium – a concept derived from nineteenth-century natural science¹³⁷ (Mirowski 1991). Inspired by the work of Léon Walras (1834–1910), Kenneth Arrow and Gérard Debreu (1954) finally showed that, under a series of very restrictive assumptions, there exists a set of prices at which supply equals demand (Schlefer 2012).

How do these characteristics of NCE relate to the main theme of the CRESSI project: the creation of economic space for social innovation addressing marginalisation? Two issues are highlighted below regarding, firstly, neoclassical equilibrium, and secondly, its assumptions.

What does the neoclassical equilibrium set of prices entail? With its focus on economic growth – an understandable choice given the low average living standards in the nineteenth century – NCE is concerned with the problem of how to maximise the output of commodities given available endowments of land or nature (N), labour (L), and capital (K). Naturally, the highest possible output will be obtained when N , L and K are used efficiently, i.e. not wastefully.¹³⁸ The neoclassical assumption is that efficiency is guaranteed if N , L and K are traded in markets governed by self-interest (profit-maximising producers and utility-maximising consumers), that is, if N , L and K are traded in the same way as commodities are traded. Prices will signal where N , L and K are most needed, and ensure that the ‘factors of production’ end up where demand for them is highest. The maximum output which thus will be reached entails full employment of all ‘factors of production’.

The distribution of income brought about by ‘factor markets’ is taken to reflect each individual’s marginal productivity. With classical concepts such as subsistence wage and cost-based pricing discarded, neoclassical markets do not allow for, for instance, a subsistence minimum or, on the other hand, a cap on the price of land or capital; on the contrary, such ‘interventions’ are believed to reduce growth and create unemployment. That such statements are hard to prove, because they are built on tautologies, is a methodological issue yet to be resolved (Blaug 1992). Pending a solution, countries where NCE is implemented in a relatively pure form, such as Britain and the U.S., experience relatively high poverty rates, alongside high average per capita incomes. For

¹³⁷ Especially the formalisation, in the 1840s (based on earlier work by Joseph-Louis Lagrange (born Giuseppe Lodovico Lagrangia), Pierre-Simon Laplace, and Sir William Rowan Hamilton), of the two laws of thermodynamics (the law of conservation of energy/matter, and the entropy law); see Philip Mirowski (1991); Nicholas Georgescu-Roegen (1971).

¹³⁸ Looking at output from the side of supply, NCE disregards an independent role for demand, assuming that (at the macro-level) it will adjust to what producers offer (‘Say’s Law’). This distinguishes NCE from Keynes who, observing the mass unemployment of the Great Depression, concluded that Say’s Law (‘supply creates its own demand’) does not always hold.

those who consider this amoral, U.S. economist and Nobel prize laureate Paul Krugman explains: "... the amorality of the market economy is part of its essence, and cannot be legislated away". Labour should be traded, "just like apples or coal"; markets are "absolutely and relentlessly amoral". The only option to deal with poverty and marginalisation is "after-market intervention".¹³⁹ Within NCE, distributional issues are relegated to a subfield of NCE called 'welfare economics' (Atkinson 2011). Welfare economics ranks the effects of policy interventions in terms of the social welfare they entail. Based on neoclassical assumptions, its outcomes tend to involve a trade-off between 'efficiency' and 'equity'; exploration of the possibility of efficiency going hand in hand with everyone's material existence needs being met is not a prominent neoclassical concern:

"An economy can be [Pareto] optimal ... even when some people are rolling in luxury and others are near starvation as long as the starvers cannot be made better off without cutting into the pleasures of the rich. If preventing the burning of Rome would have made Emperor Nero feel worse off, then letting him burn Rome would have been Pareto optimal. In short, a society or an economy can be "Pareto optimal" and still be perfectly disgusting." (Sen 1970)

Thus, the neoclassical equilibrium set of prices does not preclude marginalisation. That is, the fact that it brings about equilibrium does not guarantee that the equilibrium price vector – including the 'price' of labour, land and capital – permits each individual to cover his or her material existence needs. As neoclassical economists acknowledge, "a resource allocation can be inter-temporally efficient and yet be perfectly ghastly" (Dasgupta & Heal 1979: 257). Yet, the assumption is that if the economy is run on neoclassical assumptions and prescriptions, total output will be higher, and this will permit compensation – through after-market redistribution – of those whom the market hasn't served well. In other words, the scale effects of adherence to neoclassical assumptions will allow 'winners' to compensate 'losers'. However, that the wealth that is created will eventually 'trickle down' is assumed rather than conclusively proved. Material existence for everyone is *assumed* to be taken care of 'after the fact'.

Nevertheless, such neoclassical results – of compensation and 'trickle down' – only hold within the framework of the restrictive assumptions underlying the Arrow-Debreu model. If 'externalities' – such as commitment to desired social or environmental outcomes – cannot be ruled out, the neoclassical conclusions – e.g. of scale effects outweighing distribution effects, or a trade-off between efficiency and equity – no longer hold. Walrasian general equilibrium (GE) solutions do not hold in a world where neoclassical assumptions do not apply.

The discovery that most neoclassical assumptions do not hold in reality may be the reason why NCE has moved away from investigating GE to microeconomic partial equilibrium studies of situations where one or more assumptions do not hold. However, the implications for GE are seldom analysed; in general, NCE continues to fall back on the theoretical Walrasian model, basing its policy conclusions on it, rather than working out how the model would have to change if the micro-studies of 'market failures' and 'externalities' were taken seriously. The latter would imply a paradigm change, which most researchers are not prepared to explore.

¹³⁹ Paul Krugman, *Washington Monthly*, September 1998 (Book review of *The Living Wage. Building a Fair Economy* by Robert Pollin and Stephanie Luce.)

How did NCE come to prevail? This may be due in no small measure to its rational, mechanical metaphor, borrowed from nineteenth-century physics (Mirowski 1991), which readily lends itself to mathematisation. “Agents were like atoms; utility was like energy; utility maximisation was like the minimisation of potential energy, and so forth” (Weintraub 2002). This rational, mechanical metaphor may be appealing for two reasons: first, because it speaks the language of physics, which has strong connotations of objectivity;¹⁴⁰ secondly, because it may invoke the idea – real or illusory – that social goals come within reach simply by modelling the system and by altering – from outside – its parameters: a technocratic or social-engineering approach. Since in the past two to three decades NCE, including its explanation of ‘production factors’, has generally been taught at schools and universities as if it were the only (sensible) perspective on economics that exists¹⁴¹ – indeed a ‘meta-theory’ framing all economic as well as non-economic thinking (Weintraub 2002) – it is the dominant perspective informing policy¹⁴², the presence of other theories and attitudes notwithstanding.

The question for the CRESSI project is to what extent this theoretical framework is suited for analysing and furthering innovation, in particular social innovation addressing marginalisation. Although NCE originally was not developed to deal with innovation, later additions to NCE have dealt with technological progress, although treating it as an exogenous factor. More recently, neoclassical growth theory has attempted to endogenise technological progress, attributing it to profit-maximising behaviour in oligopolistic conditions at the micro-level and, typically, R&D investment, competition, and average education levels at the macro-level. NCE has also taken on board concepts from evolutionary, institutional, and behavioural economics in an attempt to add realism to NCE’s strict and axiomatic assumptions. However, such explanations still rely heavily on core neoclassical assumptions and the ruling out of ‘externalities’ which may be critical for social innovation, in particular commitment to selfless objectives:

“Mainstream economic theory makes powerful use of the assumption of full-blooded pursuit of self-interest. Some specific results, including the central Arrow-Debreu theorems on the efficiency and Pareto optimality of competitive equilibria, are based on ruling out “externalities” (including altruism) altogether, except in some very restricted form. Even when altruism is allowed (as, for example, in Gary Becker’s model of rational allocation), it is assumed that the altruistic actions are undertaken because they promote each person’s own interests; there are personal gains to the altruist’s own welfare, thanks to sympathy for others. No role is given to any sense of commitment about behaving well or to pursuing some selfless objectives. (Sen 1997)

For an understanding of the innovation process, and social innovation in particular, ‘other-interest’ and commitment to behaving well may be critical, and their absence might act as an inhibitor in the innovation process. The inability of NCE to deal with such ‘externalities’ explains the need for novel frameworks and concepts. We come

¹⁴⁰ Whether recent discoveries of subjectivity in physics corroborate such connotations is another matter.

¹⁴¹ Often one is told, directly or indirectly, that if one does not accept the tenets of neoclassical economics – in particular the definition that economics is “...the science which studies human behaviour as the relationship between ends and scarce means which have alternative uses” Lionel Robbins (1932) – one is not an economist. This, combined with the abolition of economic history, the history of economic thought, and the philosophy and sociology of science as subjects in the economics curriculum in the past three decades, results in students having no reference point from which they can contextualise or verify such claims.

¹⁴² Whether as theory driving the policy-making process or as after-the-fact legitimisation.

back to the latter (in Section 10.4) after investigating causes of ‘externalities’ that are particularly relevant for social innovation.

10.3. ‘Externalities’ in social innovation

The neoclassical concept of ‘externality’ is defined as “The effect of one party’s economic activities on another party that is not taken into account by the price system” (Nicholson and Snyder 2007: 359). Positive externalities are benefits to society whose costs (whether of goods production or service provision) cannot be recouped by their producer. An example is an innovation in waste water cleaning by a firm which benefits everyone while those benefiting from it are not charged. Negative externalities are costs to society that cannot be charged. An example is (possible) negative health impacts of WiFi¹⁴³ which affect everyone but are not charged to the firm causing the problem, nor to the users of the goods. Because the externalities are not charged, they do not appear on the income and expenditure account and balance sheet of profit-maximising producers (*cf.* Muller, Mendelsohn and Nordhaus (2011)); hence they are not minimised (for negative externalities) or maximised (for positive externalities). In neoclassical terms, the costs and benefits associated with the generation of externalities are ‘non-appropriable’. The (assumed) social implications of ‘externalities’ are that goods (and services) with positive benefits will be under-supplied; those with negative externalities will be over-supplied.

The neoclassical solution is to price ‘externalities’ so that they can be ‘individualised’ and ‘internalised’, thus becoming part of processes of profit maximisation and cost minimisation, which is expected to simultaneously maximise social benefit and minimise social cost. It is the self-interestedness of profit maximisation that, according to NCE, leads markets to produce whatever consumers want (subject to income constraints). Externalities undermine the social benefits of individual self-interest, in the sense that it no longer gives optimal societal results (social benefits are under-produced and social costs are not minimised). The solution is to price, and create markets for, externalities so that they can be internalised, which will lead to socially optimal levels of production.

However, to make matters more complicated, other possibilities are also thinkable (see also Bootle below). Rather than being charged to specific producers or consumers, costs may also be shifted forward to the public balance sheet and so on-charged through taxation. Or costs are arrived at reversely, for example the costs of police on a school campus because the content of teaching does not hold the students’ attention so they become bored and indisciplined.

Such limits of self-interest as the basis for our social order – indeed, of self-interest as a “civilising medium”; see Hirschman (1997) – are not readily captured by NCE’s underlying more fundamental assumption, epitomised as *homo economicus*. But they are a concern to social innovators addressing marginalisation.

¹⁴³ See, for instance, <http://www.freiburger-appell-2012.info/en/home.php?lang=EN>; http://www.electrohealth.nl/images/govt/Raad_van_Europa_12608_dangers_of_electromagnetic_fields.pdf; http://www.electrohealth.nl/images/elektrogevoeligheid/EMF_Guideline_OAK-AG_2012_03_03.pdf.

A problem with an exclusively neoclassical solution is that the externalities concerned may not be quantifiable in any precise way. Moreover, the underlying assumptions regarding human motivation may not (fully) hold for social innovators and/or for the problems they are concerned with. If governance and models for entrepreneurship and innovation based on price only incentives cannot bring about efficient solutions to marginalisation, there would be a need for novel analytical frameworks relevant for social innovation.

The papers in this report suggest that the following causes of ‘externalities’ are important in social innovation:

- 1) *Creation and spreading of knowledge* – Social innovation depends on and itself is likely to further the creation and spreading of new knowledge. When innovation is interpreted in a more narrow sense, as newly-generated organisational or technological knowledge to improve processes and/or products, it tends to be under-produced in perfect competition, because the new knowledge is non-exclusive, which makes it impossible for the innovator to appropriate the returns and thereby recoup the cost of innovation (Arrow (1962), referred to by Kubeczko, this report). This is likely to hold more strongly for social innovation.
- 2) *Dynamics and uncertainty* – Social innovation by its nature involves taking decisions under uncertainty – since it will often be impossible to attach exact probabilities to future outcomes. The neoclassical way of reaching equilibrium requires an overview of all possible outcomes regarding production and consumption, present as well as future, with probabilities attached to all of them. In a world characterised by innovation, such information is not available (see Havas; Kubeczko; von Jacobi; Ziegler). A framework for social innovation will have to show ways for dealing with *uncertainty* and *dynamic efficiency* (Schumpeter) rather than perfect information and static efficiency.
- 3) *Trust and motivation* – A framework for analysing social innovation would also take into account the negative effects which extreme poor conditions may have on trust and motivation (Molnár). This is an example of a ‘negative externality’ which is unlikely to disappear automatically within a competitive, free-market framework.
- 4) *Myopia, or discounting the future* – Benefits of social innovation are likely to include non-economic, non-monetised dimensions, in particular: fulfilment of capabilities (Sebastianelli, Chiappero and von Jacobi) or capacities (Naastepad and Houghton Budd). The creation of such benefits requires funding. At present, however, funding is mostly commercial and linked to projects generating short-term, private, financial returns. Long-term, social, and non-monetised returns are discounted, although in the end, such benefits are likely to improve economic outcomes as well. These are examples of positive externalities which may be created by social innovation and are not captured by NCE.

Can the externalities involved in social innovation be removed by internalising them, as would be the neoclassical solution? The internalisation of externalities related to social innovation may be problematic, because the pricing (or ‘monetisation’) of external benefits of social innovation – such as increased capacities and/or capabilities – poses problems of a fundamental nature. The first concerns the valuation (in money terms) of impacts such as ‘increased access to health or education’, ‘greater self-worth’, or ‘more

fulfilment' of the (previously) marginalised.

Second, even if it were possible to attach a monetary value to such benefits, the next question would be how we can make sure that the prices attached to them are socially optimal. A socially optimal price would reflect the value of the benefit over its entire life time, not just to the person receiving the benefit, but also to society at large which benefits from the enhanced capabilities and/or capacities of the individual. Such difficulties are likely to greatly complicate if not preclude the determination of the 'socially optimal' value.

A related fundamental problem is the choice of the 'appropriate' social rate of discount to be used to turn 'future benefits' into 'present value' terms. For example, enhanced capabilities may have effects in the distant future, for instance on children, grandchildren, pupils, students, colleagues, in short, everyone whose capabilities are enhanced and whose capacities can unfold thanks to the person whose capabilities were enhanced in the first place. At what discount rate are these to be valued?

Further, suppose the relevant benefits can be properly priced, so that they can act as incentives for social innovation; they would then have to be sufficiently high to compensate for the risk involved, which is likely to be high, since the outcome of social innovation is fundamentally uncertain. Moreover, such results have to be comparable to alternative investment opportunities. If the internalised benefits of social innovation do not sufficiently raise the rate of return to such innovations (relative to risk), it will be unlikely that these price incentives will achieve what we would like them to do: mobilise greater funding for social innovation.

Finally, and most importantly: apart from the neoclassical question whether externalities *can* be monetised and whether a market for them *can* be developed, another question that arises is whether they *should* be monetised and marketed? This takes us to the core behavioural assumptions of NCE, i.e. its perspective on human nature. According to NCE, people both are *and* should be motivated by financial gain. This can be understood when the reason why NCE emphasises these human qualities is understood. NCE has, from the beginning, been concerned with economic growth. This may be understandable in the context in which it emerged, about two centuries ago, when living standards were much lower than today, and where an expansion of opportunities – indeed capabilities – of people required, first of all, an increase in the number and quality of goods available to them. The neoclassical idea was that the quickest way to achieve this would be through (1) private property and (2) the pursuit of self-interest. For if self-interested persons own capital, what will they do? They will attempt to multiply it. This capital became the basis for the expansion of the productive base of the economy. For in the days of Adam Smith, when financial markets were not as ubiquitous as they are today, the way to accumulate capital was to start a factory and produce goods. This is what Adam Smith called the 'invisible hand': when an entrepreneur expands the number of goods which people have at their disposal, he serves society as much as he serves himself, even though the former was no part of his intention. Private benefit equals social benefit. But what does accumulation mean in today's context of an economy characterised by 'financialisation'? Does accumulation still add to physical investment and the expansion of goods? Indeed, does the expansion of goods have the same priority today as it had two centuries ago – a question raised by Keynes already in 1930 and by Amartya Sen and many others today?

The rise of NCE should be seen also in the social context of 18th-century Britain. When NCE emerged, its emphasis on self-interest was part of an emancipatory movement. The amassing of mercantile capital gave an upcoming middle class a ground to stand on, independently of norms, values and rules set by the Church, the state and the nobility. Capital gave human beings a basis on which they could stand on their own, independent of the restraints set by tradition, permitting them to pursue their own individual task in life. Are NCE, and capital, emancipatory still? The papers in this report suggest that this may require a further step in the development of NCE, or economics in general: the inclusion of ‘other-interest’, ‘ethical individualism’ or ‘character’ in addition to self-interest (see also Section 10.4). This may be the way to, in the words of Roger Bootle of London’s *Capital Economics*, “save capitalism from itself”.¹⁴⁴

For if today, thanks to the increase in living standards achieved through two to three centuries of accumulation, other – mainly non-material – values come into view, is pursuit of self-interest only the way to achieve them? In relation to non-material dimensions of life, the human being tends to be intrinsically motivated (committed) rather than driven by external (price) incentives. The papers in this report point to perspectives on human nature according to which human beings are ‘intrinsically motivated’, ‘committed’, or have ‘character’. Indeed, concerns are that insistence on incentives in relation to non-material aspects of life may even have counterproductive effects. Most importantly, it may cause what Frey and Oberholzer-Gee (1997) have called “motivation crowding out”, and erode intrinsic motivation itself (Grant 2011). In short, in the case of non-material dimensions of life which tend to be important in contemporary society and in social innovation – such as capacities and capabilities –, one-sided emphasis on incentives may lead to their ‘under-production’. This is the crux of the question, and an important subject for further investigation.

Today, the neoclassical principles which were developed originally to deal with the production of goods are increasingly applied also in the realm of non-material, non-economic dimensions of life. This becomes visible already in the notion of ‘services’, but more concretely in terms of things such as education, research, wellbeing, even spiritual aspects of life such as morality and a sense of meaning and direction in life.¹⁴⁵ Perhaps related to reduced possibilities of further expansions of the economy proper – given contemporary phenomena such as ‘demand saturation’, ‘secular stagnation’, ‘de-growth’ –, the imperative of accumulation increasingly draws non-material, non-economic dimensions of life – which previously were acknowledged, for instance by macro-sociologists such as Max Weber, to belong to non-economic realms (*cf.* Mann’s ‘culture’) – into the economic realm. As a consequence, health care, education, research, wellbeing, even capabilities, are now also called ‘goods’, and new ‘markets’

¹⁴⁴ “*The Trouble with Markets* has grown out of my burgeoning worry that the financial collapse of 2008/9, the essence of which I can claim to have foreseen, imperils not just the economy but capitalism itself. Globalisation, the root of recently low inflation and increased prosperity, is at risk. And dare I say it, democracy, the root of everything is at risk as well.” See <https://www.capitaleconomics.com/staff/roger-bootle.html> and Bootle (2012) *The Trouble with Markets. Saving Capitalism from Itself*, London: Nicholas Brealey Publishing.

¹⁴⁵ For instance, finding a gene for morality, or drugs or implantable chips for enhanced attention and cognition, opens up prospects of new ‘markets’. But does this improve people’s capabilities and capacities, or preclude their unfolding and development?

are created for their ‘production’.¹⁴⁶ Does this create sufficient economic space for, for instance, what the ‘Capability Approach’ calls ‘evaluative space’ and ‘ethical individualism’? Will it lead to socially optimal levels of the non-material dimensions of human life, at socially optimal prices and socially optimal quality?

One of the reasons for such ‘economic imperialism’ (Lazear 2000) is the lack (real or imagined) of other perspectives on these issues. In an attempt to fill this lacuna, the papers in this report point to novel theoretical frameworks and concepts as well as novel institutions and economic solutions that may be more adequate to deal with the non-material nature of the factors that are important in addressing marginalisation (see Section 10.4).

10.4. Towards theoretical foundations for social innovation: CRESSI’s Common Framework

In terms of CRESSI’s Common Framework, as represented by Table 1 and Figure 3 in Deliverable 1.1 (reproduced below),¹⁴⁷ the papers in this report agree that social innovation requires intellectual space for a reconsideration and widening of ‘cognitive frames’ (in terms of Beckert) or ‘culture’ and ‘ideology’ (Mann) – in particular, of NCE and theories derived from it, that is, most of what today is regarded as standard economics.

This, in turn, requires ‘space’ in institutions (Beckert) and politics (Mann) for the evaluation and rethinking of values and ideals. Finally, intellectual and institutional space depend on the economic space created by their funding.

¹⁴⁶ Examples are the ‘health care market’, the ‘market’ for higher education; ‘social impact bonds’; the opening up of psychotherapy and psychiatry to financial investors.

¹⁴⁷ See: C. Houghton Budd, C.W.M. Naastepad, and C. van Beers, "From ‘Common Framework’ to measurement and analysis", in C. Houghton Budd, C.W.M. Naastepad, and C. van Beers (Eds.) (2015), *Report on Institutions, Social Innovation & System Dynamics from the Perspective of the Marginalised*, CRESSI Deliverable 1.1, Chapter 11. Available at: <http://www.sbs.ox.ac.uk/ideas-impact/cressi/publications-0>

Table 1: Integration of Sen, Beckert and Mann (1)¹

Sources of Power ²	Kinds of:		
	Marginalisation (1)	Social innovation (2)	Capabilities (3)
1. Cultural (Ideological)	Cm	Ci	Cc
2. Economic	Em	Ei	Ec
3. Security-related (Military)	Sm	Si	Sc
4. Political	Pm	Pi	Pc
5. Artefactual	Am	Ai	Ac
6. Natural	Nm		Nc

(1) Based on: Risto Heiskala (2014) Relating Mann’s conception to CRESSI (see this report).

(2) Note that this matrix is based on RH’s *elaboration* of Mann’s *The Sources of Social Power*.

Mann distinguished four sources of social power: RH adds two sources (natural and artefactual) while renaming two others (‘ideological’ becoming ‘cultural’ and ‘military’ becoming ‘security-related’).

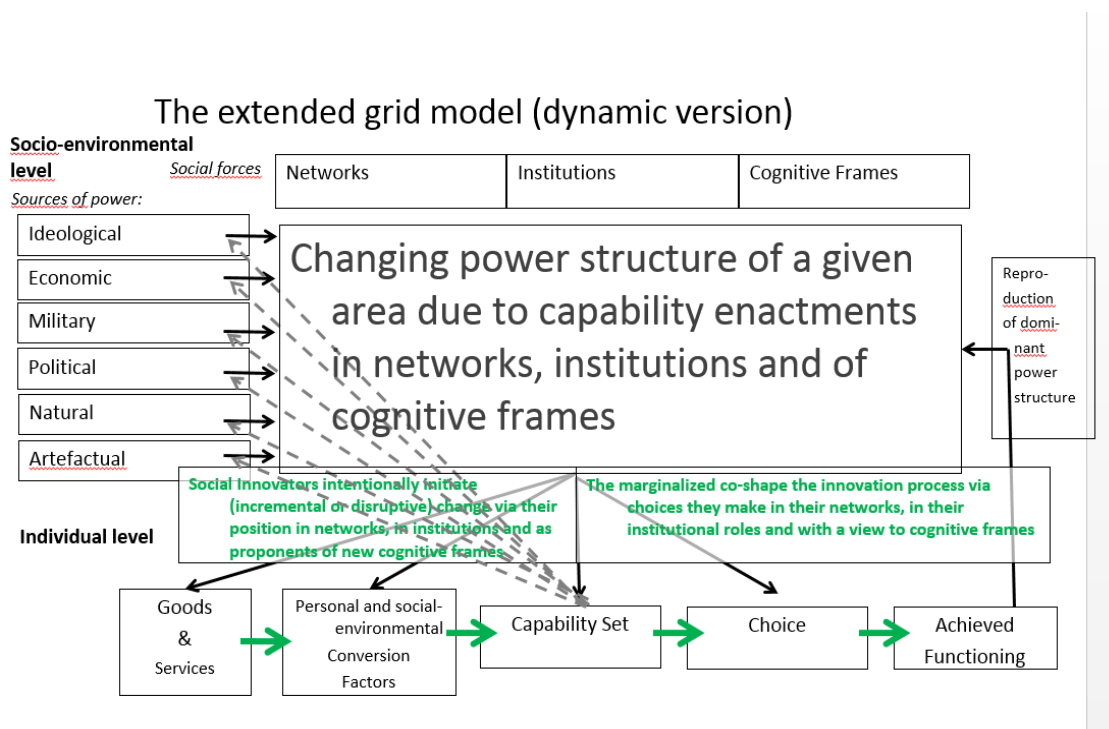


Figure 3: The Extended Social Grid Model and Social Innovation

More specifically, the papers in this report suggest that social innovation addressing marginalisation may critically depend on the following.

10.4.1. The creation of intellectual, institutional and economic space

Rather than adherence to predetermined rules (von Jacobi) and goals (Ziegler; Lodemann), social innovation requires space for existing ideas to be evaluated, for novel ideas to be born and developed, and for will grounded in ‘ethical individualism’¹⁴⁸

¹⁴⁸ In the Capability Approach, “Ethical individualism ... postulates that individuals, and only individuals, are the units of moral concern [so that] when evaluating different states of social affairs, we are only interested in the (direct and indirect) effects of those states on individuals” (Robeyns 2005).

(von Jacobi; Sebastianelli, Chiappero and von Jacobi). This may involve a reconsideration of current paradigms and ‘best practices’.

Bringing into practice novel ideas requires institutional and political space. Institutions (including legislative processes and regulation) reflect values, collective interests and, in terms of Mann, social powers. At present, such values are largely informed by the values and conceptions of NCE (Kubeczko) including a one-sided focus on incentives and work ethic (Molnár). Social innovation, on the other hand, will require an institutional and policy setting adequate for the generation and distribution of knowledge (Kubeczko), learning and acquisition of entrepreneurial qualities (Molnár), and evaluation, renegotiation and modification of values and social objectives (von Jacobi). Finally, coordination of plans and sharing of information and (collective) interests with other individuals and groups may help overcome (assumed) atomistic behaviour and improve decision-making concerning social innovation (von Jacobi).

Without material needs being met, evaluative and institutional space will remain illusory. Both, therefore, require the creation of economic space, in particular, the channelling of funds towards financing intellectual and institutional space. This, in turn, requires novel economic underpinnings, both intellectually (see point 10.4.3. below) and in practice (see 10.4.2).

10.4.2. ‘Other-interest’

The replacement of market automatism with conscious evaluation and rethinking of values will place individuals before the task of balancing their own interests with those of others.

The CRESSI project advocates a Schumpeterian approach to innovation, in that Schumpeter places the entrepreneur centre-stage (see also the papers by Ziegler and Molnár). But entrepreneurship can be self- or other-serving. ‘Other-interest’ would involve discussion of the normative presuppositions and implications of entrepreneurship and innovation, and of maintenance of the health and integrity of the system (Ziegler); it would also involve creating room for commitment (Lodemann). For although social innovations need to be profitable in order to stay in business (Molnár), they are often not developed without the presence of committed entrepreneurs, financiers and customers prepared to go against, rather than passively responding to, market incentives.

10.4.3. A dual theory of value and capital

The above suggestions take us to the heart of economics and finance. To raise them is to question the concept of *homo economicus*, asking what wider image of the human being is a match for social innovation. This may require an expansion of *homo economicus* into a more virtuous successor who includes ‘intrinsic motivation’ (Molnár), ‘ethical individualism’ (von Jacobi; Ziegler; Sebastianelli, Chiappero and von Jacobi) and ‘character’ (Naastepad and Houghton Budd). It is only when ‘incentives’ are replaced by a sense of ‘telos’, as well as commitment to it (‘character’, ‘intrinsic motivation’, ‘ethical individualism’) that capital can become available for purposes other than self-interested accumulation and preservation of capital (Naastepad and Houghton Budd).

From an economic-sociological point of view, the ‘Capabilities Approach’ goes a long way to challenge the assumption of *homo economicus* as a concept for humanity and as the foundation for its economic dealings (Sebastianelli, Chiappero and von Jacobi). Its notions of ‘diversity’, ‘plurality of scope’, and ‘multiple evaluative spaces’, for example, directly and specifically challenge neoclassical atomistic individualism.

A main reason why NCE builds on the notion of *homo economicus* lies in the role it assigns to capital (Naastepad and Houghton Budd). NCE (as well as in most other streams of economic thought) focuses on economic growth, and capital serves this purpose. According to NCE, the quickest way to economic growth is when capital is led by self-interest. A broader vision (or version) of the economy is provided by Keynes’s understanding of the economic problem as ‘meeting material needs so that fine actions can be carried out’, or Sen’s understanding that growth of GNP is not to be understood as a goal in itself, but “a *means* to expanding the real freedoms enjoyed by the members of the society” (Sen 2001). In this view, capital serves a dual purpose, as the financier of production as well as the enabler of fine actions. Focused as it is on material aspects of existence (accumulation of material wealth), NCE has no direct eye for ‘fine actions’ or the unfolding of capabilities and capacities. The idea of capacities as a new counterpart of capital overcomes this myopia, enabling a widening of the lens of NCE, or indeed all conventional economics.

10.4.4. Revisiting efficiency

Social innovators care about outcomes and processes in terms of marginalisation (Ziegler; Lodemann). For social innovators, efficient solutions to marginalisation may require a reconsideration of the concept of efficiency. Efficiency concerns the relationship between a goal and the resources used to achieve it. For social innovation addressing marginalisation, the efficiency question would be how to reduce marginalisation with least cost. This, however, raises a complication.

Efficiency is often measured as P/C , i.e. the amount P of some valuable output per amount C of resources used. However, for social innovators, this relationship is more complicated than in NCE, because cost (price) itself may have an impact on marginalisation. Unlike in NCE one cannot say: “the end justifies the means”, because the means are an integral part of the end.

10.4.5. A re-consideration of methodology and scientific-ness

Equally central to the papers is the need to revisit the meaning of science in the field of economics. Of particular epistemological and scientific relevance here is the discussion (in the paper by Sebastianelli, Chiappero and von Jacobi) of inductive and deductive reasoning.

Although too substantial a topic to treat here with any justice, the outcome of the debate on frameworks relevant for social innovation may well depend on our ability to find alternatives to both induction and deduction.

10.5. Conclusion

If we now span the arch from where CRESSI started, that is, the statement in the EU (2013) FP7 programme call that

“...we lack systematic research about how markets, public sector and institutions (including incentives, norms and legal provisions) work for those groups of society which are marginalised....”,¹⁴⁹

to the end of CRESSI Work Package 1, how do deliverables D1.1 and D1.3 help in understanding the relationships between, on the one hand, marginalisation, and on the other hand, markets, institutions, and norms, and the role which social innovations could play in overcoming such marginalisation?

WP1 (deliverables D1.1 and D1.3) has resulted in a framework that places markets and marginalisation within a wider context of society as a whole, which is described as consisting of different spheres, in particular, (1) ‘cognitive frames’ (in terms of Beckert) or ‘culture’ (in terms of Mann), (2) ‘institutions’ (in terms of Beckert) or ‘politics’ (in terms of Mann), and (3) ‘social networks’ (in terms of Beckert) or the economy (in terms of Mann).

When looked at from the perspective of these (three) spheres, questions of markets and marginalisation take on a new dimension. In particular, the question arises whether, for instance, behaviour, incentives, values, cognitive frames, and institutions which may work for markets or in the economy, are also appropriate for the sphere of institutions and politics, and the sphere of culture and cognitive frames?

Taking a concrete example from the present report: are incentives, which may be appropriate in the economic sphere, also appropriate in the sphere of regulation (e.g. ‘tradable emission rights’) and in the sphere of culture (e.g. a ‘market for higher education’, or, in terms of capabilities in the sense of Amartya Sen, a ‘market for capabilities’)?

Above all, social innovation addressing marginalisation may require answers to such questions.

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Contact person: Project Manager: cressi@sbs.ox.ac.uk



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