

Kniepert, Martin

Working Paper

Bringing Institutions into Economics when Teaching Economics as a Minor Subject

Diskussionspapier, No. DP-70-2017

Provided in Cooperation with:

University of Natural Resources and Life Sciences, Vienna, Department of Economics and Social Sciences, Institute for Sustainable Economic Development

Suggested Citation: Kniepert, Martin (2017) : Bringing Institutions into Economics when Teaching Economics as a Minor Subject, Diskussionspapier, No. DP-70-2017, Universität für Bodenkultur Wien, Department für Wirtschafts- und Sozialwissenschaften, Institut für nachhaltige Wirtschaftsentwicklung, Wien

This Version is available at:

<http://hdl.handle.net/10419/235196>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



Universität für Bodenkultur Wien
Department für Wirtschafts- und
Sozialwissenschaften

Bringing Institutions into Economics when Teaching Economics as a Minor Subject

Martin Kniepert

Diskussionspapier
DP-70-2017
Institut für Nachhaltige Wirtschaftsentwicklung

Dezember 2017



Preface

This thesis has finally evolved from the context of teaching economics as a minor subject at the University of Natural Resources and Life Sciences, Vienna (Universität für Bodenkultur Wien). After years of working as research assistant in the field international integration and agricultural development, the author – a qualified economist – returned to his primary subject. This offered the opportunity to readdressing the principal questions of this subject, its relevance for students, its general public perception, and the ways of its actual implementation. Taking some general scepticism for granted and leaving aside some dogmatic aberrations, while not overlooking some all too obvious – and dramatic – failures, economics still seemed to offer considerable insight and often quite successful policy designs. It would not have to be judged as fundamentally wrong. After all, large parts of the world assuming standard economic wisdom for their policies experience previously unseen levels of wealth. Nevertheless, doubts were again at the root of the interest in reconsidering the way economic theory as such has developed, as well as the way in which it is presented at universities and beyond.

The wealth of the history of economic thought and the often universal comprehension of economics as a social science shown by some of its, mostly earlier, representatives encouraged the author to aim for a deeper understanding of what is typically criticised or defended in economic theory. A lot of criticism here proved to be as old as the part of the theory itself being criticised; often, the respective criticism had been shared by those who had contributed the alleged aberration in the first place. What is more, even obviously unrealistic assumptions or laws could claim to have been vindicated, at least on grounds of their ultimate explanatory power.

Typically, students are left alone with these questions. They are supposed to accept the axiomatic foundations of economic theory, and are asked to build on them for further academic accomplishments. This may well be justified for pragmatic reasons, from a personal perspective, as well as from the perspective of economics as a field of research under its currently prevailing paradigm. But it may also be recognised as unsatisfactory. Ultimately, the continued and unresolved deficiencies of the current paradigm, or at least the way in which economics is taught, may lead to misinterpretations of real-world developments, to inadequate policy design, and furthermore to harmful economic and social developments. A precursor for such dangers may be seen in the failure of communication between differing social-science approaches. Reducing its scientific aspiration to matters of what its instruments can capture as efficiency, proves this to be willingly accepted by the discipline. Inadequate and incomplete answers to real-world problems, if not simple neglect of them, has contributed to the erosion of public acceptance of economic theory. So even well-founded economic knowledge may be rejected wholesale, quite independently of specific interest, just based on a generally evolving contempt. The latter is to be observed not only in the case of economics but for social sciences in general.

Considering this situation, some self-assessment with respect to the kind of work being done by an economist will have to begin with nothing short of a disclosure of the epistemological foundations of economics and social science in general. Different schools of economic thought share axiomatic foundations, which conversely means that differences and respective corollaries for economic policy can well be made explicit on this level.

On a more concrete and observable level, today's economic research is concerned with technical matters, typically determined by a narrow focus on specific subjects and methods. On the other hand, some strands of economic research answer to general criticism by abandoning at least parts of orthodox theory, claiming justification on the basis of some ad-hoc solutions. Others challenge current orthodoxy fundamentally. While not claiming a need in principle for a uniform body of orthodox theory, the author of this thesis felt some concern at seeing respective achievements being questioned; the enticing dangers of a freewheeling relativism derived from possibly successful case study analyses remain a cause for concern. On the other hand, the theoretical diversity of social-science approaches – in theory and in methodology – may repeatedly prove to be most inspiring and seminal. So finally, it was also the creative tension between these two poles that gave rise to this thesis.

Abstract/Kurzfassung (deutsch und englisch)

Die Entwicklung der Wirtschaftspolitik war seit den 1980er Jahren von einem Trend zu einer einzigen Art der institutionellen Organisation geprägt. Sie orientiert sich damit an kurzfristigen, unmittelbar anwendbaren Effizienzkriterien. Dies wurde durch die universitäre Lehre unterstützt, indem sie besonderes Gewicht auf die entsprechenden analytischen Instrumente legte. Die hiermit vorgelegte Arbeit stellt für diese Wirtschaftspolitik eine systematische Verzerrung fest. Sie tut dies, indem sie die Entwicklungstrends von Institutionen in verschiedenen Sektoren der Wirtschaft auswertet. Zudem werden bestehende institutionelle Arrangements für ausgewählte Bereiche im Detail diskutiert. Im Weiteren werden Beiträge von Vertretern der Neuen Institutionenökonomik ausgewertet, um einen umfassenderen Ansatz nutzen zu können. Darauf aufbauend lassen sich Institutionen als öffentliche oder Clubgüter klassifizieren und also solche auf ausgewählte Politikbereiche anwenden. Es kann damit gezeigt werden, dass die mikroökonomische Theorie in diesem erweiterten ökonomischen Ansatz einen geeigneten Platz finden kann, zusammen mit Konzepten wie dem des Common-Pool-Ressourcenmanagement. Abschließend wird vorgeschlagen, in den ökonomischen Curricula den Institutionen, ihrer Evolution und ihren Auswirkungen auf die ökonomischen Ergebnisse wesentlich mehr Raum zu geben. Besonders für die Ökonomie als Nebenfach sollte mehr auf institutionelle Arrangements geachtet werden.

Schlagwörter: Neue Institutionenökonomik, Dogmengeschichte der Wirtschaftswissenschaften, Agrarökonomik, Ökonomie als Lehrfach

Developments in economic policy since the 1980s have shown a general trend towards a single type of institutional arrangement, following short-term, immediately applicable efficiency criteria. This was supported through the teaching by putting particular weight on the corresponding analytical instruments. The thesis presented here observes a systematic bias in this. It does so by evaluating institutional trends in the various sectors of the economy, and by discussing institutional arrangements of selected areas in detail. Furthermore, it reviews contributions by representatives of New Institutional Economics for a more comprehensive approach. Based on this, institutions themselves are conceptualised as public or club goods. As such they are applied to the policy areas selected. It can thereby be shown that microeconomic theory can find an appropriate place in this extended economic approach, along with concepts like common-pool resource management. In conclusion, this thesis proposes giving considerably more space to institutions in economics curricula, to their evolution and implications for economic outcomes. Particularly for economics as a minor subject, more emphasis should be placed on institutional arrangements.

Keywords (JEL): New Institutional Economics (B25), History of Economic Thought (B20), Agricultural Economics (N54), Teaching of Economics (A22)

Content

1	Introduction	5
2	The research area	8
2.1	Ethical and ontological presuppositions, free will	8
2.2	The challenge of social organisation	17
2.3	On the contribution of pure economic theory and its limitation	21
2.4	Institutions matter	30
3	New Institutional Economics and its perception	39
4	New Institutional Economics tried and tested	53
4.1	Determinants of wealth	55
4.2	Geographical Indication	67
4.3	Agricultural policy in Austria	77
4.4	Five questions on NIE – summed up	87
5	Conclusion	89
	Literature	94
	Internet, Databanks	103
	List of figures	104
	List of tables	104
	List of abbreviations	105
	Curriculum Vitae	106

1 Introduction

For many academic journals, research institutes, universities or professional associations, ethics statements have become a standard over the past few decades. Additionally, in many publications or research reports the compliance with such statements is established in an introductory paragraph.

Today's economics teaching – as neoclassical economics – usually hardly addresses ontological and ethical questions. Obviously this is in strong contrast to the fact that these questions are part and parcel of any kind of social science. So even if left unnoticed, teaching economics inevitably brings substantial ethical standards with it, entailed firmly in its theoretical foundations.

On the one hand economics may claim to remain free of value judgements and work as positive science. On the other hand its utilitarian basis is normative; its methodological individualism presupposes value judgements. Typically, economics teaching will scrupulously steer clear of questions like income distribution, and declare that this can only rely on personal judgement, not on scientific evidence. So, economics largely claims to offer positive science. It is thus taught as instrumental knowledge.

This given, economics presents itself as free of any manipulative bias, and only non-involvement in disputes over any moral purpose can serve as its ethical foundation: the search for truth as such (and scientific work is systematically part of this) follows from ethical foundations. To quote POPPER on this: "It is important to realize that science does not make assertions about ultimate questions – about the riddles of existence, or about man's task in the world. [...] The fact that science cannot make any pronouncement about ethical principles has been misinterpreted as indicating that there are no such principles while in fact the search for truth presupposes ethics." (POPPER, *Dialectica* 32:342)

Nevertheless, this hope for a search-for-truth as an ethically safe haven must remain premature. Even if it were given, even if it were not challenged, the final product as purely instrumental knowledge may after all be used in the most lopsided and unethical ways. Responsibility for this cannot be denied wholesale just on the basis of some kind of long-term truth. For this, the observation of the possible outcomes of modernisation in the first half of the 20th century and its interpretation by HORKHEIMER and ADORNO (1994, [first 1944]) should serve as warning: the initially most optimistic expectations linked to enlightenment, i.e. to ever deeper and better scientific insight, may ultimately lead to collapse, if they do not correspond to an adequate social development.

The whole complex of questions raised in this context may remain without an ultimate answer. Nevertheless, an attitude that the teaching of economics can rely on is required, not the turning of a blind eye to the problems of technological and social developments. While a formal statement on the non-violation of ethical standards can certainly not suffice, at least some serious effort of consideration may be expected.

What to teach?

Economics as a minor subject is mostly taught in the same way as in the first lectures of the major subject. It is very much concerned with markets, supply and demand, the calculation of some price equilibrium and *Pareto optima*. Efficiency and thus maximum welfare is the

principle objective. Apart from this, different kinds of market intervention and distortions are discussed, highlighting the resulting welfare losses. Economics is presented as pure price theory. If there is a reason to go into a special field of economics (environmental economics, for example), it will just be the straight application of what the introductory courses have provided as price theory.

Institutions are introduced into this kind of teaching of economics only as principally existing, as playing some role for behaviour, but not as really relevant. It is only prices that matter. Of course, the institution of the market itself, shaped by private property and mutual exchange on the basis of it, is to be given. It forms one side of the dichotomy of market-vs-plan. With this white-and-black picture of possible institutional arrangements, the issue of institutions is supposed to be covered.

The thesis presented here does not aim at the discussion of whether such introductory lectures may allow for a coherent, theoretically and methodologically solid foundation for further studies. This may well be the case. Here the discussion concerns whether teaching economics as pure price theory is adequate for students who have only a limited opportunity to gain some insight into economics. It will be asked whether giving more prominence to the role of institutions from the first lecture onwards may provide a more complete and substantial insight into economics as a social science.

How this thesis proceeds

In its second chapter, following this introduction, this thesis will give an overview of the research area in question. It will firstly call for the epistemological and ethical foundations of economics as social science and from this derive the expectations that may justifiably be raised. (Chapter 2.1) It then lays out the task that economics faces as a social science (2.2). Chapter 2.3 will describe and analyse how economics has supported or maybe even initiated economic policies and economic developments over recent decades. Examples for this will be selected from various European countries where the respective developments could be best observed. This second chapter will be concluded by tentatively introducing institutions as contributing their part to economic development (chapter 2.4).

Chapter 3 reviews the contributions by four of the most prominent researchers, forming the basis of what emerged – and is still emerging – as New Institutional Economics (NIE): Ronald Coase, Douglas C. North, Oliver E. Williamson, and Eleanor Ostrom. Contributed from different disciplinary backgrounds, their work is checked for what they share in their respective approaches in theory and methodology, where the differences are and how and to what extent all this may be synthesised.

To the extent that the synthesis of the four contributions mentioned will call for additional research, some of the not fully clarified areas will be covered in chapter 4 by formulating five open questions. These will be addressed to policy areas and the kind of research that is done with respect to these areas. Answers to these questions are expected to help clarifying respective conceptual issues within NIE. The areas addressed here are General economic development, agricultural policy in Austria, and Geographical Indication. These subchapters may well be understood as prototypes for further implementation of this approach of economic research.

A concluding chapter will first summarise the outcomes of the thesis. The role of institutions for economic development will be assessed, particularly as their determinants and

functionality are considered in their possibly changing socio-economic context. This implies the political context as well as the relative scarcities of resources and goods, as an after all defining aspect of economics.

Finally, this concluding chapter will return to the principal question of this thesis, namely whether giving institutions a more prominent role in teaching economics from start may provide a more complete and substantial insight into economics as a social science when teaching it as a minor subject.

A final word of this introduction may address the way literature is used for this thesis. Typical textbook knowledge is presupposed, so there are no citations for this. In particular, the second chapter discusses this in a wider context, possibly contrasted with other literature or traced back to contributions it was originally based on.

2 The research area

This chapter gives an overview of the research area in question. It will firstly call for the epistemological and ethical foundations of economics as social science and from this derive the expectations that may justifiably be raised. (2.1) The following part recalls the challenge of social organisation that is faced by economics and other social sciences. (2.2) Chapter 2.3 describes and analyses how economics has supported and possibly also triggered economic policies and developments over recent decades. Examples for this will be selected from European countries where such developments could be observed. Finally, this chapter will conclude by tentatively introducing institutions contributing to economic development. (2.4)

2.1 Ethical and ontological presuppositions, free will

The philosophy of science is a field of research that can claim to be used at least to some extent as a foundation by all scientific disciplines. Nevertheless, this theory is controversial in many areas, especially in the social sciences. Different approaches may rival each other. This may, on the one hand, be regarded as undermining the credibility of scientific results. On the other hand, it also indicates that scientific results should not be confused with ultimate truths. An adequate approach to science must be able to deal with reservations without having to question the scientific process itself.

The philosophy of science has numerous points of contact with the even more fundamental theory of epistemology, i.e. the human ability of perception, which in turn leads to the cognitive sciences. From there, the step towards the discussion of human judgemental capacity, and so to the question of responsible handling of knowledge, is almost complete. Last but not least, there are links to didactics, especially when learning and research are equally understood as the elaboration of knowledge.

Any inquiry into the philosophy of science thus, on its own initiative, invites itself to refer to the neighbouring fields as well. Even if students initially just want to learn about the way in which science works, the question of what can indeed be expected from it or from a scientific study, and what not, will become soon acute. A broader view quickly becomes helpful, if not necessary. So, trusting the reader's willingness to engage with this, this chapter will not just be limited to the philosophy of science.

To begin with, various different approaches can be considered.¹ Possibly by

- tracing historical developments of the philosophy of science, which, however, is by no means to be understood as simply linear, or cumulative.
- demarcating different schools of thought based on their specific characteristics; if necessary, schools of thought can possibly be named by certain representatives.

¹ The literature on the philosophy of science does not give a unified picture. As the issue is addressed here to provide just a point of reference in this field for the general topic of the thesis, only some principle features are carved out. For this, encyclopedic material, secondary literature, and a few selected primary sources were used. So, the author wishes not to pretend to have ploughed through all the original sources of Berkeley, Kant, Hegel or the likes. As the material is very extensive and often repetitive on central issues, also indirect citation seems hardly reasonable. The reader is asked for the required indulgence in this respect.

- prioritising a particular school of thought as a first step with the elaboration of the differences to other approaches as a second.
- a pragmatic, so to speak, demand-oriented selection, that is, a selection determined by the requirements that scientists encounter in their current work. This often ends with “cookbooks”, i.e. the relevant literature on techniques of scientific work.

At first, it might be expected that, independently of the chosen approach to the philosophy of science, a comprehensive picture of it would ultimately be possible. At a second glance, however, it becomes clear that not even most of the present introductory texts make this claim, let alone that the sketchy presentation developed here would claim to do so. There will therefore be no attempt to draw precise boundaries between differing approaches (whereby it is also omitted to emphasise their importance as independent approaches). Instead, central questions should be raised, not to provide definitive answers but merely to approximate some optional handling of the underlying problems. The wide range of questions is thereby also revealed. A categorisation of different approaches following outstanding representatives is largely dispensed with, as most of them were well aware of the ambivalences of the subject, and maybe even sought rather to explicate these ambivalences than to pretend to the achievement of unambiguous positions. Even if individual representatives can be assigned to clear positions (for example, Mach to *entschiedener Empirismus*), it is nevertheless noticeable that these representatives can always find positions that do not deny justification of other perspectives either. This is also reflected by the fact that schools such as ‘constructive realism’, ‘dialectical materialism’ etc., which initially tried to demarcate their own stance from others, and later attempted to reconcile opposing concepts. Finally, being well aware of the extreme shortcomings of this brief introduction presented here, it still seeks to give an impression of the entire range of questions of philosophy of science.

Thematic demarcation

First, it should be made clear that the philosophy of science does not deal with knowledge or its development in the broad sense, but with the structure and functioning of especially scientific knowledge. This becomes manifest as a professional discipline at universities, by publishing journals etc. The philosophy of science is to be understood as a professional discipline, as a second order science, concerned with the working methods of the various disciplines and science as a whole. This may also be the reason why the term philosophy of science (as differing e.g. from its German equivalent *Wissenschaftstheorie*) is used in English, where its subgroups are known as philosophy of economics, philosophy of physics, philosophy of biology, etc. To a blurring of the boundaries between philosophy of science and the more general epistemology, covering also the cognitive abilities and restrictions of humans, also contributes that these terms are sometimes used almost interchangeably in the literature. (See MOULINES 2008:10f). For the thesis presented here, both terms are needed and used for their respective meaning.

So, it can be expected that the philosophy of science will describe and analyse the functioning of sciences, but will not explain the foundations, the significance, or the effects that science has in the social context. How socially relevant knowledge is generated, actually selected and circulated, is beyond what in this respect one could describe as the self-contained aspirations of the philosophy of science. For all this, in view of all the funding of universities, research facilities, etc., society may at least feel entitled to receive ‘scientifically proven’ information, ‘assured knowledge’, ‘accurate forecasts’, etc., as a basis for its

decisions. Already here, a word of caution is appropriate. For the contribution of science itself to all this, such an expectation would have to build on a naïve scientific realism. In addition, an adequately assessed contribution from science to social knowledge leaves the question of social interaction and dynamics open.

The subject of epistemology is dedicated to a deeper understanding of the creation and development of individually and socially available, relevant knowledge. It begins by considering human cognitive preconditions and ultimately takes into account the fact that knowledge, once it has been created, is not simply neutrally or indiscriminately available: its generation like its diffusion may be distorted or manipulated in favour of certain interests, consciously or unconsciously. The fact that knowledge can be actively destroyed or stealthily eroded, possibly in favour of pre-scientific myths or – conversely – be replaced by modern knowledge, is a principle subject of concern as well. It is only in this context that questions about the ethics of sciences can be discussed sensibly. For the Frankfurt School HABERMAS states that with the retreat of philosophy of science from epistemology, science resigned from a position to reflect its own role, also with respect to the process of formation of human species. (cf. 2016 [first 1973]:12ff)

Empiricism vs. Rationalism

What was first? Matter or mind? This question is already found among the earliest representatives of Greek philosophy. It has constantly been restated, with more or less new arguments. If this section is now discussing epistemology in all its developments and appearances under the aspect of this dichotomy, this may be a very great simplification. Nevertheless, it seems appropriate and productive. The two camps may have appeared under different names, may have used their own concepts and definitions (which certainly did not always help understanding them). The critical question that makes it possible to identify an affiliation to their respective camp is just: *‘Say, as regards metaphysics, how you feel?’*.

According to metaphysics, an understanding of the world, society, the meaning of life, etc., is first and foremost revealed by the mind (or the *ratio*). For a long time, metaphysics discussed the role of a God in these contexts – and still does so in the context of religions. From around the nineteenth century onwards, its role became increasingly reduced; it had to restrict itself to explaining what could not be explained by empirical research. In the same way, ontology, which had initially dealt with the proof of God, changed. Later it turned quite pragmatically to questions about the existence of elementary particles, their interactions and their structure within a larger framework. This also reveals a development in which metaphysics can be seen on the retreat to the extent that empirical sciences provided more and more precise explanations for the phenomena studied.

The proponents of metaphysics (as well as their opponents) always and reliably provided arguments for the legitimation of current forms of rule, for the establishment of legal systems, and so also for the strategies of higher-education policies and research funding. A historical contextualisation of their different manifestations and the stages of their development would be just as revealing as precise delimitations. Nevertheless, for the purpose of this thesis only two representatives are selected: empiricism on the one hand and rationalism on the other.

Such a stylising approach is not only necessary because each extension would have to go beyond what can be discussed here, but also because their respective representatives themselves often qualified their own approaches by incorporating at least aspects of the

opposing view into their own. Of course, from the outset, rationalism and empiricism contradict each other completely, but science managed to go for a more or less arbitrary eclecticism. Induction and deduction are also opposed to one another, but ultimately there is usually a play of trial and error that practically dissolves this contradiction. Mind-vs-matter, idealism-vs-materialism/naturalism, rationalism-vs-positivism, realism-vs-nominalism/anti-realism, etc., all these may be heroically opposed to each other as mental figures; but finally, their respective representatives themselves were so entangled in their own contradictions that more precise elaborations remain unproductive or end up in the dispute over words.² In view of this, it is perhaps not surprising that today's academia is no longer willing to ask the 'grand' questions of the epistemology, but rather to exhaust itself in the clarification of technical questions such as correctly applied citation rules and the advancement of formal ethical guidelines and restrictions.

On the contrary, and just briefly: empiricism proceeds from things as they are; or as they can be observed. Rationalism, on the other hand, underlines the fact that behind the things that are observable there is still something essential, thoughtful: metaphysics exists above or behind physics. Only on this basis can the world be understood. While this controversy could easily be dismissed as academic, it acquires critical importance in that it is only metaphysics to which meaning or sense can be attributed. Metaphysical ideas coincide with those of religion and ethics. A restriction to a purely empirical science, therefore, invokes a contradiction among rationalists, because a world without metaphysics, i.e. without religion or secular ethics, is said to lose its moral foundations.

Special emphasis in this discussion is accorded to the role of Kant. He set himself the task of recalling the various arguments and giving them a place in a consistent overall concept. In this, meaningful empirical work is possible on the basis of specific predicate-concept that is to be provided beforehand by pure *ratio*. Thus it is recognized that logic and mathematics can provide knowledge and predicate-concept *a priori*. But it is also acknowledged that such concepts are not meaningful without a real, observed world: 'Thoughts without content are empty, intuitions without concepts are blind.' So a self-contained metaphysics was just as much rejected as the expectation that empirical work could be possible without it. Furthermore, Kant also accorded a place to ethical principles in this overall concept. Thus he covered three essential philosophical questions: What is it? Why is it? What it should be?

Despite the great respect that is typically paid to Kant, the debate on empiricism vs. rationalism has by no means been completed. Primacy was still given to one or the other side. Clearly, the importance of metaphysics as restricted by Kant was unacceptable to the Church. But even after the onset of the Enlightenment and thus also after the increasing independence of philosophy from theology, it was particularly in Germany that a primacy of rationalism was advocated, albeit under the cipher of idealism. Thus Hegel thought that a cultured nation without metaphysics was like a temple without the holy of holies. With German idealism, a new school of thought, which was very influential in politics, arose. Feuerbach, on the other hand, answered: 'Man is what he eats,' and furthermore, that God did not create man in his own image, but the reverse, that man created God in his own image.

² From 1900 onwards MOULINES (2008) was used as basic text. Here, cf. specifically 188f .

With the Vienna Circle, a group of proponents of empiricism constituted itself at the beginning of the 20th century; it is said to be the most radical of its kind in the history of philosophy of science. They wanted nothing short of the eradication of any metaphysical thought from science. Thus, for example, Mach questioned the atomic model, since atoms as such could not be observed.³ The effort, strictly following the rules of logic, going from the empirical observation step by step to comprehensive theories, was considerable; 'protocol statements, as used to document the work with laboratory experiments, were to make it possible. In the end, however, insoluble problems remained: the approach of the Vienna Circle was particularly limited by the development of thermodynamics and the theory of relativity. The use of purely theoretical concepts should solve these problems, without, however, opening a back door to metaphysics. As critics it is again the Frankfurt School standing out with HORKHEIMER (1937); in the 1960s this led to the 2nd positivism dispute.

Thomas S. Kuhn's coup of liberation

Kuhn unravelled the field of philosophy of science in a way that was new. He did not ask how science should work, so he did not maintain any normative purpose, as had been the case until the Vienna Circle. Nor did he take basic questions of philosophy as starting point. On the contrary, he looked at how sciences in their respective disciplines had actually developed over the centuries, at how they actually worked. Thus he began to work in just the way demanded by empiricists. Kuhn's interest was not to interfere with the discussion among philosophers of science; his contribution was rather one of a historian. Nevertheless, or just because of this, to the philosophers of science, whose work got bogged down in their discussion about rationalism vs. empiricism, and to the scientific community in general, it was like a liberating coup. He showed how science and scientists actually worked, how knowledge was created, but also possibly maintained against contradictory findings. With this, following MOULINES (2008:99), a new phase in the history of philosophy of science began, namely a historicist phase. Nevertheless, the problems dealt with in previous phases, concerning first the role of metaphysics, later the Vienna Circle, with its most radical logical empiricism, had not been solved. They were rather pushed aside for pragmatic reasons.

Kuhn introduced the concept of the *paradigm* that constitutes a scientific discipline in 'normal' times: It comprises four types of components: i) 'Schematic generalizations' or 'guiding principles' (e.g. $f = ma$ in Newtonian mechanics). This formula is neither verifiable nor falsifiable, so it does not qualify as scientific for a school of thought like the Vienna Circle, but on the other hand, physics does work with it. (ii) Models in a very broad understanding (possibly even heuristic models), (iii) normative values, which may include, for example, values of economic or political utility, (iv) 'examples' of a basic pattern such as Mendel's peas for classical genetics. In 'normal' times, such a paradigm is never seriously questioned; on the contrary, it proves to be stable, despite obvious shortcomings. It is therefore not sufficient to point to possibly blatant deficiencies of a paradigm in order to transcend it. It is

³ The decisiveness with which any magnitude or category, which was not actually observable, was rejected may be explained at least in part by the fact that these late-19th-century scholars in Vienna no longer wanted to accept any clerical and nationalistic interventions in their empirical work. So to them, the whole phantom of metaphysics was to be put an end to. An exhibition on the Vienna Circle at the University of Vienna in 2015 gave ample evidence on the political context in which it worked. This is namely the case for the period after WWI. [[web](#)]

only a genuine scientific revolution that makes this possible, that is, the overcoming of an older one through a new, stronger paradigm. Thus the Ptolemaic world-view could still be maintained even as the effort to explain the observed orbits of the planets became excruciating. Nor did it suffice that the much more easily representable heliocentric world-view was actually irrefutable. It was necessary for society to be ready for it; if needed, by a change in its social relations and power structures.

For 'normal times', all this means that the dominant paradigm is firmly established with respect to the strategies of scientific research programmes, journals, the general doctrines, etc., even specific disciplinary definitions and wordings. In particular, by linking terminology to paradigms, it becomes clear that the communicability of indeed rival findings within this framework becomes impossible. According to Kuhn, a neutral observation language, a language suited to permitting the comparability of research results (cf., above, the concept of protocol records of the Vienna Circle) is no longer given. Real scientific progress will always require a fundamental paradigm shift, a scientific revolution.

As already explained, Kuhn himself did not regard this type of scientific development as unconditionally desirable. He just presented what he had observed. However, by disclosing the actual functioning of science, additional areas of discussion opened up. In particular, with the determination of the normative content of prevailing paradigms, many scholars saw themselves suddenly exposed to unusual criticism. Were they not entirely committed to science? Was it not Max Weber's postulate of value freedom that had been universally accepted as the unchallenged gold standard?

Options after Kuhn

Invoking Kuhn, so-called socio-epistemic approaches, derived a justification from the stated normative content of paradigms for openly interest-based science. And indeed, even from the point of view of the Vienna Circle, this could be unproblematic, even beneficial, if research results could mutually be opened to cross-examination, provided a shared empirical basis was given. Thus a feminist or class-oriented science can well develop otherwise unknown perceptions. From such considerations, a more relaxed attitude towards the contradiction between positive and normative science can arise. After all, normative science would not remain separated from the knowledge of positive science. The two modes of working can thus be regarded as equivalent in the medium term as in their development of knowledge (cf. for an example showing some influence of all this on teaching economics, MANKIW and TAYLOR 2017a:24). However, the question arises as to whether the problem is not trivialised by taking the capacity of science for self-correction for granted. As already explained, it is precisely the lack of communicability of research results across different paradigms that poses problems. The outcome may be an unreflected self-centredness of science on the one hand and some scientifically careless relativism on the other.

The discourse analysis and the critique of ideology of the Frankfurt School can be regarded as an attempt to expose the normative content of scientific work and how this relates societal power structures. This school distances itself from empiricist science by stating that the latter ignores all questions of metaphysics, meaning and ethics. An example of the latter can be found again by a reference to MANKIW and TAYLOR (2017a:23ff), who proposes outsourcing questions about the aims of politics. Doing so would enable science to make objectives explicit, and subsequently restrict itself to purely instrumental questions. Goals themselves should not be the subject of science, which is also confirmed by STIGLER and BECKER (1977),

for example. According to Adorno and Habermas, however, this must be regarded as inadequate. Keeping political or social goals as exogenous to scientific work would not follow from a pretended value freedom of science but from the unwillingness to analyse its societal context. In this way the Frankfurt School explicitly postulates an ethical standard as a necessary component of science. In view of these categorically presented positions, a productive exchange between them is, of course, hardly to be expected, not to mention the development of some generally accepted knowledge.

Truth can wait. The claim indeed to generate *true* or at least *assured* knowledge by science was actually abandoned quite early by the representatives of the philosophy of science. Simultaneously with the idea of *tried and tested* statements, statistical probabilities, with which hypotheses could be confirmed without granting for any exact outcome, were introduced. In principle, however, the claim to truth was not abandoned. Just that now it was meant as providing an orientation rather than a goal to be achieved. Imre Lakatos's work became an attempt to reconcile Kuhn's considerations with those of Popper (who in some respect represented aspects of the programme of the Vienna Circle).

For the philosophy of science, progress may also – to some extent – be just a matter of time. Thus it was found that some theoretical concepts that would have been rejected by strict empiricism could be confirmed years or decades later by better methods of observation and measurement. For example, the atom was initially not more than a theoretical concept. As already mentioned, Mach (one of the theoretical precursors of the Vienna Circle) initially dismissed the concept, because one could not see such atoms anywhere. Later, however, thanks to improved microscopes, they became visible. An analogous development existed with the Higgs particles – also referred to as 'God particles' – whose existence was proven after decades with the help of the Large Hadron Collider and the considerable computer power at CERN in Geneva. The same can also be said for Freud's id, ego, and super-ego concept. Freud, too, had begun as an empirically working neurologist, but confronted with insuperable limits in this work. Subsequently, he drew up his theory, which, according to Popper, was regarded as completely unscientific because it included no falsifiable thesis. Today, however, quite analogous to the work at CERN on the Higgs particles, neuroscientists find empirical confirmations for Freud's concept. Based on these experiences, some justification was now possibly conceded to new theories, also before empirical evidence was provided; that would possibly be brought about later. As long as they offered some explanatory power, they could be considered justified. Even if a concept such as the now proverbial 'phlogiston' was empirically on shaky ground, one would still be entitled to use it in science provided it could explain and predict certain phenomena. Without this concession, concepts such as entropy or the theory of relativity would not initially have been justifiable. As may be noted, Kuhn's idea of scientific revolutions and his concept of paradigms and paradigm shifts also is very much in line with this new attitude to theories.

A loss of standards?

As has been explained, individual scientific disciplines have been able to get closer to the demands of the Vienna Circle over recent decades. The rigour of set theory as a basis for logically assured structures of theories also contributes to this. Empirical work has generally been accorded a very high priority, supported by the improvement in statistical methods and possibilities. The fact that today's scientific careers can be built on this alone, may perhaps be discussed as an overshoot of this development.

On the other hand, the radical standards of the Vienna Circle may be seen as blurred by the acceptance of indeterminacy of theories and, above all, of probabilistic proofs. The way in which Kuhn's observations are used to justify relativistic approaches should be another matter of concern. What is most striking, however, is that the *grand* epistemological questions are no longer discussed. The frequent confusion of epistemology or the philosophy of science with the techniques of scientific work makes this more than obvious. This change is also very noticeable in the application of the concept of ontology. Of course, originally this was concerned with things like the proof of God, which may in its literal sense indeed be a matter of the past, or for all too backward-oriented interests. What is left of ontology today is just a question of the choice of the smallest units or particles to be considered. Ethics became a sales argument for everyday goods, knowledge became an instrument of securing competitiveness. This kind of relaxation in dealing with these questions may point to a high degree of maturity of the given paradigms and thus be justified. On the other hand, it may also indicate a possibly dangerous impoverishment of the discussion of the role of science and knowledge.

On the need for epistemological and ethical standards

So we are back at the beginning of this chapter: the question of the way in which science works and the expectations that may be raised when attempting it. This chapter has now placed this question in a framework that goes far beyond the introduction of scientific craftsmanship. But did the frame really have to be stretched so far? In the context of a thesis on economic institutions, were the questions of philosophy of science and epistemological theories presented here necessary to clarify these expectations at all? Is not the kind of science practised today so advanced and assured that a brief presentation of some pragmatic approach, such as 'constructive realism', would provide a sufficient understanding for each individual scientist? Could not today's science feel free from past burdens and medieval questions? No. For two reasons.

On the one hand, one is mistaken if one believes that today's world is decisively shaped by a modern scientific worldview. Pre-scientific worldviews dominate many people's thinking. Not only do they ignore research results, they show a quite general contempt for scientific research as such. It is true that some representatives of the major religions have found ways and respective partners to adequately discuss the relationship between religion and science.⁴ Fundamentalist currents reject modernisation particularly with respect to questions of social organisation (while rarely with respect to technical modernisation). Creationists insist on teaching exclusively the biblical history of creation at school, not Darwin's theory of evolution. Esoteric ideas are found in Western countries, possibly in reaction to the experiences of individualisation, and the too heavy burden resulting from insecurities and personalised responsibilities, attributed – justifiably or not – to modernity. Finally, recent developments of so-called post-factual statements may not even be that new, just like the allegation of the venality of science. But these accusations are unrestrained in a way not known since the

⁴ In 2004, Jürgen Habermas and Josef Ratzinger met for a discussion in Munich (cf. KATHOLISCHE AKADEMIE BAYERN (2004, ed.)). The principle question was whether a modern, democratically constituted society would be able to generate sense and guidance from its own resources or to what extent some pre-political moral foundations would be needed to provide for this.

middle of the twentieth century. Science must defend itself convincingly against these tendencies.

The second point makes it important to engage with epistemology concerns that make a social life possible. Once existing norms can not be valid through all times and regions, i.e., they cannot be assumed to be functional independently of their historical and geographical context. The functionality of standards is rather dependent on given resources, as well as on technological and demographic conditions. If they change, the standards must change. For the history of mankind it could now be declared with the necessary cold-heartedness that it was sufficient for its mere survival to have social norms evolving just as plant or animal species evolve. Societies with norms that became dysfunctional would thus simply be sorted out – through wars, diseases, whatever. Other societies with mutated standards would survive. That such norms cannot live up to universal, non-relativistic ethics is as obvious as it is unsatisfying, but should not be the critical point to be discussed here. Rather, attention should be drawn to a new, additional urgency for modern world society. Given the necessity of developing and implementing social norms globally, the evolutionary game is only supported by an unbroken chain of favourable coincidences. A technically advanced modernity, a modernism that does not also develop correspondingly advanced social norms, will sooner or later lead to disaster. Nature would take its course. This raises the question of whether people can take their fate into their own hands instead. Ultimately, this is the philosophical question of free will, and therefore also of the role of rationalism and the possibility of self-assertion of humans as humans.

An option for a biological foundation of free will

As already noted, the sciences have been able to replace more and more elements of metaphysics in their traditional role of explaining how the world works. But so far, they have hardly advanced as far as questions about the ego, self-consciousness, or free will. The brain itself, and so what maybe assumed to form the basis for human cognition, has remained largely inaccessible. So the respective questions have remained a topic for philosophers. An answer to the question of humans' ability to shape the developments of a globalised and technological world on the basis of their own capacity for insight as well as responsibility in the sense of preserving one's own kind would have to be answered by them. In current discussions, this would affect the conclusion of a climate agreement, for example. Only at a second stage would the possibilities of action to enforce this will be called for. In this sense, a distinction is made between free will and the freedom to act.⁵ In contrast to practical everyday notions it is not the freedom to act that poses the principal problem here (though this may be difficult enough in itself), but free will. Over the last few years, new experimental imaging techniques have increasingly enabled neurological research to learn how human actions are triggered in the brain even before the proband becomes aware of willing them. What is presented to them as their own will, as causing the action, is thus a consequence of the impulses of the brain as well as the action itself. The action is, therefore, biologically determined, and not the result of insight or independence. SINGER (2004a, 2004b) and ROTH (2005) became known as leading representatives of this research.

As an opponent in this case, HABERMAS (2009:7) first signalled a key development point in the discussion of free will: "Not the fact that all operations of the human mind depend

⁵ This terminological distinction follows TUGENDHAT (2007)

throughout on organic substrates is disputed. The controversy is, rather, about the kind of naturalization of the mind.”⁶ He thus completely dissolves the traditional, Cartesian matter-mind dualism, while at the same time warning against a reductionism that leaves the question of human behaviour only to neurological approaches. According to HABERMAS (2009:166ff), SINGER ignores specific characteristics of human development of the will. The decisive factor for this is the ability to weigh options for action, supported by the ability for collective cognition, i.e. learning in a social process of the exchange of knowledge. Just as the emergence of self-consciousness (i.e., of the ego) is based on neuronal connections, and thus also perceived as thoroughly corporeal, it is at the same time developed under the influence of social conditions (correspondingly: the super-ego). This pattern also applies to the laying of the foundations of free will. HABERMAS distinguishes *natural-causal relationships*, contributing to the formation of the will and the consciousness, from *reasons* not predetermining will, but allowing for various possibilities for action. Reasons are introduced by exchange with people, they can be reflected and discussed and thus lead to free, not to biologically-predetermined decisions, even if these are finally supported again by the neuronal system. Further attention must therefore be paid to the social conditions and thus also to the kind of communication between people, which can be designed by humans on the basis of a reflected, enlightened self-interest. So there is a range of possibilities for action to be taken by the individual, possibilities to choose from. Thus the design of social norms (i.e. of institutions, as they are called in the larger context of this thesis) is not fully determined by the human biological condition either. Neither – following HABERMAS – are they restricted to some myopic individual or small-group optimization. Instead, they can well take account of complex and wide-ranging social requirements. In this way, an explanation gap is filled for the ‘post-metaphysical’ period, which was previously occupied by metaphysics and obviously is not a research subject for brain researchers.

In the sense in which HABERMAS is prepared to accommodate results of brain research, they are also prepared to borrow from a social scientific perspective. They do so by reserving some importance to the exchange of views between individuals alongside environmental influences. Thus it is also clear to brain research that only a part of the character of the human being is genetically determined; life experience, and in particular the behaviour of the people in the immediate environment, especially during the early years of education, do play some role. Still, as social relations are not the focus of brain research, it will be up to social sciences to deliver the respective information.

2.2 The challenge of social organisation

Based on methodological individualism, standard economic theory analyses the form of social organisation as an expression of aggregate individual behaviour. Based on this, consumer sovereignty is one of the guiding ideas of the liberal concept of the economy: all economic activity ultimately serves the demand of individual consumers. This, of course, does not imply equal access to resources, nor equality in income opportunities or social status. Pareto efficiency as the main objective of welfare economics leaves these issues untouched. Neither does it presuppose free will as discussed in chapter 2.1; the preferences

⁶ Own translation

of consumers may well be physically predetermined or more or less at random, while the final choice is seen as influenced by scarcity ratios.⁷

With its marginalist approach, neoclassical theory assumes that markets themselves (if undisturbed by state intervention) have a tendency to clear; so at least in a hypothetical long run it is expected that incentives align, i.e. prices and marginal utility equilibrate, and thus welfare is maximised. Other approaches (e.g. those of Marxian economics, also LEWIS (1954)) do not consider such equilibria as typical or a natural point of convergence for economic development. For them, it is disequilibrium, in particular a mismatch between wages and marginal labour productivity, possibly providing resources for additional investment. It is thus social institutions that allow for the maintenance of such a mismatch, mirrored in social stratification. Also well known are the Schumpeterian considerations that it is the deviations from perfectly aligned incentives that are crucial for economic development and so for an adequate understanding of them, being well aware of the destructive component of economic innovation.

The challenge for scientific analysis of social organisation now lies first of all in the identification of its constituent factors, also with respect to its dynamics and resilience. The context of this is principally given by available resources but also by changing technologies, which may in turn be induced by social developments. The critical question is then whether the respective developments may be considered as an outcome of some autonomous, self-controlling system, or whether some reflected intervention is guiding, or should guide the process. Typically, the respective discussion in mainstream economics focuses on the dichotomy of centralised vs. decentralised decision-making. However, as introduced in chapter 2.1, the more relevant question is whether humans do have the principle capacity at all, to take decisions going beyond their individually experienced, unreflected utility maximisation.

So at the bottom line one may ask whether individual behaviour is indeed guided by a more or less enlightened self-interest, as is supposed by economic orthodoxy. If this is taken for granted, would it also make it possible to go beyond immediate utility maximisation and include a conscious establishment of social institutions, or is this otherwise left to some evolutionary process? If it were a conscious process of establishment of these rules, would it

⁷ An observed economic outcome may indeed be explained as one of individual, unforced exchange. But, this does not necessarily imply, that it is indeed based on individual utility maximisation of participants. Instead, participants may – for whatever reason – lack the needed information for this and/or the cognitive capacity to digest respective information. While well identified and discussed as a problem by SIMON (1978), who had already worked on the issue from the late 1940s onward, by STIGLER (1961), or by AKERLOF (1970), the problem remains unresolved. There will always be an information and rationality problem. So the basis for a rational decision may not be given; the respective axioms are violated and behaviour could actually be more or less random. The market outcome would then evolve from some Darwinist process alone. (cf. ALCHIAN 1950) The problem with this is not that e.g. policy interventions, the impact of shocks or the like could not be simulated and predicted quite accurately in the neoclassical framework. The problem is rather that the utilitarian foundation, i.e. the normative rug, is pulled from under welfare theory. This may not be of much concern for e.g. the Austrian School, but it should not be neglected either. What aggravates the situation is that information can show some advantages if provided as a public good, but which is counter to overall policy development.

then come about as a *Social Contract*, i.e. based on a more or less equal footing of all members of society, or would it rather be imposed by a few persons assuming power for themselves, possibly by brute force? For the latter case, research strategies might drop the methodological individualism favoured by orthodox economics and go directly for laws of motion of the respective changes in a historical perspective.

In its conceptually most simple case, a form of governance will be just a market relationship, relying essentially on mutually acceptance of private property, if needed, enforced by a third party, namely the state. How will more complex forms of cooperation come about? Could we trust Adam Smith's *invisible hand*, relying on immediate individual utility maximisation to channel resources by the price mechanism automatically to their most efficient uses? After all, with Ronald COASE's 1937 publication *The Nature of the Firm* it was hierarchies as a competing form of institution also entering the debate among orthodox economists as an in some cases superior form of organisation. Accepting this would actually have to question the *laissez-faire* doctrine of orthodox economics. However, orthodox economics – again, at least as it is taught to undergraduates at universities and presented to a wider audience – avoids discussing this, in that it takes the firm as a black box, only of interest with respect to its behaviour vis-à-vis other market participants. So COASE's (1937) rather provocative question is actually ignored.

On the other hand, the state, if only in its role as guarantor of private property, is assumed by textbook economics indeed to be essential. (The role of the state as provider of social security, public infrastructure etc. has been reduced over recent decades. Policy has thereby largely followed orthodox economic advice. Actually, this part of the state was seen as alien to a rigorous variant of orthodox economic theory in the first place; it therefore does not have to be discussed here, while it will be addressed later.) What is hardly addressed is the historical specificity of the state, or, more accurately: of the nation-state. The fact that this kind of social organisation arose only as late as just after the Thirty Years' War, with the democratically constituted state not beginning to take shape before US independence and the French Revolution, is hardly an issue for textbook economics. Neither is it an issue that this nation-state is currently showing signs of erosion, well before it might have taken root in all parts of the world, and well before it would have allowed for a supra-national structure suited to solving global problems. Instead, in its function as guarantor of private property is it practically taken as kind of a natural constant; its possible origins, the factors determining its constitution, etc. are not addressed, let alone explained. Of course, for many observed cases, it is noted that the nation-state does not perform in its function of a guarantor of property rights – without offering more than the advice that it should. Another contribution to the working of democratically constituted nation states – namely ARROW's (1950) *impossibility theorem* – offers most brilliant insight, albeit without showing much interest in improvement.

An economist who became more explicit not only with respect to the importance of institutional settings as such, but also on how to establish them, is Paul ROMER. Well known for his work on endogenous growth theories (ROMER 1987), so working at the cutting edge of what orthodox economics has to offer, he also chose sides with respect to matters of policy implementation. For this he pushed the concept of *charter cities*. (ROMER 2009) In this he proposes to establish cities in still unpopulated areas of less developed countries, based on rules conducive to economic growth (i.e. a respective *charter*). While he does not expect that such cities could emerge from their existing context, he sees other, economically more

advanced states as guarantors of such charters. As guiding examples he mentions Hong Kong and Macau, long under the rule of Britain and Portugal respectively. Another example he mentions is Shenzhen, as it developed as a special economic area in China. However, the concept of special economic areas – offering rules more conducive namely to foreign direct investment – is not new. It may in fact be traced back to ancient colonial cities of Greece such as Marseille, or of the Roman Empire with Cologne etc. The development of trading hubs of the Hanse in the Baltic Sea and beyond following the Lübeck law, supports Romer's basic idea as well as the experience of Maritime Republics of medieval Italy. Some inspiration will have also been drawn from the charter cities allowed to determine their own administrative rules in parts of the United States. So the principle functionality of this concept is proven, and therefore there is no need to discuss it here. However, there are two aspects that deserve some special attention in the context of this thesis: i) Even if ROMER denies any colonial character of charter cities on the ground that people could choose freely to live there (voting with their feet), this does not mean that there was no exploitative relationship, as wages may well stay below marginal productivity. This aspect had been elaborated by LEWIS (1954, 1979, also mentioned above), showing that the development of centres may rely heavily on a large surrounding pool of cheap labour. If so, the dynamic development expected by ROMER would result at least to some extent from *specific institutional differences* as they have been analysed since Marx, not necessarily from *general institutional superiority* of the charter cities. ii) Institutions are imported from and ultimately enforced by other, economically advanced countries. The countries that ROMER (2009) proposed for this include Canada, for example, thus an advanced market economy, but by introducing Shenzhen as an example of such a charter city he also considers the option of undemocratic and mixed economic systems as appropriate guarantors of the expected development. What remains critical for him are institutions conducive to business, i.e. strict enforcement of private property and the rule of law. This obviously very much follows the pattern of bourgeois revolutions as known from Europe associated with the beginning of industrialisation. Considering these two distinctive aspects of ROMER's proposal it can hardly be unnoticed that the now Chief Economist and Senior Vice-President of the World Bank is rather in line with Marxian theories than with current orthodoxy.

Closely linked to the expected functions of the nation-state and the optional ways of its constitution is the characterisation of individuals. Here as well, it is a kind of a constant, this time a triple anthropological constant, that is assumed by orthodox economics: it is the utility maximising, well-informed and rational individual populated by current textbooks. Certainly, no textbook fails to classify this as just a theoretical concept, not to be mistaken for a real person. And indeed, its explanatory power is tried and tested, it serves well as a component of adequate research designs, and so criticism based on its immediately "unrealistic" features cannot make much of an impression. Typically, the respective disputes remain most unproductive. Nevertheless, the issue should be raised here, as this concept was by no means considered as an anthropological constant by those who created it. Like utilitarianism in general, these three characteristics were rather understood as aspects of a *political project*. As such, it was part of the project of modernisation, based on the idea of human rights and enlightenment. (cf. J.S. MILL 1860, 1863)

When utilitarianism took the stage in the early 19th century, it was no more than a vision. *Life, liberty, and the pursuit of happiness*, which is essential to it, was not without reason so distinctively a part of the declaration of independence of the United States, showing

resistance to its former colonial power. At the time, European populations had to see fulfilment rather in serving the greatness of their countries, as represented by monarchies. Religious obedience to church organisations may be seen as just another expression of this. Only gradually did people reorient themselves and seek to escape such appropriation. The recurrent experience of a backlash, most dangerously in various forms of nationalism or other, supposedly higher-ranking social targets, demonstrates the fragility of this political project of self-empowerment. Marxian critique, considering J.S. MILL's notions as lacking historic and social contextualisation, and thus ignoring the true driving forces of progress, as well ignoring human nature should be taken seriously.

Economics textbooks expect the liberal state and the independent, enlightened individual as the natural, truly correct condition. This condition may be disturbed, suppressed or hampered. But it remains the default position, only waiting to be allowed to evolve. If only more people were to read these textbooks, then some malicious people would be removed, the excessive greed of some would be tamed, this condition could thereby finally appear and everybody would be allowed to live up to their individual potential. Maximum welfare would be achieved.

The latest prominent attempt (and failure) to predict history on the basis of such thinking was presented by FUKUYAMA in 1989. He actually did so, *before* the Berlin Wall was torn down, and thus earned quite some respect as a prophet. He wrote, as if history were determined to bring about "the triumph of the West, of the Western *idea*" (1989:3; italics in the original). The following years may have been known for the dominance of the *Washington Consensus*. But history came back; a *Beijing Consensus* claimed its place, as the Western *idea* seems to have lost its hold.

It is not sufficient for economics to be concerned only with production or market efficiencies, if it does not want to restrict itself to more or less logistical solutions to some limited economic problem. The societal basics of the concepts of the state and individual, and thereby the challenge of social organisations, have to be understood as matter of concern. Doing so if only when teaching economics as a minor subject is by no means exaggerate.

2.3 On the contribution of pure economic theory and its limitation

In recent popular publications and presentations on the differences in economic policies, it has almost become a standard to show satellite images of countries like North and South Korea. Another option is showing flight-paths between countries. This corresponds very much to the hope of economists for some real experiments, showing some convincing proof for their theses. Unfortunately, this supports simplifying expectations and all too easy measurement-proposals. This chapter will try to look at underlying features of economic theory and corresponding policies.

On the character of economic theory

Today's standard economic theory is essentially just a price theory. It does not discuss questions of social organisation of economics in general, nor of the meaning of value, nor the role and character of individuals, let alone distribution or justice. For the classical political economists these were most critical questions, showing their roots in moral philosophy as well as their embeddedness in social and political developments of their time. With the marginal revolution (independently put forward by Jevons, Menger, and Walras around 1870)

the classical value paradox was overruled. Alfred MARSHALL codified all this in his *Principles of Economics*, published in 1890. In his *Essay on the Nature and Significance of Economic Science* (1932) Lionel Robbins wrested utilitarianism from the problems linked to cardinal measurement in that he declared ordinal measurement would do. With Gérard DEBREU's *Theory of Value – An Axiomatic Analysis of Economic Equilibrium* (1959) economic theory could be presented as a coherent and formally closed system of thinking. Codified and widely disseminated by Paul Samuelson's *Economics* (from 1948 onwards in a large number of editions and translations), this standard of economic thinking still shapes teaching at universities today. (Cf. for a history of economic thought BLAUG 1985.)

The axiomatic core of this paradigm is well known, consisting of the characteristics of the homo economicus, i.e. a) utility/profit maximisation, b) rationality, c) perfect information, complemented by d) convexity of production and utility functions (i.e. substitutability of factors and goods respectively), and finally e) well-defined property rights. These axioms and the methodological individualism following from them constitute the conceptual backbone of neoclassical economics. Equilibrium, i.e. a balanced account of resources and needs, becomes the reference point to be pursued for maximum welfare in a world principally characterised by scarcity of goods relative to needs.

However, the first three axioms captured by the concept of the homo economicus have repeatedly been attacked as not matching people's true nature. Convexity turns out to be an exception rather than the rule. A general existence of property rights may typically not be attacked because of its lack of realism, but rather because of its distributional relevance.

Obviously, mainstream economists do not overlook certain deficiencies either; they will speak of "market failures". Thus the principle-agent situations and so-called moral hazard following from incomplete or asymmetric information (cf. AKERLOF 1970), external effects (*the* theoretical cornerstone of any environmental economics course), bounded rationality (cf. SIMON 1978), etc. came to be standards in economics. But these deficiencies are not seen as problems of the concept itself; instead, they are attributed to its insufficient implementation. So the term *market failure* as used in economics does not refer to failing markets as such, but to failed enforcement of market principles.

This way of thinking stabilises the core of neoclassical economics. What is more, the relevant research is to a large extent aimed at maintaining economics as a unified, coherent theory. On the one hand this is certainly a legitimate strategy; for scientific work a general explanation is mostly seen as superior to a large number of specific case explanations. As a prominent example one might refer to Keynes's *General Theory for Employment, Interest and Money* (1936): with this, in aiming for a *general theory*, Keynes made clear he would not want to dismiss neoclassical theory altogether. Instead, *neoclassical theory* would be seen as a *special case* in a more general setting. The fact that HICKS (1937) largely forced it back into standard neoclassical thinking with his "neoclassical synthesis" remains a matter of continued dispute. Students often consider this to be dogmatic and sterile, and therefore call for a wider range of approaches.

In recent years, namely as established economics was caught clueless by the crises beginning in 2007/2008, this led to a number of activities openly challenging established teaching. Pluralistic and transdisciplinary in their ambition, they offer room for a wide range of traditional and recent heterodox economic thinking, albeit in some cases again being rather dogmatic in themselves. (cf. e.g. Exploring Economics, Netzwerk Plurale Ökonomik e.V.,

International Student Initiative for Pluralism in Economics – ISIPE.) Typically, established economics wards these alternatives off by reference to scientific criteria known primarily from physics, supposed to set binding standards also for economics, including their critiques. Another approach, namely the now more prominent behavioural economics, concentrating on immediately observable economic problems, does not give in to the claim of unified theory either. *Whatever works!* may summarise its principally casual stance on comprehensive theory development. Known for its heavy use of randomised control trial, it is less assailable on methodological grounds. (cf. e.g. BANJERJEE, DUFLO 2011).

In any case, the core of economics as an academic subject and as established in all relevant research institutes, governments or international organisations is just neoclassical economics, maybe with a few not-so-systematic extensions incorporating some Keynesian objections. Current disturbances in the field of macroeconomics may add more questions but cannot challenge it. It may just add some personal and scientific reservation with respect to claiming ultimate truths. After all, one may simply wish to be pragmatic in saying – as NORTH (1990:17) observed – that the neoclassical assumptions were still the “best game in town”.

Prices, commodities and property rights

Being essentially a price theory, economics hinges for its explanatory power on the identifiability and quantifiability of commodities, products, services, etc.: i.e., that they can carry price tags, and for which property rights can well be enforced. With this at hand, a most consistent and concise theory is possible, presupposing no more than just one form of governance: market exchange plus property rights. Such an achievement obviously calls for being tried and tested for its usefulness to the largest possible extent, if not universally.

Of course, large parts of the observed economies have seemed scarcely accessible to this theory: natural monopolies, infrastructures, education systems, later also the environment, biodiversity etc., i.e. what related in one or another way to what was classified as public goods, all this seemed to call for a different kind of theoretical approach. Price tags for individually consumed units of these goods, or the notion of some marginal individual utility seemed inadequate. Not least for these reasons, a kind traditional economics continued to exist in parallel to neoclassical economics. It had its roots in mercantilism, i.e. a view of the economy from the perspective of the monarchy; even if over time it adopted the basis of microeconomics for its analysis, it stayed separate as ‘public finance’.

Nevertheless, economics departments working on plain price and property theories in economies driven by individual decision-making would not give in so easily. They would identify the mechanism working quite visibly on commodity markets also at the deeper layers of what had previously been considered a restricted area for this kind of approach. A critical breakthrough in this field is attributed to BUCHANAN (1965) for his development of *the theory of the club*, showing the interdependence of the number of individuals, i.e. the size of a “club”, sharing the use of some kind of good and the utility these individuals can derive from it. Following from this, a shared good, once it has been provided for, may effectively be available like a free good. But, from a critical point onwards, congestion will occur, as the restraint that would otherwise be provided by the increasing marginal cost exceeding decreasing marginal utility (and thus willingness to pay) is absent. In that the axiomatically relevant, but missing property right in a good as such is now substituted for a property right in using the good, the realisation of the neoclassical welfare maximum is – theoretically – within reach.

What appeared so alluring about this step forward in theoretical development was not that some third category of goods had been defined, namely club goods, in addition to private and public goods. It was rather the option to capture what used to be considered public goods as club goods. For BUCHANAN (with his Austrian School inclination) this was namely an important step against any kind of central government. For neoclassical economists, it meant at least the extended if not complete dominance of their concept of economics as pure price theory.

Of course, so far, all this was just theory. The 1970s and 1980s were to become the period in which to gain the upper hand in actual policy-making as well. But this would not be a landslide victory. Not only would vested interests and a great deal of general scepticism make this unlikely. Some doubts with respect to the notion of principally self-regulating markets were also raised from inside the discipline of principally neoclassical economics. OLSON, with his *Logic of Collective Action* (1965), taking a more differentiated stance than BUCHANAN in his paper on *Club Theory* referred to above, should perhaps be mentioned here. On the other hand, it is obvious that private business interests welcomed the developments.

Considering what has been identified in this thesis as the core issue of changes, namely the privatisation of public concerns, one landmark project was achieved at the beginning of the 1970s. The *Roskill Commission* applied the neoclassical concept to support public decision-making on a *Third London Airport* in the form of a cost-benefit analysis (cf. e.g. NWANERI 1970, PRICE 1977, Chapter 12). What previously would clearly have been a matter to be decided by a political authority, was now to be decided on the criteria of individual willingness-to-pay, willing-to-accept etc. A flood of research projects and publications has since been launched, seeking to develop methods that would inform decision-makers on what should have been on the price tags of those calculative units of public goods that were – following the new view – consumed by individuals. Contingent valuation and hedonic pricing as methodologically rival approaches offered complementary support to decision-making in concrete situations. The first time the *Journal for Environmental Economics and Management* went to press was in May 1974. Standard textbooks and official manuals for the work of governmental authorities clearly prove all this to have been a strategic success for neoclassical economics. The foundations were laid for what came to be environmental economics. Thus it was pure neoclassical price theory showing that making rights to use environmental resources tradable offered the most elegant way to achieve maximum welfare and to trigger the optimum of environmentally friendly innovation at the same time.⁸ This would clearly be superior to Pigou-taxation, let alone regulatory prescriptions at technical levels.

⁸ This textbook standard is mostly dubbed “Coase theorem”. Here it should be pointed out that Coase himself did not proceed directly from analysis to this kind of policy conclusion. “I tend to regard the Coase theorem as a stepping stone on the way to an analysis of an economy with positive transaction costs. [...] Of course, it does not imply, when transaction costs are positive, that government actions (such as government operation, regulation, or taxation, including subsidies) could not produce a better result than relying on negotiations between individuals in the market. Whether this would be so could be discovered not by studying imaginary governments but what real governments actually do. My conclusion: let us study the world of positive transaction costs.” (COASE 2005:36)

Public utilities

While environmental policies could be developed from scratch, another field of application of the new theories had to overcome long-standing structures. Electricity, water, railway, telecommunications and other services had typically been provided by public utilities, as their tendency to form natural monopolies should not possibly be exploited by private companies. Other industries also seen as being of national relevance were embedded institutionally in a wider social context, whether in governmental structures, traditionally stable labour relations and/or bank affiliations.

In the 1980s, it was namely Britain, struggling to manage the decline of its heavy industries (first of all coal mines), of its printing industry (with lead typesetting being replaced by photosetting) etc., that failed to find a continued consensus for the respective policies. Instead, it became the trailblazer of deregulation and privatisation policies, showing the most rigorous withdrawal from what had so far been considered public responsibility for industrial development.

Other countries followed, often with a more phased, gradual, or differentiating implementation. While no proceeds from privatisation were recorded for OECD countries for the years 1980-1983, they first peaked in 1987, and later again in 1998. The absolute number of the proceeds – 0.8 trillion USD for OECD-countries over the period 1980 to 2001 – certainly sounds impressive; however, it crumbles somewhat when expressed as ratio to the GDP: 0.3% of these two decades. (cf. OECD 2002:3, 24ff) Thus it was not the proceeds that would have motivated privatisation policies. If budgetary relief is mentioned as the most important objective of privatisation it should be kept in mind that it was to a considerable extent loss-making firms that were to be removed from the list of public payees. Other objectives of this policy were a more efficient capital allocation by the integration of firms in financial markets, attracting foreign investment, offering investment opportunities for yet to be developed pension funds, restructuring labour relations, and quite generally resolving bureaucratic inertia. Obviously, the public debate on this was extremely intense, blaming the policy for selling the family silver, forgoing democratic accountability, abandoning workers' and customers' rights and safety, etc. Key to an appropriate understanding of this policy – and thus the point that matters for this thesis – is that the multidimensional set of objectives of public firms was reduced to just one: the dimension of efficient production of a specified output; it is prices of shares, sold value of output, employed hours of labour, etc. that matter. Thus, it fits well into the world of the pure price theory of neoclassical economics. Public goods (e.g. general job security, technological development) may no longer be expected (justifiably or not) to result from an external effect of a production activity. Strictly, public goods would either i) be re-framed as club goods, i.e. for cases in which the collective action problem could be solved by specific groups in society for their own purposes (e.g. security in gated communities), or ii) public-procurement mechanisms would commission them from the private companies providing them (often the case for public transport), or iii) technological developments would make it possible to change the character of public goods into private goods (e.g. by lowering transaction cost for individual payments systems in the case of motorway tolls, waste disposal, etc.) (cf. SCHNEIDER, HOFREITHER (1990), FRANGAKIS (2009), OECD 2002, 2003, 2009)

Industries with small and medium-sized enterprises

Some industries (e.g. shipping, agriculture, housing, pharmacies), differed from those discussed in the section above in that they were constituted by a larger number of often small- and medium-sized, privately owned enterprises. Public ownership was not a suitable option. Instead, they rather relied on price-support policies, and – if necessary – compensating subsidies or tax breaks.

Fixed-price policies, whether minimum prices for producers or maximum prices for consumers, are attractive for policy-makers as they are easily implemented. Typically they have to go along with border protection, allowing for some additional tariff revenues – at least as long as no surplus is produced. Shortages of supply would be used to justify special support for producers; an example would be the case of housing affected by upper limits on rent payments. Obviously, such policies could only appear as pure mockery of the very basics of all textbook wisdom.

Yet even such resolute a defiance was no longer safe when it came to international trade negotiations and budgetary limitations. With the multilateral trade negotiations launched in 1986 as Uruguay Round of the GATT⁹ a format was found to bring agricultural policies into line with economic wisdom. Non-tariff barriers (quota etc.) would be converted to their tariff equivalent, i.e., non-market compliant instruments would be substituted for a compliant one. Market distorting as it still is, it allows translating price changes from one side of the border to the other. A second aspect was that trade policies could now be negotiated more directly across a large number of products and countries.

This procedure – tariffication – had been a standard of earlier negotiations. (JOSLING, TANGERMANN (1996); SEITZ, WINDFUHR (1989) Principally, this was a first step bringing policies into line with neoclassical economics as price theory: prices might still not be in line with equilibrium, but they would play a role for allocation and adjustment. This had contributed critically to the success of the earlier GATT negotiation rounds and also to the world textile agreement. They could now be incorporated into the final agreements of the Uruguay Round. Commitments to phasing out tariffs and thus domestic price policies too (at least for tradable goods) matched structural adjustment programmes of the WB and IMF for *getting the prices right* (cf. e.g. WORLD BANK (2007)¹⁰. Demanding a *level playing field*¹¹ for all competitors suggested that market access should be allowed for international suppliers under the same legal conditions as for domestic producers.

⁹ The Uruguay Round, launched in Punta del Este (Uruguay), was the 8th negotiation round in the framework of the General Agreement on Tariffs and Trade (GATT). By the end of these negotiations it was upgraded to the World Trade Organisation (WTO), filling the gap in the set of international organisations that was left when the GATT was established as agreement only alongside the International Monetary Fund (IMF; short term finance) and the World Bank (WB; longer-term finance) after WWII.

¹⁰ At the stage when this was published (in 2007), the earlier policy of “getting the prices right” had already proved to be dangerous when applied as shock therapy. So proposals on complementary measures were added here.

¹¹ A standard formula for trade negotiators and analysts; 576 hits on the WTO website on 25 July 2017)

As explained above for possibly positive external effects of publicly run utilities, these changes do not mean that the respective public goods could not otherwise be provided. An example may be “biodiversity” as a public good: previously it was supposed to be safeguarded under an agricultural policy regime supporting traditional agriculture. Under the new regime the same may be specified as ecosystem service, traded on its respective market. Pollination may serve as an illustrative example: more and more of the service of bees is explicitly purchased by fruit producers from honey producers moving with their bees to the required sites.

So economies’ legal frameworks would be checked for any non-tariff barriers – if possible first to be converted into tariffs before being phased out. On the other hand, a rule axiomatically important to neoclassical economics – property rights – was extended to new fields, also in the Uruguay Round: trade-related intellectual property (TRIP) became part of the later agreements, along with legal entitlements generated in the field of service industries. (cf. SENTI (1986, 1995); RAGHAVAN (1990))

Public Sector

The public sector was also to be transformed following the newly strengthened economic paradigm. Previously, public administration had been based on rules; its activities had been based on laws and regulations, not on prices or respective incentives. Max WEBER (1922, ch. III, §5, ch. VI) analysed bureaucracy as an essential part of social modernisation. Based on principles of rationality, accountability and meritocracy, citizens could well take pride in the British Civil Service, the German or Austrian *Beamtentum*, etc.

On the other hand, public administration would often be associated with epithets like Kafkaesque or Byzantine, indicating that the system may have become rather self-serving. In 1944 Ludwig von MISES published a forceful statement on this issue, highlighting an antagonism between profit management and bureaucratic management; this statement is certainly nothing short of what was driving the discussion in the 1980s, now invoking what by then had evolved into standard textbook economics.

It was *New Public Management* (NPM) that proclaimed market orientation for governmental, welfare and communal services. This indicated a paradigmatic shift in public administration. Market-economy principles were to be realised in that citizens were considered as customers asking (and paying) for specific services as on a market place. Staff were supposed to be paid on the basis of performance, no longer on the basis of length of service. Monolithic structures would be opened to various agencies, non-profit organisations and also private companies. Contracts were to replace hierarchical relations, implemented namely by outsourcing non-sovereign duties. (cf. POLLITT, v. THIEL, HOMBURG 2007:110; EWALT 2001:8f) The word “incentivisation” entered languages.¹² With Britain and the US as frontrunners in these matters, the OECD ran a Public Management Committee and Secretariat (PUMA) since 1990s.¹³

¹² Following an evaluation of Google’s ngram viewer, this word began to be used in 1984 (after some few occurrences in the 1960s) and reached a peak in 2005.

¹³ The report OECD (2000), *Trust in Government*, is again mainly on ethical standards and their possible improvement. Cf. also de VRIES (2010) for a brief introduction into the discussion at that time.

To give but one more example of the far-reaching consequences of the changes triggered in this field: within a single decade, cameralistic¹⁴ accounting as it had been applied by public authorities since the 30 Years War was replaced by double-entry bookkeeping largely following commercial standards. With this, input was to be replaced by output orientation; effectively this meant that the valuation of public provisions would no longer be based on the cost of the required inputs but on a market value of the output. Asset valuation also became part of obligatory bookkeeping and thus accounting records.¹⁵

Financial sector and general equilibrium

General Equilibrium, i.e. the simultaneous equilibrium of financial, labour, and commodity markets has always been and still is the supreme discipline of economics. For some time, Say's theorem and the Walrasian system offered some plausibility for the belief that this general equilibrium would emerge almost necessarily and automatically. It was only as late as 1954 that ARROW and DEBREU could offer rigorous formal proof of the underlying ideas. Of course, with the experience of the first half of the 20th century, namely with hyperinflation in Austria and Germany, and later the world economic crises of 1929ff, acknowledging the causes and considering the effects of these occurrences, this proof could hardly be seen as more than some formal exercise. Nevertheless, for the coming year it would lead the way for economic research.

Before ARROW and DEBREU had come up with the proof of an optional existence of general equilibrium, it had been KEYNES in 1936 who had offered an explanation for what had happened before and during the crises of 1929ff. To some extent this was quite influential in economic policy making. So, still within his lifetime and directly influenced by him in international negotiations the IMF was founded, offering an international currency and stabilisation mechanisms to be applied in case of critical disequilibria in international financial markets. Keynesianism also provided arguments for monetary and fiscal policy makers in many countries.

In current textbooks, general equilibrium analysis typically relies on some form of the neoclassical synthesis, presented by HICKS in 1937; this integrates some of KEYNES' insights into a basically neoclassical framework. From the 1960s onwards, the theory of rational expectations could repel – at least for some time – what was left of Keynesian assumptions on behaviour even more; so called New Classical and New Keynesian thinking reduced the

¹⁴ named mercantilistic in France and in most Anglo-Saxon literature

¹⁵ The work of the International Public Sector Accounting Standard Board (IPSASB) gives evidence of the global outreach of these developments. Set up in 1997 it developed standard for public accounting and offers support to countries moving from mere cash management to full accrual systems. A large number of individual countries (including Austria) and multinational organisations (including the United Nations) develop their accounting system in accordance with IPSAS.

In Austria this was introduced e.g. for universities along with the UG 2002 (BGBl. I Nr. 120/2002) stating § 16 that for accounting the respective part (§ 189 ff) of the Austrian *Handelsgesetzbuch* is to be applied. So it is the law that regulates accounting primarily for private firms; as if there was a need to stress the entrepreneurial spirit that is also supposed to pervade formerly public authorities, the *Handelsgesetzbuch* (exchange law) was tellingly renamed as the *Unternehmensgesetzbuch* (law for corporations] in 2007.

analysis to different reasons for price and wage rigidities, supposedly not allowing for smooth adjustment to changing technology, exogenous shocks, trade union dominance and the like.

The loss of influence of Keynesian analysis in academia was supported in actual policies by the failure of Keynesians to overcome stagflation in the 1970s. It was supply side policies that gained ground, heading for improvement of the conditions of firms. As in other sectors, also for the financial sector it was deregulation that was expected to be key to growth and higher welfare. In the case of the financial sectors this meant reducing restrictions on trading financial assets in national and international markets. In 1986 it was a *Big Bang* with which financial markets were deregulated and technically modernised in a single step. With confidence in the stability of financial markets also new financial products were introduced, supposed to allow for risk sharing. These were asset or mortgage backed securities, collateralised debt or loan obligations, etc. So, also a previously public good of financial stability was commodified, and made tradable.

Winner takes all

At this point it should be summarised that the dominant economic policies since the early 1980s declared private initiative to be the key to economic development and welfare. Output was expected to be measurable; otherwise to be recognised and discarded as inefficient. Regulatory law or any kind of state action beyond the enforcement of private property rights was seen as an inferior solution to any problem. The state as a stabilising factor, providing for public goods was replaced by the ideal of the lean state: the less regulation, the better. As shown, this was now all-encompassing; all parts of the economy, the public sector itself and – not just a side issue – an increasing share of minds. Proponents of these policies could well refer to the economic knowledge developed in academia. Without doubt, there were ample opportunities to dismantle inefficiencies caused by structures that may have been intended to stabilise society at an earlier stage. So economics students were well trained in unmasking rent-seeking lobby politics; they had a sharp view for possible efficiency enhancements in industrial organisation and market relations; and, what is more, they would welcome new technologies making it possible to transform public goods into private goods.

To many, the strategic success of this approach was so overwhelming that what used to be part of an economics education as subject in its own right, namely public finance, increasingly lost out. This may be seen as bringing an end to a development that began with the rise of liberalism at the end of the 17th century. Until then, economics was seen as a matter of the state, with cameralistics, i.e. a 100% public-accounting perspective, dominating the field. Gradually, the market-economy perspective, with private players taking decisions and driving developments, took over. The provision of public goods would not have to rely on overbearance, nor on solidarity. By the 1970s at the latest, state-run industries, with their often chronically deficient balance sheets on the one hand and Keynesian fiscal and monetary policies ending up in stagflation on the other, ultimately seemed to discredit any further role for public finance. Even when presented on micro-economic foundations (as maybe most influentially by Richard A. MUSGRAVE in various editions from 1959 to 1983), public economics could no longer defend its former stronghold in economic education. Some of the issues it addressed would typically be ranked in one of the later chapters of micro-economics textbooks as exceptions from the rule. From now on neoclassical policy conclusions could barely be distinguished from those of the Austrian School, at least not in the way they were communicated. Neoliberal policy dominance was firmly established.

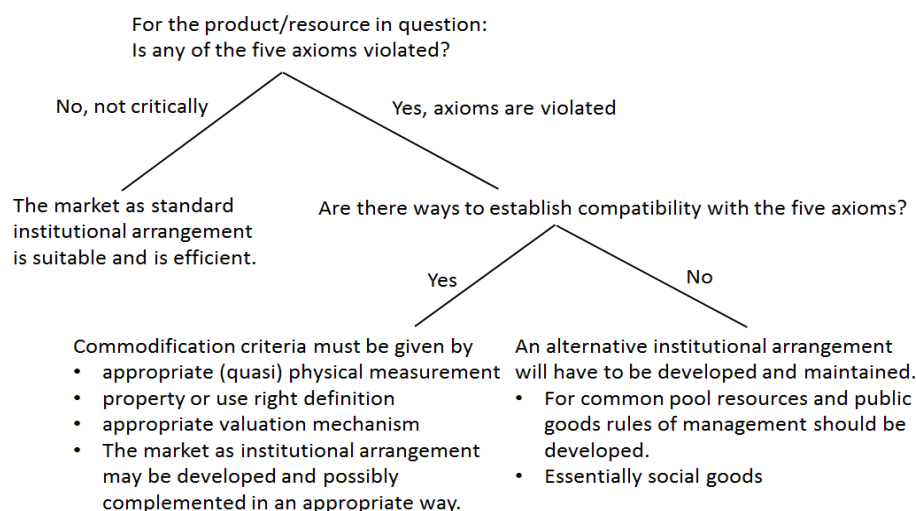
2.4 Institutions matter

By standard economic theory, the establishment of individual market relationships was now seen as *the* blueprint for the organisation of all economic activities and thus for policy advice. As explained, in many cases this is straightforward, namely for tradable commodities with easily definable, and also easily enforceable property rights. Based on this notion, the parts of the economy that do not match the mentioned characteristics are also expected to be transformed so as to do so. Market failures are not seen as linked to a potential inadequacy of market principles but to insufficient enforcement of them. This corresponds to the notion mentioned above that the liberal state and the enlightened, independent individual are practically always in a stand-by position, just waiting to be released. If only this could be taken for granted, then markets would automatically emerge for all resources and products. The state would enforce property rights (just in case people would not abide by them themselves), and market participants would exchange their resources and products freely to their mutual advantage: maximum welfare would be achieved.

Of course, standard economic theory does know about market failures, about adjustment problems, etc., but nevertheless, the only institutional arrangement it accepts as a guiding principle is the market. Over recent decades, the foundations in economic thinking laid down by the textbooks in this way, found their expression in policies such as shock therapies and wholesale dismantling of institutions that do not fit the pattern of the market.

This section will try to capture some of the conditions under which markets emerge, and analyse the conditions under which they can indeed be efficient. It will seek to establish when the institutions of the market may prove insufficient. Based on this, the place of the institution of the market in a wider set of institutions will become clearer.

Figure 1: Decision tree for an appropriate attribution of goods to categories, following compatibility with neoclassical axioms



Source: Own illustration

Note: The category to which goods are attributed may change with the changing natural resource base, technology and demography. The attribution may principally follow relative scarcities, but it may also be biased. When considering any switching between the categories in this figure, respective switching between private/open-access/club/public-good categories (following the criteria of excludability and rivalry) may support an understanding. Essentially social goods cannot be attributed to another category.

One of the conditions that will have to be checked is whether the resource or good observed is tradable; for this, it first of all has to have the character of a commodity. Only as such it will allow for compliance with the five axioms of neoclassical economics (cf. chapter 2.3, paragraph 2). If all this is given, the market can be seen as an appropriate institution. (In Figure 1 the good can clearly be attributed to the upper left option.) If it is not given, it could possibly be 'commodified'. Technical developments may be conducive to this. Legal conditions may be changed accordingly; a property or use right may be enforced in this sense. Anti-trust policies may help in the case of violation of convexity. AKERLOF's (1970) problem with asymmetric information may find relief in a guarantee policy. If this is possible, the lower left option of Figure 1 will remain the relevant one.

Still, even if it can be commodified, it nevertheless may be asked whether this is indeed the best option. Possibly, management as a common-pool resource is more efficient. So in Figure 1 the lower left and the right options are both possible. Which one is better suited depends on legal conditions, the cost of excludability etc., i.e. on the transaction cost. With changing legal, technical, demographic conditions one may switch in both directions between the lower two options. If the good or resource cannot be commodified – at least not without destroying it in its substance – the market as institution is not appropriate and so another institutional arrangement is needed to maintain it.

Goods and services for final consumption

The idea that final consumption is the purpose of all economic activities is one of the unquestioned principles of economics.¹⁶ With this in focus – as is argued in this thesis, it is maybe all too self-evident that economics is just about goods. Goods in a general sense of course, so covering resources, products and services. Confronted with the complexities of reality, this 'general sense' may call for quite some abstraction from what can be observed on traditional commodity markets; the term 'commodity market' typically refers to markets where primary-sector products are traded (sugar, tea, gold, gas), rather than manufactured products, let alone service-industry products, including those of the financial industry. Nevertheless, the basic concept of a good or service that prevails in economic theory matches the character of a commodity: it is easily tradable (or 'fungible', i.e. mutually interchangeable), as it is easily measurable in (quasi-)physical terms, and it can be compared in value with other commodities. Whatever the complexities of interaction and the difficulties of measurement etc., standard economics is used to rely on the conceptualisation of all kinds of goods as commodities. Only in this way can economic theory be maintained as pure price theory. Any categorisation of goods proposed by this economic theory – as in the following paragraph, or when consumption and investment goods, etc. are categorised – does not overrule this principle conceptualisation of goods as commodities. It is in any case superimposed. As will be seen in this chapter, this conceptualisation indeed corresponds to

¹⁶ The sentence: "Consumption is the sole end and purpose of all production; and the interest of the producer ought to be attended to only so far as it may be necessary for promoting that of the consumer.", stems from SMITH, A. (1776), *An Inquiry into the Nature and Causes of the Wealth of Nations*. (Book IV, chapter 8, 49), retrieved here from econlib.org on 15 August 2017. An accepted standard as it is, it may be recalled at times when intermediate objectives such as competitiveness, market share, employment, shareholder value and the like defy this elementary principle in current policy debates and lobby work.

real-world economic development. The question to be discussed will be the extent to which this is appropriate in reality and in theory.

In any introductory textbook, goods are classified as free or scarce on the first pages, and in a later chapter (when it comes to the issue of ‘market failures’ or ‘inefficient allocation’) also as public, private, club or free-access goods. It is thereby made clear that these classifications do not depend on the character of the good as such, but on circumstances. Natural as well as legal conditions will decide. Water will be a scarce good in summer in southern Italy but a free good during spring at the foothills of the Alps. Technical conditions and ultimately the choice of the legal framework also decide on the classification in the private-to-public spectrum. Water may conform to all four options: private as bottled water, as club good in a swimming pool of some private spa-resort, as public in a municipal one, or as free-access good in case of an uncontrolled fishpond, which – to make things worse – is used for sewage disposal. Of course, such classification of goods is not always without ambiguity. In this case, e.g., the municipal swimming pool might be captured as club as well, and the fishpond as a mismanaged club good.¹⁷ But such ambiguities do not call the analytical strength of this system of classification into question. They rather highlight the great variety of institutions and the flexibility with which they may be arranged.

Commodification induced by changing scarcity?

In mainstream economics DEMSETZ (1967) is regarded as having raised the issue of property rights emerging along with increasing scarcity of a good and/or decreasing transaction cost. He presented his argument on the basis of anthropological observations of fur hunting and trading on the Labrador Peninsula. While hunting by the Indian population was only for food, there was no scarcity of animals (or land); a special form of resource-management avoiding overhunting was not needed. But once fur trading took off, overhunting could have become a problem. In 1723 a seasonal allotment system was introduced in forestry parts of the peninsula; in other words, individual use rights in land, with which land took on the characteristic of a commodity. In contrast, similar rights were not introduced in the plains, as the enforcement (i.e. the transaction cost) here would have been higher, because animals would typically roam huge areas (in contrast to the forestry areas). So, enforcing property rights in the plains would not be as rewarding as in the forestry area; it just would not happen there. The existence of property rights was thus explained by DEMSETZ as depending on relative scarcities, i.e. on the basis of elementary economic principles.

Earlier, commodification of land had been analysed by MARX (cf. 1982 [first 1862], ch. 24¹⁸) as part of the establishment of market relations. A historical example he referred to was the enclosure of the common land in Britain, particularly in the context of the Civil War between the parliamentarians (largely representing the landed gentry) and the monarchists. With this, peasants lost their traditional use rights in land, and – following MARX – the foundations of the rise of the bourgeois class were laid. What MARX recognized as expropriation of land was

¹⁷ OSTROM (2005b:24) makes this ambiguity explicit. The typical textbook presentation (a table with four options) carries excludability/non-excludability and rivalry/non-rivalry as criteria for private, club etc. goods. For OSTROM, these Boolean criteria are replaced by the wording “Difficulty of excluding potential beneficiaries” being high or low, and “Subtractability of use” being high or low.

¹⁸ Note: In the English edition chapters 27 to 31 in part eight, Primitive accumulation

also in line with the interest of the reallocation of land from food to wool production and furthermore in line with the creation of a proletariat of landless people. Wool and cheap labour were essential inputs to the burgeoning industrialisation. As a result of the development, land, labour and agricultural products were commodified, became tradable, with labour now *having* to be traded at practically any price, as it could no longer rely on former possible access to land as a basis for subsistence.

POLANYI (1978 [first 1944]:60ff), used the same example to show the principal pattern of the establishment of market exchange, presupposing commodification of land, labour etc. He used the term “fictitious commodities”. He agrees with the Marxian interpretation, in that the enclosure movement forced peasants to leave the land that had previously been available for subsistence farming. He points out that land consolidation, newer technologies and more capital input contributed to growing yields and labour productivity, actually outpacing population growth. This is again in line with the generally positive stance of Marxist analysis with respect to the dynamics of the capitalist mode of production. A difference becomes apparent in that Polanyi gives a positive verdict with respect to the role of the Crown: at least before the Civil War, England overcame the traumata of enclosure better, because the Crown did not support this development. For a Marxian interpretation this is of course not surprising, as the Crown just defended the old feudal system. But POLANYI argues that the Crown was not conservative; instead, it supported the spread of technologies, immigration of agricultural experts, the development of a statistical systems etc. He was well aware of criticisms, pointing out that such policies of retarding or smoothening economic developments would avoid or just postpone the ultimate changes; nevertheless, he saw justification in this.

Neither MARX nor POLANYI would interpret this process as directly driven by changing scarcity ratios; i.e. their arguments are not in line with DEMSETZ (1967). For both of them it would be class interest driving this process by framing the legal conditions in favour of their own interest, well beyond marginal revenue. Also such a marginalist equilibrium would not have settled the case for them, as both regarded commodification and – linked to this – individual optimisation on markets as forced behaviour, contradicting human nature; people would thereby be alienated from their true needs.

MOORE (1966:4ff) compares this development in England with the one in Russia. He emphasises the evolvment of the landed gentry and the British yeoman from the 15th century onwards as a capitalist class. Land enclosures had begun in England already then on a smaller scale, and soon allowed for trading land. The medieval texture of rights and obligations characterising the relations among peasants and between peasants and landlords gradually dissolved and was replaced by commercial relationships. MOORE (ibid. p. 17) points out that later the Russian kulaks had been in a similar situation as the British yeoman at their time. The difference for the respective future developments was that in Britain the formerly dominant alliance between the Crown and the peasants was replaced by an alliance of the landed gentry with the emerging capitalist class, strong enough to contain the Crown’s influence and ultimately make it co-operate with capitalism. The peasantry as such had lost out. In Russia, the kulaks could not establish a strong relationship with an emerging capitalist class, but instead was persecuted by the central government after the revolution in 1917. The peasantry’s agriculture was transformed to a modern form of agriculture following collectivisation policies of the central government. With this, MOORE supports his hypothesis that it was these characteristics of the development that helped to

establish democracy in England – in contrast to Russia – on a firm footing. For all that, he reasserts that this process was one of “...massive violence exercised by the upper classes against the lower...”, while taking place “...over a long space of time ... mainly within a framework of law order...” (ibid. p. 29)

So, whatever approach is chosen, at the bottom line economic development corresponds to different forms of the articulation of property rights. Speed, degree, and fierceness of their enforcement depend on various factors, including different optional alliances of interest groups.

Standard textbook economics presupposes property rights as given or – if not given – to be established. As has been introduced already above, goods may qualify according to circumstances as private (i.e. commodified goods), club, free access, or public goods. DEMSETZ (1967) observed that property rights emerge following changes in relative scarcities of the resource in question, and the level of transaction cost that arises when property rights are enforced. This means that with circumstances changing – whether due technology, trading opportunities, demography, or climate – public or free access goods may re-categorise as club or private goods. The reverse development can also be observed: advances in technology may allow for a re-categorisation of formerly private goods as public goods. Of course, as it may have been hard for people at medieval times to imagine that a forest could be a private matter at all, it will call for some mental flexibility to do so in principally similar situations today. This could well be understood as a challenge to teaching economics. MANKIW and TAYLOR (2017a:223f) allocate a little bit more than one page of their 423-pages textbook on micro-economics to this issue.

Still, what should not be forgotten is that it does not only take mental flexibility to understand the issue of changing property rights, but that also socio-economic problems – as has been seen with the enclosure movement in England – may go along with it. On the basis of pure micro-economic thinking one would assume that increasing scarcity of a resource would allow for higher returns in using it, and thus a growing interest in earning these. Facing the danger of HARDIN's (1968) *tragedy of the commons* on the one hand, and the option for efficient use on the other, the respective social choice problem will have to be solved somehow. As will be discussed later also in chapter 4.1 there is a rather moderate notion, with some affinity to micro-economic thinking again. According to this some extra gains will be expected from dealing with this resource. This will now ask for some investment in a process developing the legal foundations of private property in the concerned resource. The social-choice problem would be solved. Still, this notion that a property regime follows relative scarcities so smoothly may be called optimistic.

Technology, changing scarcities and commodification in forward and reverse gear

An example of the role of scientific discovery and technological development may be given with the issue of bandwidth for telecommunication, whether via cable, satellite or terrestrial. When it all began, it was difficult to imagine how radio transmission would work at all: A phlogiston, in this case the ‘aether’ carrying waves, had to substitute for the later explanation by modern physics. Phlogiston or not, for long it must have seemed unquestionable that nature's capacity to transmit radio waves – principally an open-access good – would have to be managed publicly. Public authorities allocated bandwidth to radio stations, ensuring that

the stations would not interfere with each other.¹⁹ The radio stations themselves would now manage a public good, without a realistic opportunity to exclude anybody from listening. The fact that electromagnetics would indeed allow for practically unlimitedly individualised market relationships, payable bit-by-bit, would have been discarded as unrealistic science fiction. But this is just what has been introduced from the 1990s onwards. Use rights in bandwidth would be auctioned by the state, telecommunication companies and broadcasters would in turn charge their users for Pay-TV, SMS, music downloads, etc. So telecommunication has been commodified.

Reverse developments – from private to public goods – are as well observed, again, just to pick up on the same example, telecommunications: transmission of data became so cheap using wifi-networks that administering payments (i.e. transaction cost) would be unreasonably high. Flat-rate offers were one result. Furthermore, the limited radius of wifi-networks makes this technology most suited for the governance form of a club (in concrete terms e.g. a café, trains, busses). Yet as the provision of some infrastructure and (mis-)uses are closely intertwined, legal limitations are typically given.²⁰

The same – only at first sight bizarre – developments can be observed for Mount Everest (commodified by ascents liable to pay), bottled water (in contrast to water from, for example, the traditional Viennese *bassena* (tap water in the tenement corridor), now in reverse as the trend to the generally accessible water cooler in offices), editorial work of publishers (now provided by freelancers as clickwork), or the atmosphere (of which the use as space for emissions is now liable to charges in the EU or California per t of CO₂), etc. While the effects of commodification are often far reaching and hard to measure, they are not necessarily problematic. (For problematic cases see below.) Instead, commodification may indeed allow for more efficient and sustainable production otherwise not possible. Of course, like any change in economic organisation, these not necessarily problematic commodifications have a re-distributive effect too. It will be worth checking this in terms of now – or no longer – possible rent-seeking.

Not necessarily the best option

As already introduced with DEMSETZ (1967) above, differences in transaction cost are critical for commodification. (In his case it was the seasonal allocation of use rights in forests, but not in the plains, as in the latter the enforcement would have been more expensive than the losses that would occur without.) Enforcing property rights by fences, or by cryptographic keys, the expense for invoicing, cash transport, etc., all adds to transaction cost. Examples for the administrative part of transaction costs encountered in everyday life are flat-rate arrangements in telecommunication, almost ubiquitous all-inclusive arrangements in holiday resorts, lump-sum payments (per diems) for official trips, etc. The latter examples suggest that an accurate financial settlement, considering each traded commodity would be rather cumbersome. It would hamper or even suffocate the intended trade.

¹⁹ Of course, some pirate or clandestine radio stations would broadcast from ships or rapidly changing locations, so staying beyond the reach of public authorities. The latter gave rise to the question why principally the state should keep control over these technical options, and thus also over mass media. The implications are far reaching. Today, respective discussions concern internet neutrality.

²⁰ Cf. e.g. the debate on the German Telemediengesetz [[web](#)], also in contrast to the European Regulations [[web](#)]

What deserves attention is whether the decision on the commodity-wise-vs.-flat-rate payment is taken by just one, single, board, responsible also for implementation and outcome. If so, the overall outcome will be decisive; the decision will be unbiased. If there is a bias for one or the other option, the overall outcome may not be efficient. With this it becomes clear that commodification does not necessarily offer the more efficient solution. Instead, as has been argued by POLANYI and MARX (see above) it may just reflect economic interest that can assert itself due to political power, or it may follow an ideological bias favouring commodification. The two options rely on different institutional arrangements. Finding ways to select the optimal one will be a challenge.

Measurability and work ethics

For all the analytical insight that may be provided by theory, and for many actually observed commodifications, a separation and measurement problem will be encountered. This is because the provision as well as the consumption of the respective goods are often closely intertwined with that of other goods. These may be public goods with a substantially social character.

Some good insight into the problem is given by the discussion on results of NPM, as it was introduced in chapter 2.3. Here, attempts to measure work performance by linking it to measurable aspects of public goods almost necessarily leads to failures and frustration. An analytical *as if* commodification might offer brilliant insight, but re-translating it directly into reality will not necessarily work. Adequate valuation of inputs and outputs is hardly ever possible. Instead 'managerialisation' is observed in that NPM primarily is shifting emphasis to management and away from work ethics. Ranking work ethics second will tend to undermine them, and ultimately lead to 'infantilisation of employees'. With NPM, the immediate value of the dedication of a teacher or the enquiring mind of a researcher have often lost recognition compared to management capacities. (cf. DIEFENBACHER 2009:900ff).

Other authors defend NPM as successful, namely with respect to the re-organisation of public services in Central and Eastern Europe. (cf. POLLITT, v. THIEL, HOMBURG (2007); DAN, POLLITT 2014) It has also often proved efficient for western administrations to outsource or separate formerly publicly provided services. Private companies followed the same concepts by outsourcing specific services (accounting, legal and other services). (cf. for this also chapter 2.3)

A year 2000 OECD report on 'Trust in Government' points out: "A key challenge for government" concerning public services was to develop a "modern set of core values [that] should combine 'traditional' values, such as impartiality, legality and integrity, with 'new' values such as greater public accountability and transparency." (OECD 2000:9) The seven principles of public life in the United Kingdom: selflessness, integrity, objectivity, accountability, openness, honesty, and leadership, are quoted. (cf. OECD 2000, Box 2).

Of course, the real performance of administrative staff may in many cases fail to live up to seven such principles. But by the same token it may be said that homo economicus does not live up to expectations of neoclassical axioms either. So one may not want to offer an ultimate answer but borrow from NORTH (1990:17) and rephrase him in that for public administration – for all its deficiencies – work ethics, not premium payments, still offer "the best game in town".

Essentially social goods

It had already been discussed that a commodification of some long-standing public goods may at first seem somewhat bizarre. Some examples were Mount Everest, editorial work, the world atmosphere. Many more of such examples could be mentioned. However, there are also cases for which commodification is observable, where it is even being pushed politically, but for which the case is not unproblematic. An example would be commodification of care of the elderly, where each activity is broken down into a minimum measurable act. The same can be observed for healthcare. Education may be supporting personal development in a comprehensive sense, including social skills, or it may supposedly be provided by a trainer focusing on techniques needed to pass an exam. Luther was reluctant to see prayers as a tradable service; the modernising Vatican had offered this service, with Tetzl in charge of merchandizing. In each of these cases some socially relevant matter, some habit, some capability that is essential for the individual and for society at large is indirectly affected. In terms provided by economic theory this can be captured as a good that may – or may not – result from an external effect of the activity performed. The goods generated by these external effects would be security and social cohesion.

Goods like security and social cohesion will not only be generated on the basis of the external effects mentioned. There will be many contributing activities, with the way in which they are performed indeed playing a role. The maintenance of essentially social goods is typically embedded in complex social surroundings. Examples of this can be found in culture in all its forms, whether music, language, lifestyle etc. Safety, cohesion, trust, justice, and other social matters are also cases in point. Here, culture maybe selected to explain the case. Following definitions given by encyclopaedic sources,²¹ the term *culture* refers to a set of shared values, conventions and social practices. It covers inherited ideas, beliefs, and knowledge, which constitute the basis of social action. From this, it is obvious that trying to turn culture into tradable commodities will destroy its very substance. To make it clear on a narrowly defined notion of culture, still covering all relevant aspects: one may run a profit-oriented theatre on the basis of selling tickets, thereby offering some entertainment, or maybe even an edifying experience. For this, a sub-discipline like 'economics of arts' can easily be developed following the same principles of demand and supply encountered on any other commodity market (cf. FREY 1990:69ff). But the critical aspect about culture is not enjoying (or sticking out, if so) an evening at the theatre. The critical aspect is the ability and

²¹ Merriam-Webster proposes (among other definitions): "the integrated pattern of human knowledge, belief, and behavior that depends upon the capacity for learning and transmitting knowledge to succeeding generations", "the set of shared attitudes, values, goals, and practices that characterizes an institution or organization", "the set of values, conventions, or social practices associated with a particular field, activity, or societal characteristic". Collins offers: "the total of the inherited ideas, beliefs, values, and knowledge, which constitute the shared bases of social action", "the total range of activities and ideas of a group of people with shared traditions, which are transmitted and reinforced by members of the group", "the artistic and social pursuits, expression, and tastes valued by a society or class, as in the arts, manners, dress, etc.", "the enlightenment or refinement resulting from these pursuits", "the attitudes, feelings, values, and behaviour that characterize and inform society as a whole or any social group within it". Apart from these definitions, there are also those referring to "stockbreeding" or "to grow (microorganisms) in a culture medium", so to the aspect of culture as contrasting to nature.

the opportunity to exchange the experience made and to develop a shared understanding, or at least mutually respected attitudes.

Considering the challenge of social organisation it is obvious that these goods are vital (cf. chapter 2.2). The extent to which they have eroded over recent decades, but also to what extent they could be generated or replaced adequately, is hard to determine. Direct measurement is hardly possible; measurement by their effectiveness (e.g. number of illegal intrusions, suicides, successful conflict resolution, number of addicts, or possibly some happiness index) remains necessarily vague, but at least an option. For their vagueness, i.e. for measurement problems etc., these questions may not be as accessible by econometric techniques, not by neoclassical thinking in commodities, and so not by what is considered hard science. This in turn may have led to some neglect by academics, depending on publications in hard-science journals, irrespective of the urgency of the problems. With New Institutional Economics this may change. It brings the variability of institutional arrangements back into economic thinking. It enlarges the research area again to cover public goods with an essentially social character, their emergence, their maintenance, their contribution to social organisation and to economic welfare. Institutions themselves, by the way, are a candidate to be categorised as such a good.

3 New Institutional Economics and its perception

Institutions are not new to economics. During most of the 250 years of history of economic thinking, institutions played a more important role than prices. Nevertheless, only as late as the 1920s Thorsten Veblen and John Commons presented an economic school of thought with the word “institutions” in its name, indicating the principal means of social and economic coordination. Obviously, this explicitly contrasts with the kind of economic thinking that had evolved after the marginal revolution of the 1870s. That revolution, and the way in which Alfred MARSHALL codified it in 1892 in his *Principles* relied only on prices as explaining and guiding economic behaviour. Economic thinking was purged of all the institutional components that had been part what since Adam Smith had been called Political Economy. While MARSHALL presented a pure price theory of economics (somewhat later called neoclassical economics), Veblen and Commons presented a theory based purely on institutions.

During the 20th century, neoclassical theory was able to decide the academic competition in its own favour. The textbook by Paul Samuelson – first published in 1948 – was to dominate the thinking of generations of economics students. Some scattered authors like Geoffrey M. HODGSON (1988), Malcom RUTHERFORD (1996), or Daniel W. BROMLEY (1989) would still fly the flag for what now came to be known as the “Old” or “Original” Institutional Economics. For a re-integration of both approaches there was hardly any room. *Ordoliberalism* remained a German peculiarity. With rational-choice theory the situation became even more lopsided. It may just have been a matter of time and ever more pressing problems until this development would find its own corrective.

This chapter gives a brief introduction to contributions that laid the foundations of what has now emerged – and is still emerging – as New Institutional Economics (NIE).

Coase, North, Williamson, and Ostrom

It is Ronald COASE, Douglas NORTH, Oliver WILLIAMSON and Elinor OSTROM to whom the development of NIE is to be credited. Mentioning and presenting them here in this order is not meant to imply any ranking with respect to their relative importance, nor is meant to suggest any logical or binding historical sequence of the way the currently visible edifice of NIE has been built up. Instead, their respective contribution came from different perspectives, sometimes presenting differing conclusions, while after all there are areas of considerable intersection, and overall there is a quite coherent picture of NIE. Remaining divergences should remind the reader that no new economics catechism is to be expected, and it was certainly not indented by those contributing to NIE.

As early as in 1937, in his article on the *Nature of the Firm*, COASE questioned the market principle as being necessarily superior to hierarchies: observing the simple fact that hierarchical organisations existed without any external prescription to do so, he concluded that the reasons for this would have to be considered as economically relevant. The critical role of transaction cost thereby assumed the stage of economic research: for example, for the case of employment, it was not only the wage that mattered, but also the search cost for qualified personnel (and the search cost on the part of the would-be-employees), the cost of contracting, the cost of management, etc.

After COASE had highlighted the possibly superior efficiency of hierarchical structures within firms in 1937, he shifted the focus of this same argument to a possibly inferior efficiency of markets in 1960. Taking account of all cost components (in this case namely the cost of the internalisation firstly of external effects, including the cost of information, of contracting, of enforcement, etc.), the market might ultimately lead to lower overall welfare than a solution with all these costs as internal costs in the first place. He addressed this as *The Problem of Social Cost*. He exemplified it by situations in which a public good (constituted or affected by external effects of other activities) would be completely private, with no cost differences of the enforcement of this status for potential owners. In this notional situation the good as such or its respective use-rights could be traded freely, so that all those participating could consume it up to their marginal utility, and so a welfare maximum would be achieved. Logically, for this it would be irrelevant who had acquired (e.g. by public auction) this respective public good at the start of the process. A practical example of these considerations, and indeed a concrete problem to be solved at the time, was the use of radio frequencies and possible interference by neighbouring radio stations. A typical textbook example is the shared use of water by fishermen and a paper mill.²²

In neither of these two articles, COASE claimed a principal superiority either of hierarchical decision-making on the one hand or market mechanism on the other. He rather wanted to draw attention to transaction cost and its determinants as a critical matter. These two articles may thus be seen as a precursor to later standards in industrial organisation. So his work explicitly or implicitly plays a role for whether value chains are to be organised inside or between firms. In concrete terms this is for example the make-or-buy decisions that populate today's textbooks. When at first COASE pointed out that hierarchies may be superior to market solutions, this also entailed its equivalent in the reverse perspective: the establishment of competitive market relations within firms observed in more recent decades. Whatever the perspective, it is the issue of transaction costs explaining the case. From the 1970s onwards the implications of his papers surfaced as the principal-agent problem, or as the problem of incomplete contracting. They also cover the role of asymmetries of information, on which a lot of research concentrated after it was made explicit by ACKERLOF'S *Market for 'Lemons'*-article in 1970.

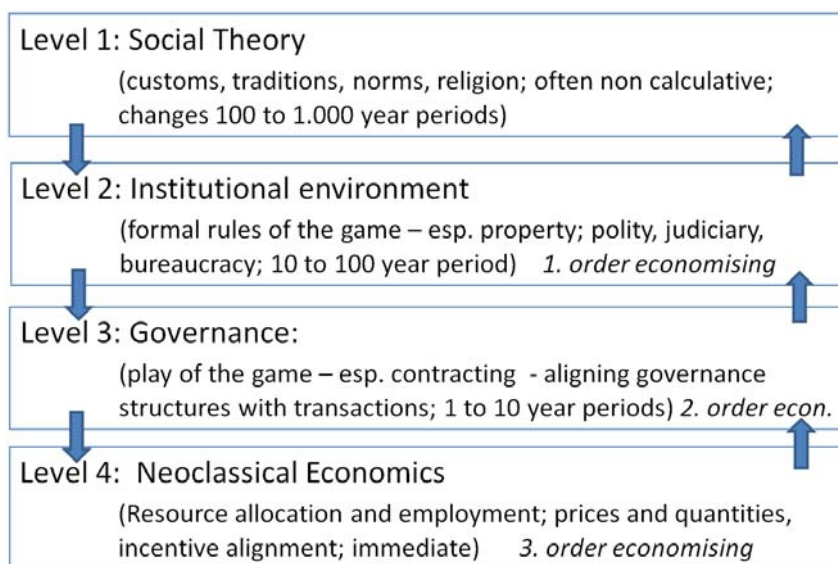
Later it was Oliver Williamson who coined the term *New Institutional Economics* (cf. MÉNARD and SHIRLEY (2005:2) who attributed this to him, referring to Williamson 1975, chap. 1).²³ His original research interests were with managerial economics and industrial organisation. Here

²² COASE had indeed worked on this problem in 1959. With his 1960 paper he elaborated on it in a way to make the underlying structure of the problem more accessible. So he began explaining it for animals roaming in neighbouring fields for food, thus causing a crop reduction there. This paper thereby integrated the concepts of external effects, the option of compensation vs. enforcement of property rights by fences, and also the concept of public goods. DEMSETZ (1967, as introduced already above, illustrated this by reference to the development on the Labrador Peninsula.)

²³ MÉNARD and SHIRLEY (2005) edited and introduced into the voluminous *Handbook of Institutional Economics*. A large number of contributions of authors who constituted NIE are collected here. Other comprehensive introductions were provided by BROUSSEAU and GLACHANT (2008), FURUBOTN and RICHTER (2005), [from the preface, p. xv): "The present volume is, essentially, the English-language version of the book *Neue Institutionenökonomik*, by R. RICHTER and E. G. FURUBOTN, published in Tübingen by J. C. B. Mohr (Paul Siebeck) in 1996."], and again FURUBOTN and RICHTER (2010)

he mainly paid attention to the cost of institutional arrangements (i.e. transaction cost) needed to get the sphere of neoclassical economics working. He separated these spheres as *levels*. For the level of the institutional arrangements he used the term *governance*. It is this level that – according to WILLIAMSON (1996:3f) – had attracted most research in institutional economics: here, the “action reside(s)”. That is, action with respect to changes in institutions over relatively short periods of time (1-10 years) as well as research action addressing these changes. In concrete terms, this level corresponds with business or public administration, self-organising clubs etc. It is above the level of neoclassical economics (i.e. of trading commodities, services, their respective markets, and thus also price formation), while it hinges on the next higher level of general property laws, judiciary systems etc. These institutions are again seen as embedded in social traditions, customary behaviour, religion etc.

Figure 2: Economics of Institutions



Source: Own illustration following WILLIAMSON, O.E. (2000:597)

Note: The term “governance” is used by Williamson specifically for what he categorises as his Level 3. Other authors use “governance” for all levels. So the term governance may be read as interchangeable with institutional arrangement, institutional framework, or otherwise. If not determined by context, this thesis follows WILLIAMSON. The whole set of levels is referred to as institutional arrangement. The arrows have been added by the author.

This embeddedness means that the neoclassical market mechanism, for example, evolves within the framework of the next higher level of institutions, the level of governance. An example would be that company shares may only be traded within a framework offered by stock markets, which will be designed following public laws and self-regulation of stock market companies. Public laws themselves have to be consistent with constitutional rights, which in turn reflect longstanding traditions, religions and perceived values of society. The close links between eating habits, food laws and religious as well as cultural rules provide a telling example of this triple embeddedness. Another example might be the way in which monetary value is maintained over time, i.e. how credit systems are organised. The arrows on the left hand side of Figure 2 indicate the direction of the gradual institutional framing of ultimately concrete and detailed economic activities.

By using the heading “Economics of Institutions” – and not institutions of the economy – for his representation of the various levels (Figure 2) WILLIAMSON makes it clear that the

institutions themselves are also subject to economic circumstances. They are formed with respect to relative scarcities of resources. (Note: This has already been discussed with DEMSETZ (1967) in chapter 2.3.) Only in this way can they fulfil their task (indicated by downward arrows) in an efficient way. If they remain fixed while relative scarcities change, they will become dysfunctional, the economic process will suffer from disruptions. So the necessary feedback is indicated by the up arrows on right-hand side of the diagram.

The higher the level, the longer is the time horizon for any changes on these levels. The lifespan of an institution thereby actually related to the task it fulfils. On Level 4, action is taken immediately and continuously. The market is the institution for it: namely, spot markets, or more generally markets where the exchange of goods takes place – literally or quasi – over the counter. The goods are consumable within a short period of time; no long-term risks or material changes have to be considered. Here the short-termism of marginal, neoclassical theory is appropriate. On Level 3, the level of governance, it is longer-term contracts, organisational responsibilities, and full cost considerations that take the stage, together with aspects of insecurity and credibility. Not just accidentally, the ten-year frequency of change indicated by WILLIAMSON is a good match for the average equipment-renewal interval. The institutions on Level 2 are typically linked to state authority: while contract development was left to the level of governance, the enforcement of contracts is expected from the legal and executive capacities of the state. But there is more to this. Demographic, and technological changes, as well as changes in the natural resource base, i.e. changes in relative scarcities, would usually also have to lead to changes on this Level 2. A general inertia at this level is mostly a sign of a lack of responsiveness to the feedback from lower levels. So a conservative articulation of property rights, a rigid company law, and/or frozen societal structures that kept society in balance only under previous conditions will lose their functionality. The character of these institutions will change from enabling institutions to unduly restraining ones. Here the frequency of 10 to 100 years indicated by WILLIAMSON matches the historical experience of wars, revolutions and all kinds of social or regional labour mobility that challenges and finally breaks unresponsive societal structures. Level 1 covers long-term traditions, religions, customs etc. The frequency of 100 to 1000 years may reflect time horizons in which natural religious rites were followed by polytheistic, and later by monotheistic religions. With the age of enlightenment, the modern world view may be seen as substituting for it. Whether this could be seen as a long-term, unidirectional development with a final “end of history” – with maybe some backlashes along the way – will remain a matter of dispute. The role of traditions and customs may be less profound, but it is still at this highest level of institutions. WILLIAMSON hypothesises some feedback from the lower levels, i.e. real-world scarcity ratios and social organisation at this level, but at the same time he assumes the option of spontaneous origin. The institutions here are hardly determined by calculated, deliberative choice. Possible evolutionary determination would deserve some closer inspection.

The simple fact that WILLIAMSON categorises social institutions according to these four levels makes it clear that they should not all be explained in the same way. Each level's institutions deserve special attention, for their determination, for their functionality, as well as for the role they actually play for the economy and society.

Elinor OSTROM – a political scientist, linked to the Bloomington School/Indiana – contributed to NIE in that she analysed the evolution and the role of institutions in a multitude of very concrete settings as well in a theoretically very comprehensive way. Following her

experience with this, she emphasises the need for a highly differentiated analysis; each geographical region, each language and social group, each generation, etc. may be observed for specific features of institutional frameworks. So the analysis may not fall short of observed complexity as “institutions relate to the complexity and diversity of contemporary life”. (2005a:819) For this, over a period of 30 years she and a number of colleagues from the Bloomington School developed the Institutional Analysis and Development Framework (IAD) as a tool for analysing any kind of institutional arrangement (ibid. p. 820). Nevertheless, this allows for some clear structuring, in that it identifies major *types* of structural variables that can be found in *all* institutional arrangements. Of course, the values of these variables may be very different. (ibid. 828ff)

Like WILLIAMSON’s system of four different levels of institutions (cf. Figure 2), OSTROM assumes a multi-layered framework as well. Principally, different institutional situations are seen as nested within each other. Like WILLIAMSON, OSTROM illustrates this with four Levels of Analysis and Outcomes (OSTROM 2005a, figure 3), all beginning with *metaconstitutional situations* in which rules for the next level – the constitutional situations – are determined. On a second level (*constitutional situations*) collective choice rules are determined to be applied on the third level (now, the *collective-choice situations*). Again – as for all levels – it is the physical world as well as the kind of community that shapes these rules. The fourth level (*operational situations*) is run on the basis of the respective rules that were developed on the third level. From the metaconstitutional to the collective-choice situations it is always institutions that are concerned – here they are determined, here they become relevant as framework for the next level, by prescribing, invoking, monitoring, applying and enforcing them. On the level of operational situations the institutions are finally concerned directly with provision, production, distribution, appropriation, assignment and consumption.

It is quite obvious that i) OSTROM’s operational situations closely correspond to WILLIAMSON’s neoclassical economics level, ii) the collective-choice situations to the level of governance, iii) the constitutional situations to the institutional environment, and iv) the metaconstitutional situations to the level of social theory. Nevertheless, OSTROM makes it clear that such a categorisation is possibly helpful for the development of practical applications for her concept, while there was no theoretical justification for any specific number of layers. The number will rather be determined by the specific case observed, and by the scrutiny that may be applied to it. For a formal theory, even an infinite number of layers may be called for.

While WILLIAMSON might nourish a notion of objectively observed, factual determinants – only with the highest level given by some not fully clarified spontaneous order – here OSTROM highlights the “socially constructed realities to guide participants” (2005a:841). So while institutions are a matter of more or less conscious, man-made design for both of them, OSTROM may consider that they are open to a broader range of valid options. This becomes clearest on what is the *neoclassical level* for WILLIAMSON and the equivalent *operational situation* for OSTROM: While the latter may consider building “a theory of self-centered rational choice, a theory of bounded rationality, or a theory of norm-driven behaviour” also on this most concrete level (ibid., p. 828), without neglecting the “constraints of the physical world” (ibid. p. 843), WILLIAMSON leaves it at the price-driven, pareto-efficient solution prescribed by neoclassical theory. As explained above with WILLIAMSON’s *Economics of Institutions*, he also views the higher levels of institutions very much through the lens of the minimisation of transaction costs.

OSTROM's special approach becomes clearer as such by contrasting it with Industrial Organisation literature (cf. e.g. CARLTON and PERLOFF 2015:27f, 106f). This literature shares theoretical foundations with OSTROM, particularly in that it recognises the role of limited rationality, of what is called moral hazard, of uncertainty, and of non-competitive forms of markets. But what distinguishes Industrial organisation from OSTROM is its restriction to the standards of pure neoclassical price theory. So it very much follows what has been raised here in the chapter 2.3: confronted with the above-mentioned violations of neoclassic axioms, it systematically goes for solutions structuring WILLIAMSON's level three ('governance'; cf. Figure 2) in the sense of a private agent exchanging private products on markets on level four ('neoclassical economics'). So CARLTON and PERLOFF, for example, do not dedicate more than two pages of their 850-page textbook to the issues of market failures or external effects. For them, these problems are simply structured away by privatising the resources concerned. OSTROM, on the other hand, widened the range of options. Private market solutions are well accepted as an option, but not as the only one and – here in line with WILLIAMSON and in contradiction to Industrial Organisation literature – not necessarily as the most efficient one. Following her, the institutions of private property and the market are seen as competing with other institutions, i.e. with other forms of governance. While for Industrial Organisation literature institutions other than private property and the market will systematically lower economic welfare, for OSTROM this remains an open question to be answered in each special case.

OSTROM became most prominent, also beyond academia, for her work on Common Pool Resources (CPRs). In a large number of studies that she and others conducted (cf. e.g. OSTROM 2005b:9 for a selection of these studies), the kind of rules observed for the management of CPRs, their development, their enforcement etc. were scrutinised. (These studies may actually be seen as the acid tests for the IAD.) Eight *Design principles for long-enduring institutions for governing sustainable resources* were derived from this work (cf. *ibid.* p. 259). By following these principles of *robust governance*, social workers, environmentalists, or just people concerned, expected to escape HARDIN's (1968) *Tragedy of the Commons*. Along with this, the social group concerned would earn some perspective for its development, otherwise ending up in forced dissolution or precariousness.

Finally, OSTROM's approach matches well with COASE, in that it is the *kind of governance* of a resource (in this case CPRs) that deserved more attention than was typically paid by market-oriented neoclassical economics. As explained above, for COASE it was the observation of the special form of hierarchical governance established by firms, for OSTROM it was a less formal, rather participative way of cooperative governance. For both, it was a non-market form of governance that could well and successfully compete with the market-mechanism.

Douglas NORTH, an economic historian, widened the view of NIE considerably, in that he analysed the emergence and the long-term development of institutions on a macro level. His subject was thus not so much business administration, i.e. the level at which for WILLIAMSON (1996:3f) "the action arises", and which was the main concern of COASE in his 1937 article. Rather, NORTH would address the diverging developments of Spain and England in the 17th century, for example, the underlying drivers of the abolitionist movement in the US in the 19th century, or questions of war and peace in general. In this sense he also provided a most comprehensive definition of institutions: "Institutions are the rules of the game in a society or, more formally, are the humanly devised constraints that structure incentives in human exchange, whether political, social, or economic." (NORTH 1990:3). NORTH'S objective was to

integrate institutional analysis into economics and economic history, as there had previously been no analytical framework to do so (ibid.).

For all the concern with developments on the macro level, NORTH actually begins his analysis of the emergence and the role of institutions by questioning human cognitive capacities (drawing on Herbert Simon; the reader of the thesis presented here might also notice some link to the debate in chapter 2.1) So learning is essential, as this is how beliefs are constituted. It is these beliefs again that determine institutions. He is very clear on the fact that people and firms take action deliberately, even though there is a strong path-dependency for institutions and the content of what humans learn. (NORTH 2005:26)

NORTH speaks of political entrepreneurs like business entrepreneurs, both going for an enhancement of competitiveness, and doing so quite consciously. But since institutions may be established the wrong way, it may all end up in disaster. As consciously as these entrepreneurs may act, they should not claim to be free of path dependencies in their learning and in their resource situation. NORTH stresses that there is hubris in the World Bank reports, as at the same time as there are famines there is a glaring misunderstanding of institutions. To him, the shock therapy for Russia in the 1991 showed a considerable lack of understanding of institutions. (2005:26ff)

Following NORTH, institutions may be formal (such as rules that humans devise) or informal (such as conventions). They may be created (like a constitution), or they may evolve (like British common law). So institutions are certainly humanly devised in the sense that they are not of any metaphysical origin (God, Hegelian World Spirit or whatever), but neither is the concept restricted to immediate, purposeful, individually initiated design.

While NORTH (1990:4) uses the word “constraint” in his definition of the term institution, he points out, that institutions may not only restricting, but also permit activities. So they offer a “framework” or a “structure” in which economic activities can evolve. Again, in the jargon of mathematical economics, it may be seen as the scope for possible activities that is generated, not constrained to a smaller range.

NORTH sees institutions as competing with each other, so it is the economic efficiency with which they fulfil their functions that matters for their survival. But for him this is not as straight as it was assumed e.g. by ALCHIAN (1950), as – for NORTH – there may well be a disparity between private incentives and social welfare, i.e. the process would not be unbiased or fully self-controlling. For this and with progress in his research, NORTH abandoned the evolutionary-efficiency view of institutions. Instead, property rights would typically be devised in the interest of rulers or the party with higher bargaining power: “The [...] path of institutional change is shaped by (i) the lock-in that comes from the symbiotic relationship between institutions and the organisations that have evolved as a consequence of the incentive structure provided by those institutions and (ii) the feedback process by which human beings perceive and react to changes in the opportunity set.” Externalities as well as economies of scale, and thus path dependencies, are recognised as crucial for the direction in which political and economic systems evolve. (NORTH 1990:7f, 83ff) In this NORTH shares views with Marx and Polanyi rather than with DEMSETZ in the discussion introduced in chapter 2.3.

NORTH explains the existence of institutions in that they reduce the uncertainties involved in human interaction (1990:25). This is very much in line with COASE and WILLIAMSON (see above), with the latter also using a measurable category, as uncertainties translate into

transaction cost. Certainly, NORTH uses the term transactions cost as well (cf. e.g. 1990:27ff), but more from a social than a firm's perspective. The management of public goods or CPRs, an issue introduced by COASE in his 1960 article, also central to OSTROM's writings (e.g. 2005b), turns out to be of less concern to NORTH. While for WILLIAMSON, it is namely the immediate role of transaction as a – if possible reducible – cost factor for the provision of goods, NORTH's focus is clearly on the long-term development of institutions, their emergence, and their impact on economic growth. For this, his analysis also goes deeply into discussions of the determinants of human behaviour.

As explained above (cf. Figure 2), NORTH shares the notion of different levels of institutions with WILLIAMSON and OSTROM. In NORTH's words (1990:83): "a complex set of constraints that include formal rules nested in a hierarchy, where each level is more costly to change than the previous one. They also include informal constraints, which are extensions, elaborations, and qualifications of rules and have tenacious survival ability because they have become part of habitual behavior". As with OSTROM, there is not a strict categorisation into four levels, as WILLIAMSON does. The number of levels may rather depend on the specific case analysed, and – again, as with OSTROM – the scrutiny with which this situation is analysed.

Individualism vs. Holism

For social sciences the divide between individualism and holism has always been seen as most critical. This issue has been disputed at least since Jeremy Bentham gave rise to utilitarianism at the end of the 18th century, namely with John Stuart Mill (publishing his book on utilitarianism in 1863) and, today, Peter Singer as a further proponent. On the other hand there is the sociologist's tradition of Emil Durkheim (by the end of the 19th century), and with his structure of social action, published in 1937, Talcott Parsons also elaborated a demarcation from utilitarianism.

However, this question is hardly addressed at all in standard economic textbooks. In some sense it may be covered by the market-vs.-plan discussion in economics textbooks. For this, the individualist vs. holistic divide has its implications. In any case, the utilitarian approach is the only one that economics students are acquainted with. Sociological textbooks pay considerably more attention to this methodological and theoretical landmark.

In their introductory books on institutional economics HODGSON (1988:53-72) and RUTHERFORD (1996:27-50) devoted whole chapters to this question. In thoroughly discussing the underlying principles of these two approaches, they highlight the critical role of these methodologies for possible demarcations and intersections of different schools of economic thought.

Because RUTHERFORD offers three differentiating statements for each approach, the initially antagonistic dispute loses some of its suffocating grip. The definitions range from rather open to radically limiting statements (1996:28ff).

For methodological holism this starts with the statement (MH-1) that the social whole can be more than the sum of its parts. This statement is also mostly acceptable for individualist approaches that do not restrict themselves to the truism of some social atomism, where social totals are just sums of individuals in any specific situation. MH-2 states that the social whole may well influence and condition the behaviour and function of its parts, which will also be acceptable to for the not absolutely radical individualist. This will not be the case for MH-

3, defining a radically holistic standpoint claiming that individual behaviour should be explained exclusively on the basis of social laws, purposes or forces. Clearly, for this radical position, these laws etc. would be stated *sui generis*, i.e. would not be explained as a second-order individualist creation.

The respective key propositions from methodological individualists are categorised by RUTHERFORD again, beginning with a least controversial statement (MI-1): Only individuals have aims or interests. Here, also for methodological holists it is certainly acceptable that institutions as such do not have distinct intentions or aims – while keeping in mind that they may well have functions. Somewhat more disputable will be MI-2, stating that social systems, as well as their later changes come about by individual actions. Methodological holists may accept this as just an option. But they will not follow MI-3 in asserting that such systems and their changes may be explained *only* by individual actions, beliefs etc.

An ultimate, let alone universally accepted resolution of the problem is obviously not in sight. It may not even be needed. Some systems theoretician may claim to be able to go beyond it all by tackling the problem from a superior perspective. But, in fact, insisting on a complete resolution may even be counter-productive. The different approaches provide their respective contributions, in many cases leading to greater insight. Ideologically entrenched as the debate may often be, none of the proponents ultimately offer more than some more or less pragmatic, workable solution. After all, this may be the most advantageous outcome from the perspective of scientific output and ultimate human societal advancement.

HODGDSON put considerable effort into showing that methodological individualism is bound to fail in trying to explain the emergence of institutions on the basis of individual action: the making of institutions may well be influenced by individual, purposeful action, but never only by this. Each such an individual action would again be influenced by institutions existing beforehand. So it would have to be an *infinite regress* (cf. 1988:64ff), which would not resolve the problem but rather confirm its insolvability. Determined as HODGDSON is in this respect, he would not ultimately defy contributions based on methodological individualism in research, particularly if there was “less of reckless association between it and varieties of individualism of political kind.” (1988:72). Furthermore he would invite methodological individualism to take more account of “behaviour .. moulded by factors outside the individual concerned [leading] to greater respect for that person in his or her predicament” (ibid.). The holistic approach would by no means lead analysts on a “slippery slope to totalitarianism” (ibid.), as the Austrian School would typically charge.

The Austrian School itself leaves this problem of emergence (as it is also called) to the idea of some *spontaneous order*. Taking spontaneous order for granted will in any case necessarily also include spontaneous orders of complete repression or violent anarchy, i.e., options for which doing social science would abandon its own purpose and legitimacy (which may not necessarily be considered such a big problem, just that in the context of the work done here it would be somewhat unfortunate).

Neoclassical economics offers a rigorously pragmatic solution of its own kind. The concept of *revealed preferences*, as presented by SAMUELSON in 1938, now taken for granted in any standard economics textbook, went for a solution without really solving the underlying problem of a lack of measurability of the utility function. Further discussion of this issue was ended for economic orthodoxy by STIGLER/BECKER (1977) at the latest, in that they tightened and confirmed this standpoint: in their view, what matters is not an explanation of

preferences and behaviour as such, but only its predictability. (Cf. also FRIEDMAN 1953) In this way, the otherwise disputable issue is excluded from any further research.

A review of NIE literature shows that it does not run the danger of a premature limitation in dealing with the emergence of institutions. In contrast to neoclassical economics or the Austrian School, it embraces the role of institutions, without abandoning the explanatory power of methodological individualism where given. WILLIAMSON (2000:597) also conjectures spontaneous order as an optional explanation (namely with reference to the institutions of level 1, cf. Figure 2), not without pointing out to the need for more research on this point.

There have been important contributions to NIE on the emergence and change of institutions, first of all from NORTH (1990) being the historian among the founding members of NIE, but also from Mary M. SHIRLEY (2005) (in the context of development), Peter MURREL (2005, in the context of transitional economics), and many others. Avner GREIF (1993, 1994, 2004 together with LAITIN), did raise a point in this context that has hardly been addressed by the authors presented in the chapter so far, but which is of particular interest to the work developed here: the difference between organically emerged institutions on the one hand and consciously designed and possibly forcefully imposed institutions on the other.

With the phrase “humanly devised” in his definition of institutions, NORTH (1990:5) clearly takes methodological individualism as his starting point. So he explains programmatically: “a theory of institutions on the foundations of individual choices is a step toward reconciling differences between economics and the other social sciences. The choice theoretic approach is essential because a logically consistent, potentially testable set of hypotheses must be built on a theory of human behavior.” Still, at a later stage in his explanations it also becomes clear that choices offered to a conscious design of institutions are restricted by path dependency. So learning and an interplay of organisational and institutional development predetermine further options and development. (ibid. pp. 83ff; 92ff). This leaves NORTH’s view rather close to RUTHERFORD’s MH-II (see above); and again the dispute between institutional and holistic methodology seems to be more a matter of insistence on principles than a concern with useful outcomes.

Interdisciplinarity

Interdisciplinarity is probably one of the most worn-out buzzwords, regularly needed for project applications, but hardly realised due to practical as well as conceptual reasons. Neither is it particularly helpful for an academic career. Nevertheless, it may be a touchstone for NIE, used for the work presented here. For this, statements of those who developed NIE in the first place and furthermore some additional quotes from its current organisational context are given in the following.

WILLIAMSON (2000:595) strengthens this openness in stating that “pluralism is what holds for overcoming our ignorance”, even though he sees this as just an intermediate step as he is “awaiting a unified theory” (ibid.). OSTROM (2005a:819ff) notes that contemporary science had developed in such a way that *unique* perspectives and *pure* types of organisations were preferred; each of these would then require their *own* explanatory theory. She explicitly also refers to the transaction-cost theory of WILLIAMSON (1991), who shows how to bridge such structures in the discussion of firm-vs-market organisation. Her work on institutions and the approach of NIE draws principally and directly on psychology, anthropology, engineers, historians, lawyers, sociologists etc. In his 1997 interview COASE also makes clear that NIE:

“is not a single body of thought. There are a whole series of separate strands”. What is more is that he does not give supremacy to a purely economic approach: “Unfortunately [...] that part of the relationship of economics and law which analyzes the legal system has gone ahead much more than that part of the subject which deals with the effects of the legal system on the economic system. That is to say, what people have done is to use economics to study the legal system rather than discuss how changes of the law affect the actual way the economic system operates.” (ibid.)

A view on the web-site of the Society for Institutional and Organisational Economics (SIOE; formerly the International Society for New Institutional Economics, ISNIE) notes that the work of this society is “rooted in economics but open regarding research methodology”, and that “Cross-disciplinary research approaches are an integral part of the field”. MÉNARD and SHIRLEY (2011) see a need to defend NIE against the “threat that growing mainstream acceptance will erode NIE’s revolutionary character, creative focus, and interdisciplinary(it)y.” (p. 3). They come to the conclusion that “methodological orthodoxy ... could stifle NIE’s creativity” (p. 26).

Considering these statements, it is clear that NIE does not just appreciate some cooperation with other disciplines, possibly complementing own research. It is rather that NIE itself is a result of interdisciplinary work. The fact that one of the four Economics Nobel Prizes awarded to NIE-representatives went a historian (NORTH, 1993), and another one to a political scientist (OSTROM, 2009), supports this.

Perception of NIE

For pluralist economists, as have emerged most prominently challenging the current economic orthodoxy over the last few years, NIE is hardly worth mentioning. It is considered to be restricted to methodological individualism – as it was supposedly, and wrongly, see above. It is thereby treated as just some more or less irrelevant extension of neoclassical economics, not allowing for a proper analysis of the emergence and the working of institutions. (cf. for this the otherwise quite readable and informative contribution of DIMMELMEYER and HEUSSNER 2016, on the ‘Old’ – or as they call it ‘Original’ Institutional Economics).

What may furthermore contribute to a clear rejection by pluralists, post-Keynesians etc. is that ALCHIAN and DEMSETZ, for example, are often mentioned as founding fathers of NIE, thereby linking it to the Chicago School of Economics or the Mont Pèlerin Society. Both of these – and more individuals could well be named here – did indeed contribute to developments in economic theory that are also basic to NIE. In their case, it was principal questions of optimising behaviour and market mechanisms, as well property rights theory that they put on the research agenda (cf. ALCHIAN 1950, DEMSETZ 1967, ALCHIAN and DEMSETZ 1972). While it was indeed essential for the development of NIE to have these issues on the agenda, this does not mean that NIE would leave it at the narrow interpretations of the Chicago School.

On the other hand, from the perspective of some versions of Public Choice Theory, namely the one known in German as “Neue Politische Ökonomie” (Gebhard Kirchgässner, Bruno S. Frey and others), NIE seems to be perceived as just a newer edition of itself. So further consideration seems not to be required. Indeed, publications such as FREY (1990), did show

great interest in the role of institutions but could ultimately not add to economic insight in that it did not sufficiently confront the limitations of neoclassical theory.

BOETTKE and COYNE (2005:157) also embrace at least both the OSTROMs, Vincent and Elenor, on behalf of the Austrian School, as firmly in methodological individualism, but not in the modelling world of neoclassical economics.

As explained above, NIE is characterised by great openness to interdisciplinary work; except for the insistence on logic and the falsifiability of its theses (insofar quite restrictively Popperian), NIE does not put much effort into demarcation from other schools of thought. (cf. respective statements on the SIOE website on the demarcation of its field, retrieved 31 July 2017)

NORTH (1990:7ff), for example, explains how ALCHIAN (1950) and his notion of evolution allowing the survival of only the most competitive institutions had to be overcome. NORTH showed that the direction of institutional development was not predictable in this way. Clear statements distinguish North from neoclassical theory: “the rational actor model has simply led us astray.” (ibid. p. 8), or: “The simple fact is that the theory employed is not up to the task.” (ibid. p. 11). “Transaction costs in political and economic markets make for inefficient property rights”, or “mental constructs that can result in persistently inefficient paths.” (ibid. p. 8) (cf. also above on NORTH)

COASE also defends himself against what may be called a not merely friendly takeover by those favouring the market in principle without any second thought. He referred to the misperception of his work in this way more than once; he interpreted this not just as an accidental misunderstanding, but as systematically biased. In an interview from 1997 Coase explains: “I think the success of the Coase Theorem – because it’s discussed all over the place – is an interesting illustration of what’s wrong with economics; because, if you read ‘The Problem of Social Cost,’ it occupies perhaps four pages. It’s useful. I think it’s useful because you can show, using it, the type of contracts that would have to be made in order to have an efficient economic system. But then you have to introduce, having done that, the obstacles to doing it. Then you see how the system actually works. But many people have only read the four pages or only thought about the four pages – one of the reasons they’ve done that, of course, is it’s the most abstract part of the article.” In this sense he also criticises neoclassical economics in general: “The objection to neoclassical theory is that it hangs in the air. It is as though one were to study the circulation of the blood in the absence of a body. Firms have no substance, markets exist without legal foundations”. (Coase, R.H. (1984); cf. for this also FN 8 of this thesis)

With the Bloomington School as her intellectual background, OSTROM was mostly perceived as heterodox in her approach to economics. This school of thought became known firstly for opposing centralised administrative structures with their supposedly higher degree of efficiency; instead, it favoured polycentric law, showing a rather anti-statist stance. In this respect, some influence of BUCHANAN becomes evident. (For a discussion of OSTROM’s position from an Austrian-School perspective cf. BOETTKE and COYNE, 2005.) Furthermore, her studies often related to co-operatives, land boards, non-profit centres or development aid, for example. Her conclusions challenging HARDIN’s (1968) *Tragedy of the Commons* also added to the way her work was perceived. All this led to a widespread reception of OSTROM’s work in fields like landscape management, organic farming etc., but of course not in standard economics departments or by the respective textbooks. Nevertheless, her

analytical approach to discussing CPRs very much goes along the same lines as the standard economic theory of public goods. Her use of terms like excludability, free-rider problem, subtractability, etc. (cf. e.g. OSTROM 2005:837-841), show that her approach is well compatible with neoclassical thinking. After all, neoclassical analytical concepts are quite appropriate for what she calls the “operational situation”. The heterodox turn comes in at the stage where the incentives shaping this operational situation are determined and more complex rules than direct private property enforcement come into play.

Present State and Perspectives of NIE

With 42 years since the term New Institutional Economics was coined by WILLIAMSON, in 1975, with 20 years since the first annual conference under the name of NIE took place, in 1997, and the foundation of the International Society for New Institutional Economics shortly after this conference (ISNIE, in 2016 renamed to Society for Institutional & Organisational Economics, SIOE), a voluminous, quasi-official handbook published in 2005, and last but not least with four Nobel Prize winners among its most prominent representatives, NIE can no longer be seen as a just newly emerging. Still, it has hardly made its way into teaching at universities, at least not at undergraduate level; there it is still pure neoclassical economics that dominates.

Economics is still taught as if spot markets or auctions offered an appropriate model for the analysis of all of economics. Frictions are seen as something just to be reduced as far as possible, typically by deregulation. A possible lack of information or rationality is accepted as a more or less venial deficiency. At least on a post-graduate level some anti-trust policies come into play; but here too it is economics as pure price theory that is to explain it all. Public economics as it was taught prominently from the 1950 to 1970s has been marginalised in favour of the application of this price theory. Standard environmental economics never got beyond that point. Supply and demand, and simple state-vs.-market dichotomies are to shape the thinking of students. Here, institutions are not a matter of concern. The reasons for this may be found in the traditional inertia of curricula development, but also in conscious decisions prioritising the formal approach of neoclassical economics as academic initiation aiming at rigorous work also in social sciences. Other reasons may be found in simple misconceptions (as discussed above), or possibly also some ideological bias. While orthodox teaching may still be unaffected, some areas of economics have adopted institutions as matter of concern. Almost logically, these are the fields in which institutional change matters most, i.e. development economics and economics of transition.

Some outlook

Without question, neoclassical economics is an integral part of NIE, albeit considering its embeddedness in political and legal structures, formal and informal rules, i.e. in an institutional framework. So the field covered by NIE matches the one that used to be covered by the political economists of the late 18th and the 19th century. It is a question of concern, how and to what extent an economy is actually shaped and can be deliberately shaped by institutions. In the reverse perspective, the extent to which these institutions themselves follow economic principles also remains a matter of continued research. So the emergence and development of institutions is explored for their social and natural determinants, for their impact on social and economic interaction, and so ultimately for their functionality or possible dysfunctionality in the overall system. As yet there is no pretension that these questions have

been answered exhaustively by NIE. Even at the expense of widespread misconceptions concerning what NIE actually is, there is no ultimately codifying or overly restrictive theory. Considering that the object of research here is itself subject to it as well may make it possible to refrain from such ambitions in the first place. In his 1997 interview COASE stated: "The New Institutional Economics is not a single body of thought. There are a whole series of separate strands which have not been brought together and indeed in my view should not at the moment be brought together because we don't know enough to do it." What is more, there is remarkable restraint on the part of NIE to offering any general policy advice. COASE, again, in his 1997 interview urged: "be cautious in drawing conclusions. It's so easy to go wrong. There are so many wrong ways of doing things and so few right ones." NORTH (2005:26) makes some similar restraint explicit as well: "Throughout history humans have typically gotten it (at least partly) wrong in .. their understanding of the way the economy works."

4 New Institutional Economics tried and tested

“Economics is the science which studies human behavior as a relationship between given ends and scarce means which have alternative uses.” (L. Robbins 1932, quoted from the Concise Encyclopedia of Economics). This most succinct definition implies for economics as a social science the analysis of the way people coordinate themselves, facing these scarce resources (including human labour), most likely with rivaling interests in the use of any of these resources. Economics may be asked indeed to live up to this challenge.

The contributions of COASE, WILLIAMSON, OSTROM and NORTH as they were set out in chapter 3 show that even though these authors come from different academic backgrounds they provide some joint foundations of what now emerged, and is still emerging, as NIE. Of course, some aspects of NIE get different attention by these authors, which is actually broadening and strengthening its methodological and conceptual scope. NIE has developed now as a field of research, maintaining its scope, proving its applicability and its analytical capacities. Over the last two decades more and more research has been based on this, as is documented by articles e.g. in the JITS, JOIE, and a wide range of other journals or contributions to the annual conferences of the SIOE etc.

For the thesis developed here, three areas of research will be selected in the following. To all of these fields some general questions will be addressed, firstly asking for further conceptual clarification of the profile of NIE itself. Along with this it should become clear in what respect NIE may indeed offer some additional insight compared namely to neoclassical economics, to the Old, or Original Institutional Economics, and in some cases also compared to some heterodox approaches.

The questions:

- (1) In NIE literature institutions are often defined as instruments of risk minimisation. The definition of risk might be defined in broad sense in that not only natural or price risks are covered, but also the risk of non-enforcement of property rights or non-fulfilment of contracts. It might furthermore include not only risk but also uncertainties, as they cannot be judged by any likelihood of occurrence. With North (1990:3): “Institutions reduce uncertainty by providing a structure to everyday life”. Still, even such a definition would be rather narrow. The advantage of this may be seen in not being too vague or too arbitrary. Accepting just any kind of rule or structure as institution would undermine its usability. With the thesis developed here, it is proposed to go beyond the narrow risk-definition, but still to link it to economic core criteria. To begin with, even the market itself can be classified as an institution. It is defined by the rule of mutually agreed exchange. This implies the acceptance of changing ownership, i.e. also of ownership as such. This is the simplest case of coordination of economic agents, just after a strict command system. When the simplicity of such a situation can no longer be taken granted – maybe because of geographical distance between those involved, maybe because a longer time period is needed to fulfil the envisaged trade, the institutional setting has to become more complex accordingly. So, in any case where the applicability of this simple form of institution – the face-to-face exchange for a clearly identifiable private good – fails to work, further refinement of the institutional setting will have to overcome the arising deficiencies. To make it analytically more explicit: The kind of institution needed is determined by the kind and the number of axioms that are violated. In other words, by the kind of market failure

that occurs. In brief: ***Institutions correspond to market failures, resulting from specific violations of one or more of the neoclassical axioms.***

- (2) Generally, there are few proposals in the literature for any ontological conceptualisation of institutions. Typically, they are handled as constraints. E.g., for NORTH (1990:4) they can be handled as restrictions on an existing set of choice variables. From this it would follow that overall welfare would be reduced by institutions, charging some deadweight loss. On the other hand, following HODGSON (1988), institutions can have an *enabling* character. This possibility has already been introduced principally in chapter 3 when contrasting the Industrial Organisation literature with OSTROM. As having an enabling character, they may be considered as “capital”, which again would make clear that investment is needed to set them up and maintain them. Such a notion would be in line with the observation of transaction cost. So, the hypothesis to be tested is: ***Institutions can be captured conceptually as public goods.***
- (3) With institutions as public goods, they contribute to overall utility, i.e. become part of the utilitarian system. A question then is whether they are substitutable by other goods. I.e. whether it is possible to achieve a higher welfare level in doing so? This would be in contrast to the notion of institutions as indisputable directives. A categorical denial of substitutability is actually alien to standard economic thinking. The debate e.g. on the precautionary principle²⁴ is but one manifestation of this. For an analysis of this question it should be clear that such a substitution essentially implies a change of the institutional arrangement itself, affecting the goods governed by this arrangement. This may just be an erosion of the institution, e.g. by accepting a level of violation. Or it may be a re-arrangement of the institutional setting, in that e.g. a specific resource is no longer managed publicly or commonly, but privately. In this case, this would of course presuppose the commodifiability of the resource (which may not be given); and secondly it would have to be checked, whether the overall welfare effect would be positive or negative. In brief: Also institutions are competing with each other. The question to be checked is, ***which kinds of institutional arrangements offer higher welfare levels.***

²⁴ The precautionary principle is a restrictive kind of institution, to be enforced by the state. While neoclassical economics always assumes the possibility of equilibrium between availability and need, ecologists do not see this. MALTHUS (1798), MEADOWS et al. (1972), GEORGESCU ROGEN (1971), DALY (2008) or collapse-author DIAMOND (1997, 2005), they all see an urgent need for the restriction of market-demand on exploitation of resources. An essential point for them – different from neoclassical optimism – is that they assume natural resources to be irreplaceable, as even increasing prices would neither reduce their use sufficiently, nor trigger the development of substitutes of a kind needed for sustainability. Policy options such as green growth, i.e. growth under the condition of a shift from unsustainable to sustainable use of resources, are not given for them. This became also the distinctive characteristic for what is now called ecological economics (cf. again GEORGESCU ROGEN or DALY). MALTHUS became one of the first economic institutionalists, as he was looking out for rules directly guiding human behaviour, not only indirectly by reference to prices. Furthermore, he would not even leave it at the limitation of the use of specific resources, but go for policies limiting population. In the 1960s it was e.g. HARDIN (1968) who followed this most prominently, asking for stricter population control namely in countries like India or China.

While the precautionary principle may be interpreted in this far reaching sense of overall ecological development, it may also be applied for very specific cases, such as chemical agents used in agriculture or in medicine. It can thus also be interpreted as an institution that is used when the axiom of perfect information is violated. In these cases, secondary or adverse effects might be uncertain.

- (4) As discussed already with reference to Figure 2 (Williamson's Economics of Institutions), institutions may well be devised by humans on the lower levels of the diagram. On the highest level (religion, customs, norms) institutions may be seen as possibly originating from an evolutionary process. On level 3 it is, for example, contracts or policies that are typically developed by their respective parties. While such a progression is plausible, it is still each single case that deserves close attention and scrutiny. ***So, are the institutions in question humanely devised?***
- (5) ***Are the institutions under consideration systematically biased*** in favour of specific social groups? Analytically this question may be rather easily captured as long as social groups can be defined, e.g. on the basis of property rights. The problem of quantification is all the more difficult. As it is difficult to measure the value of external effects and its corresponding public goods, an answer will be difficult. It might be possible to observe and measure rent-seeking on a specific market, but the context of the policy formation and other effects and intentions of it will have to be included into evaluation. Furthermore, principles of the decision making process are critical, whereby also the informational preconditions of it need appraisal.

The validity of the hypotheses implicitly expressed by these questions will – if given – support a conclusion concerning a systematic bias of neoclassical economics to opt for commodification and privatisation due to its neglect of institutions in its theoretical approach as pure price theory.

The following sub-chapters are organised following the same pattern in each case. i) a specific issue is addressed, ii) an analysis of it is applied following neoclassical economics, iii) possible limitations to the analysis are identified, checking them for possible violations of the underlying axioms, iv) institutions – to the extent given – are analysed for their functionality, including the kind of articulation of property rights. In this part also the five theses/questions listed above will be discussed.

4.1 Determinants of wealth

From the beginnings of modern economic theory, with the *Wealth of Nations*, published by Adam Smith,²⁵ two factors were considered as critical for economics: Saving, i.e. the willingness to spare some of the consumption that could be possible today for the sake of having some extra equipment tomorrow and become more productive. And secondly it was the division of labour, allowing everybody to concentrate on what he or she could do best and thereby even improve in it.

The famous wording of Adam Smith "... every prodigal appears to be a public enemy, and every frugal man a public benefactor."²⁶ confirms what is an established virtue in most – if not all – societies. The emergence of this as a virtue may rather have been due to safety considerations than productivity growth, but it would feed well the need of modernising societies with its capital requirements. With the example of the pin factory, showing the

²⁵ These are standards reproduced in all economic textbooks. For a look at the original text one may go for the easily accessible and technically readable documentation of *An Inquiry into the Nature and Causes of the Wealth of Nations* on www.econlib.org.

²⁶ Book II, chapter 3, 19, 25

advantage that arises from the division of labour, specialisation, and thus also of from trade²⁷ Thereby, Smith established the second pillar of what is considered conventional economic wisdom.

This chapter begins with some basics of neoclassical thinking (and may thus well be skipped largely by trained economists.) These basics are needed to make the specifics of the role of relevant institutions visible, while the presented models should also be well understood in the contribution they can make. Confronting this text-book knowledge of i) capital as key to growth and ii) division of labour with real world examples will show strengths and limitations of the respective models. In the following parts, some current contributions to role of institutions in this broad context will be introduced. Thereby, two more pillars of wealth, well in line with Adam Smith, can be erected.

What neoclassical theory offers

With consumption as ultimate aim of economics, consumer sovereignty is a core concept of neoclassical economics. All economic activities, all resource allocation, and technological development are thus guided by the given preferences of utility maximising consumers. Of course, primary resources are still the basis to build up on. But they may be transformed and exchanged to an extent, hardly leaving any resemblance to their original character. Along with this, making use of all technological options and of comparative advantage will bring about highest overall welfare. Product and factor prices lead the way. Depending on intertemporal preferences, net-saving will allow for further growing capital stocks, whether physical, social, or technological.

In a most elegant way the Solow-Swan-model captures economic growth. Like Heckscher-Ohlin-Samuelson it may be seen as just another rigorous application of neoclassical theory, strictly building up on the well-known axiomatic foundations of it. So – like the trade model – it can well be formalised by a Cobb-Douglas production function. Volumes of substitutable inputs relate to volumes of output, whereby a technology parameter takes account of possibly changing levels of technology. In its original version this parameter was assumed exogenous; so, technological progress would just ‘fall from heaven’. In later developments this was endogenised, along with the analytical and empirical separation of the different types of capital. Technology and human capital were then discovered as public or – as long as some users can be excluded – as club goods. Investment into technology is captured by an increase of the technology parameter. Still, linear homogeneity of the production function was maintained as assumption, allowing for partially decreasing marginal productivity, thus ensuring automatic market equilibrium.²⁸ A steady-state-equilibrium of the system is achieved in that the capital-output ratio is constant in a situation where saving/per head matches depreciation/per head. Propensity to save again depends on preferences of consumers. The marginal value of leisure today will be equal to the discounted marginal value of tomorrow’s consumption. Such a steady-state does not necessitate the overall economy to stagnate; it may well grow, namely because population may be growing. But it should also be clear, that there is no inherent factor that would force the system to grow for

²⁷ Book I, chapter 1, 3 on division of labour, Book IV, chapter 8, 49 on trade

²⁸ Only later, economies of scale were introduced by ROMER (1987), as an important driving force for growth, leaving economists with the problem of monopolisation and inefficient equilibria.

ever. Increasing productivity – which is often indicted to forcefully drive the system to more growth, actually offers an option to produce the same quantity with lower physical capital requirements, and thus also lower resource needs. Of course, adjustments will be needed with respect to labour re-allocation, which indeed should not be considered as negligible, or as happening without individual and social cost. But contrary to what is often raised in public debates, the option for a no-growth economy is not only given in this neoclassical setting, it is even an expected outcome under the conditions of a given population, and furthermore even offers relief on resource requirements with technologies improving.

In a similarly elegant way this is captured for the aspect international allocation – namely trade – by the Heckscher-Ohlin-Samuelson model. Building up on the axioms of neoclassical theory it can be shown that making use of comparative advantage, each country will develop production patterns following their relative factor endowments. Thus, a country with relative abundant availability of land will go for land-intensive products, countries with a relatively large working population will rather go for labour-intensive products, etc. Within countries factor mobility has to be given, in the sense that factors can move to the kind of production for which they show the highest productivity. But, with the factor-price-equalisation theorem building up on this, factors – whether labour or capital – would not have to move between countries to achieve the same marginal productivities in all trading countries, i.e. the same wage levels, the same level of factor rewards. So, foreign direct investment, i.e. international capital mobility, might possibly accelerate the process of allocation, but principally this is not needed. The required capital could well be raised domestically, as the country with at first lower capital availability will show a higher marginal productivity and thus also a higher incentive to save and invest than other countries – *ceteris paribus*. This implies that ultimately the technological level will be the same everywhere, just as the economic living conditions will not show any difference.²⁹

These two theories are staples at least for today's undergraduate teaching. With their typical formal presentations they may actually be seen as boiling down to mere truisms. They also represent the standard that is typically offered by the economic profession to the public debate when it comes to trade and growth as a principle matter. Though, interestingly, these theories are often rejected or simply ignored in the public debate as a matter of course just like they are portrayed by the economic profession. A reasonable communication seems hardly possible. What is left as policy conclusion is calling for growth and competitiveness in whatever situation, which may correspond to a corporate perspective but indicates economic illiteracy in general matters.

Considering the effects that changes in trade regimes or growth driving technological developments have, some incongruity is observed. While – following neoclassical theory – the largest group taking advantage of free trade are the consumers, they typically feel hardly affected. A smaller group of traders will instead be able to expand their business and go for

²⁹ Of course, trade theory has to offer more. Current trade between industrialised countries, i.e. intra-industry trade became more important than the trade that could be explained on the basis of naturally given comparative advantage. Differentials in technological differences shape large parts of trade, in that production of newly developed products may first take place in advanced countries, but later move to sites with lower cost conditions. Furthermore, current negotiations on free trade agreements are rather concerned with questions of intellectual property rights and protection of foreign direct investment than with the basics of comparative advantage.

respective lobby work. Those falling prey to structural change, often existentially affected, will raise most public attention. So, it is obvious that trade and structural change (as typically going along with growth) were always criticised as forcing producers to adjust. As these adjustments are sometimes considerable, it was primarily this aspect that became of public concern. The fairness of prices, the cost of adjustments, or more clearly: The often *crippling* effect on no-longer or not-yet competitive industries, became an issue for which *adjustment* is a word often just inadequate. Schumpeter's *creative destruction* at least shows the janus-faced character of the developments discussed.³⁰

Justifiable compensation for adjustments (e.g. for the decrease of the income of factors rather scarce before opening for free trade), can theoretically be captured and often also empirically estimated. But like with the Kuznets curves (cf. WEIL 2013:388ff, 508ff), promising greater social equality after some extra hardship due temporarily enhanced investment, the historical experience is rather refuting this in its relevance.

Some experiences on growth and trade

The bit of growth theories as taught at universities, that may be left over in public awareness is probably well summarised by e.g. MANKIW and TAYLOR: "Key to growth is the accumulation of capital stock." (2017b:104) The authors exemplify this with reference to the rulers of Russia diverting resources away from the still dominating agricultural sector to provide for fast industrialisation in the 1930s. They also point out to a trade-off in the sense of "fewer consumer goods and a harsh life" and also some "short-term hardship" in exchange for becoming a super power able to fight Germany in WW II. (ibid. p. 106) The reference made to WW II, and maybe the additional information that the concerned Stalinist policy of industrialisation on the basis of forced collectivisation, led to a famine in 1932 with the number of people starved to death in the range millions, gives at least some impression of what is at stake. What is actually confirmed with such an example is that capital is a requirement for industrialisation in a technical sense, and that this can occur under different institutional frameworks. It does not contribute to an economic understanding.

The slogan of 'Key to growth is the accumulation of capital stock' has triggered policies also in other regions and historical situations. An example similar to the Stalinist one is given by the 'Great Leap Forward', proclaimed by Mao Dsedong in 1957. '3 years of tough work – a 1000 years of wealth' indicated the economic trade-off it would take. Again, farmers starved to death are estimated to have reached double digit millions. Unlike in the Soviet Union the proclaimed investment push did not lead to any economic growth. (cf. DIKÖTTER 2010). It can be concluded, that capital accumulation and growth can occur under different institutional arrangements (free market, democratic, or not) but in any case, institutions are needed not to let them drain away.

The Indian economy could prove some success in applying a strategy of an enhanced investment in the secondary sector during the era of Nehru (1947-1964). So, the typical five-

³⁰ Schumpeter, was also aware also of the dark side of this process, namely the destructive part. Still, his (and others) concern was then, that this process of creative destruction could be hampered and maybe stopped by entrenched interest groups at the price of not achieving higher overall welfare. (For a discussion on this cf. BUCHANAN and MUSGRAVE 1999:231)

year plans implemented during this period, could lead to growth rates four times as high as in the period before. (For a review and some discussion cf. GHOSH 2013).

Another telling experience for an assessment of the “Key to growth is the accumulation of capital stock.”-formula is given the so-called “Marshall-Plan”, officially called the European Recovery Program. This US-financed programme was initiated in 1948 first for four years in order to re-build the European Economy. The success of this programme is undisputed as decisively contributing to what was later called ‘Wirtschaftswunder’ in the western part of Germany. Unlike the development following WW I with reparations to be payed or delivered as return for having brought war to Europe, now, based – inter alia – on the Marshall-Plan, stability, co-operation and growth shaped the post-war development. Later, all sorts of Marshall-Plans became a standard for policy proposals (ecological, development, Mediterranean, Ukrainian, African... you name it). What is meant thereby is essentially the transfer of money for different kinds of investment. Most notably, the 0.7% of donor countries GDP to be provided as official development assistance became a standard in international declarations. Albeit, reports on failures of development assistance became a standard as well. Without going into the respective discussion in detail here, “the accumulation of capital stock” may contribute to growth and maybe also to development; it may even be an indispensable component, but it should hardly be considered “key to growth”. What had been critically overlooked when trying to copy the post WWII success of the Marshall-Plan in Europe for other regions was the fact that in Europe all the needed institutions had already been in place, while they were not given in other regions.

In the 1960s and 1970s it was the Four Asian Tigers (Hong Kong, Singapore, South Korea and Taiwan) that would catch the attention of economists. Particularly, South Korea went for industrial policies that were not less – despite its reputation of being a market economy – interventionist than the Indian policy. But unlike India, with its huge domestic market, South Korea directed its strategy to the world market in the first place. TODARO/SMITH (2011:675f) list no less than 19 major types of export promotion. Export-, not import-substitution was the preferred strategy. Import substitution had been the strategy proposed by Friedrich List for Germany and by Alexander Hamilton for the United States, in order to make ‘infant industries’ able to compete with established British producers in 19th century. Successful as it had been in their times, many postcolonial countries had failed in applying this strategy due to too small markets and thus the inability to make use of economies of scale. Learning from this, the Asian Tigers selected industries that could make use of economies of scale in the first place, while not waiting for the market to bring about results. In this way, South Korea had followed Japan’s post WW II industrial strategy, which was guided by the powerful Ministry of International Trade and Industry. So, these examples show that capital accumulation as such may or may not lead to growth, depending on circumstances and development strategy. It will be these circumstances that deserve attention.

Historically it was licences granted by monarchs allowing companies to accumulate the capital needed for larger investment. (Marxian economics puts emphasis on the change from primitive, to capitalist accumulation, explaining the specific dynamics of the latter.) Today it is mainly technologically leading companies mobilising capital for further investment. Also looking at distribution of income and wealth today makes it hard to stay with the text book notion that investments came from savings of those who lived on marginal wage equalling marginal productivity.

Here, only very few examples have been selected for the sake of illustration. They show how valuable the Solow-Swan as well as the Heckscher-Ohlin-Samuelson models may be as theoretical exercises and benchmark, their contribution to an understanding of actual developments or to policy design remains limited. They assume irrelevant or even erroneous the historical experience showing that targeted intervention and often sharp deviations from namely wage/productivity-equilibrium were essential for historically observed growth. This had been standard with Marxian economics, and also with LEWIS (1954, 1979). For economics as a major subject these aspects will be introduced. It remains to be discussed why for economics as a minor subject the more relevant disequilibria are placed back in favour of an idealised market model.

A preliminary conclusion would thus be that the *key* to growth is not capital accumulation. At best, this would be a 2nd order key. More important are conditions under which capital accumulation will occur, and then may translate into overall growth. Following neoclassical theory, capital accumulation is determined by the differentials of interest rates and profitability of investments. (as such it would be captured in WILLIAMSON's diagram, here above as Figure 2, on the lowest level). While this would be the case in a world of instant and frictionless adjustments, and under the condition of perfect applicability of all neoclassical axioms, a look at the real world tells us that the mechanism supposedly driven by the mentioned differentials can hardly be observed as ever being critical for capital accumulation. Actually, only rarely all five axioms can be taken for granted.

It can rather be observed that the operability and the relevance of this mechanism depend critically on institutions, and so – at least indirectly – capital accumulation depends critically on institutions. One might express this as asking for the way in which 'incentives are set' or 'the respective institutional arrangement' is designed. In any case, it is the specific articulation of property rights and other institutions that is critical. (cf. Figure 2, again, the upper levels.)

Recent discussions of institutions and other possible determinants of wealth

Chapter 3 of this thesis set out how NIE, with its four main proponents, shows a way to overcome this limitation without having to give up on the strengths that neoclassical theory has to offer. Over the last thirty years it can now be observed that institutional questions got more attention in a qualified way in academia and in the media.³¹ The fact that the dichotomising state-vs-market view is gradually replaced by some more differentiating analysis, might also have been supported by the end of the cold war, i.e. the end of the in some sense intellectually crippling East-West-conflict. It may also be said that greater emphasis on institutions was provoked by neoliberal policies, dominant since the 1980s, as they keep a blind eye to the complexities of institutions and thus on the issues that make NIE so distinct.

In recent years, at least since their publication of "The colonial origins of comparative development" in 2001, it was namely ACEMOGLU, JOHNSON and ROBINSON (AJR in the following) who raised considerable attention for the role of institutions. Others who picked up

³¹ Some indication for this is given by a query run by the NGram-Viewer of Google, showing that the usage of "new institutional economics" came up in the mid-1970, constantly increasing until 2000. The query is limited to the year 2008.

on this, namely RODRIK, SUBRAMANIAN and TREBBI (RST in the following) will be introduced as well.

The authors just mentioned, being well aware of the deficiencies of the neoclassical approach (as, by the way, most neoclassical economists are aware of its deficiencies themselves), can support their conviction of the critical role of institutions by an enormous wealth of examples. Namely AJR offer a long historical perspective, covering many countries on all continents. So they can illustrate the role institutions play for the wealth of nations. Still, they also want to go for some statistical proof of their hypothesis. After all, there are rival explanations, referring to many contradicting examples as well.

Following AJR (2005:399f³²), one of these rival explanations is *geographical determinism*, another one would be *culture and religion* (ibid. 400f). RTS introduce in addition to these *integration* as hypothetically claiming the most important role in bringing about wealth.

Geographical determinism

This approach explains all human achievements as ultimately being determined by geographical and climatic conditions. This would include social institutions themselves, which according to this are 2nd order only in organising social and economic life. It might even be taken as far as determining human preferences and human character. Rather crude theories, explaining “laziness” by temperature (so, e.g. popular notion of *dolce far niente* in countries south of the Alps) as cliché, even though AJR (2005:400) may quote prominent supporters (like Montesquieu and Alfred Marshall) of this explanation. Furthermore, more advanced technologies might evolve only under conditions of a more urgent need of it, so that geographic and climatic conditions might trigger a self-enforcing process, in a way that may best be captured by the already mentioned endogenous growth theories.

Obviously, geographical determinism can be seen as quite straightforward. It should be of no surprise that it can call on old traditions. Namely, the French physiocrats, the dominant economic school of thought in the 17th and 18th century, did build up this notion, while developing also the labour theory of value and the concept of the economic circulation (at the time replacing the mercantilist notion of uni-directional production processes, directed to enhance the wealth of central government). So, while value could ultimately be provided using labour, it was the natural preconditions that defined the range of possibilities to do so. Recently it was DIAMOND (1997) who explained development on the basis of “guns, germs, and steel”, explaining the strength of nations ultimately by their resource base.

Culture and religion

AJR (2005:400ff) certainly do not treat culture as just another product, traded on markets i.e. under the perspective of wealth generation as it is measured for today’s market economies, substitutable by maybe touristic pleasures or the like. (Instead, culture and religion is indeed seen by AJR as shaping economic behaviour, as determining preferences.

³² The article published by AJR in 2001 was actually the one by which the authors presented this work to wider audience for the first time. Still, the 2005 publication is selected here as main source, since as a handbook-contribution it has been revised and is more consolidated. For econometric details, the 2001 and other papers of AJR may offer deeper insight.

So, they discuss the Weberian idea protestant ethics, as it might motivate individual effort to work hard and be frugal. This may be read as being in contrast to the concept of utilitarianism. Finally, they refer to some anthropological literature, pointing to sets of beliefs that may hamper economic development. These sets of beliefs are said to show e.g. for southern Italy an “amoral familiarism” (ibid. 402), or as it is expressed for other cases, a lack of social capital. So, the way AJR approach the issue of culture and religion shows clearly that only those cultures and sets of beliefs are considered as hypothetically productive that match the requirements of modern market economies. As this excludes other forms of economic organisation a priori, this actually disqualifies itself for a discussion on economic institutions already at this stage, as it is just differing forms of institutions that are to be discussed for different sets of technological and demographic situations, in different stages of social or political transformation etc.

In any case, AJR chose to introduce culture and religion as an issue separate from institutions. In chapter 3 it had been shown that these categories could well be captured as institutions as well, along with the institutions of property rights.

Integrationism

RST (2002) introduce as another line of argument the role integration of countries into the international division of labour as the critical determinant of wealth. They refer to Frankel and Romer from 1999 and also to earlier work of Jeffrey Sachs (together with Warner in 1995; before Sachs began to consider geography as critical determinant for wealth.)

This approach can rely on the experience of countries like Germany, Japan, South Korea or China. As already explained above, the policies of these countries may not be mistaken as free trade policies; their industrialisation policies were (and are, in part) largely managed by public authorities allied with leading industrial conglomerates. A complete assessment of integrationist policies should also consider that success of integration was mostly not based on export of raw products but on manufactured goods. The experience of countries relying on the export of agricultural products or mineral resources in Africa or Latin America is telling in this respect.

Respective theories of colonialism do have a long history, beginning with early Marxist thinking (Lenin; others following the austromarxist variant) on the one hand, and theories more in line with liberal approaches (e.g. Wolfgang J. Mommsen) on the other. Furthermore, there was a second wave of theory development after most colonies became independent from the 1960s to the 1980 as post-colonial and dependency theories. (cf. the Prebisch-Singer-thesis, Paul Baran, Immanuel Wallerstein, Samir Amin, Dieter Senghaas, Gunder Frank) that achieved textbook standard. (cf. e.g. TODARO (2011, though more prominently in earlier editions). Later, these theories lost influence again, in part due to what TODARO called the neoclassic counterrevolution, in part because of the need to expand the analysis of the causes of underdevelopment beyond international influence. So, namely by Gunder Frank or Ulrich Menzel, the concept of centre and periphery was also applied to internal situation of underdeveloped countries. AJR refer to dependency theory most briefly in the part of their 2005 contribution, where the social conflict view is presented. Still, they do not evaluate, let own compare these theories with their own proposals.

Econometric work

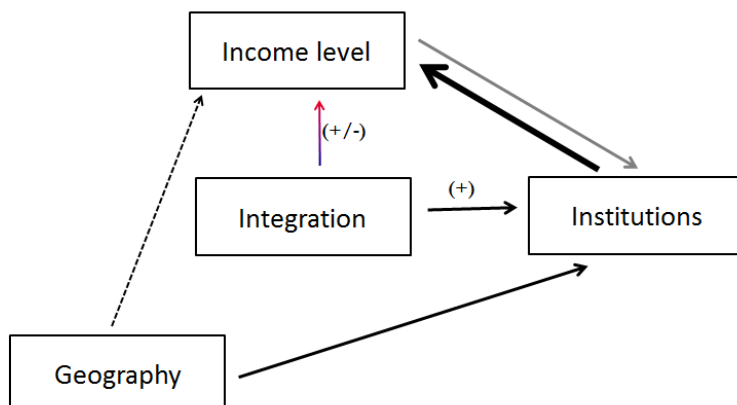
AJR and RST, both attempted to estimate the role of geography, culture & religion, and integrationism, competing with institutions for the position of most influential factor. The biggest problem for estimating the relative strength of influence on income is that these different factors may influence each other; so it may not be possible to directly estimate the cause-and-effect relationship. Causality, of course, is central to standard philosophy of science. AJR and RTS introduce instrumental variables in two different ways to solve this problem econometrically. (AJR explain the problem, contrasting it with earlier work; AJR 2005:403)

Ultimately AJR (2005:419) will reject the influence of culture and religion on wealth on the basis of their econometric results. They come to the conclusion that "...there is no evidence of a causal effect, since, as with religious beliefs [...] measures of social capital are potentially endogenous." (AJR 2005:402) A possible endogeneity disqualifies a factor as being relevant. So, as culture and religion are considered as endogenous, i.e. as resulting from wealth, just as any other output, it cannot have a causal effect on wealth itself. Or at least, it cannot be used as explanatory variable in econometrics.

This conclusion may deserve an additional discussion with respect to the conceptualisation of culture and religion. After all, they are introduced as being considered most relevant by other authors (cf. Weber, above); so for AJR it may just not have appeared appropriate not to consider this as a rival hypothesis. Culture and religion was first considered as exogenous, just in analogy to geography. Still, such econometric ambition may be considered as problematic, or even misguided. As shown in chapter 3, culture and religion are indeed better conceptualised as institutions themselves.

RST (2002:4) picked up on the econometric work AJR had published. They decided to tackle the problem of endogeneity with a series of regressions in which income is related to measures of geography, integration, and institutions. The latter two were instrumented using the instrumental variable used already by AJR (the settler mortality rates). Thereby RST want to estimate the independent contribution of each of these three factors as deep determinants to the cross-national variation in income levels.

Figure 3: On the „deep“ determinants of income



Source: Following and complementing a diagram of RODRIK, SUBRAMANIAN, TREBBI (2002:Annex)

As shown in Figure 3 and documented in the annex of RST (2002), the results of their estimation show that geography has only a limited influence on income, while it has some

positive influence on the evolution of institutions. Some influence is estimated of integration on institutions, which is very much in line with the results of AJR. In concrete terms this would be explained as the effect that settlers had in bringing institutions with them from their home countries. A direct relation between integration on income can be estimated as well, whereby the influence may be positive, but also negative. This corresponds to the literature on colonialism, where integration may indeed have detrimental effects. The most important influence on income comes from institutions, whereby here feed-back effects can be observed as institutions are positively influenced by income. In sum, RST (ibid. 1) conclude that institutions “trump” all other factors of influence.

What is to be discussed here is that AJR and RST refer to what they call the quality of institutions, which is actually captured by the statistically available risk of expropriation. In other words, what they refer to is private property as the only institution relevant. RST (2002:1) explicitly refer prominently to Adam Smith with an introductory quotation, “Commerce and manufactures can seldom flourish long in any state [...] in which the people do not feel themselves secure in the possession of their property...”.³³ Thereby, a third a pillar of wealth, next to the two mentioned above (frugality and division of labour) is erected.

However, with the restriction of institutions to private property, AJR and RST fall seriously short of the achievements of NIE as presented in chapter 3. This restriction may be attributed to the lack of more differentiated data, while this shortfall does not question the contribution made by AJR and RST. More differentiated data are of course necessary to fulfil the criteria of causality.

On the other hand, causality as an unconditional presumption, is a – to some extent wise – self-imposed restriction to the development of theory. For the case here, it is the question whether institutions are a precondition for wealth, or maybe only wealthy countries can afford properly working institutions. AJR suggest that geography might explain both, institutions and wealth, so that there may just be correlation, but no causality. With a holistic approach this hen-and-egg problem could be accepted as given, theoretical assumptions on the interdependencies may be established nevertheless, and further research could build on it, being judged by its capacity to predict. (cf. for this the discussion on holism in chapter 3)

It may be added that Adam Smith himself – again – did provide also for a fourth pillar in the broader sense of institutions, in that he also included “justice”, “faith”, and “confidence” into his considerations. (Quote from RST (2002:1)) The latter are captured by NIE as institutions in themselves, and as proposed by this thesis as institutions with the characteristic of essentially public goods.

In a later publication RODRIK (2011) himself extended this quality of institutions himself, in stating what is very much in line with what has been presented here as NIE in chapter 3: „Any kind of long-distance market requires non-market institutions to create it. Markets are not self-creating, they’re not self-regulating, they’re not self-stabilizing, and they’re not, fundamentally, self-legitimizing.” Also AJR differentiated institutions in later publications as will be seen below.

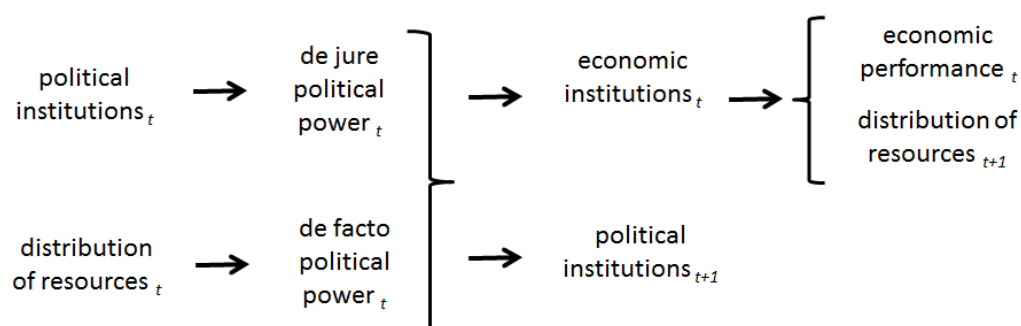
³³ Again, on econlib.org this quotation may be found in A. Smith, Wealth of Nations, Book V, ch. 3, 7

Conceptual work on the way to a theory of institutions

Their first studies AJR (2001, 2005) were restricted to the dichotomising state-vs-private approach. The same applies for the contribution of RTS (2002). Thus, the core argument put forward here had already been presented clearly by property rights theorists such as ALCHIAN (1950), and ALCHIAN and DEMSETZ (1972). As has been seen, one might even go back to Adam Smith and of course Karl Marx to find support for the critical – and productive – role of private property and the rule of law for the functioning capitalist market economy.

Later, AJR (2005) developed the concept of extractive and inclusive institutions for a theory of institutions. AJR's concept is the social conflict explanation of political institutions, leading to conscious rational choices, making economic institutions endogenous to political institutions. Also in their most popular publication (ACEMOGLU and ROBINSON 2012, *Why nations fail*) the term of the inclusive state (coexisting with civil society – or the private part of society) is introduced, in contrast to the extractive or despotic state on the one hand and the all too weak state on the other. Thereby they show, how economic institutions are shaped by political institutions which themselves are at least in part determined by the economic performance of the period before. (cf. Figure 4) So, it feed-back loops keeping a process going.

Figure 4: The process of shaping political and economic institutions



Source: ACEMOGLU, JOHNSON, Robinson (2005:392)

The feed-back loops observed here may indeed be seen as equivalent to a Marxian interpretation of historical development. Here, a change from primitive to capitalist accumulation is distinguished explaining the particular dynamics of the capitalist mode of production. From agricultural surplus, to capital accumulated by a merchant class (still in alliance with feudal structures) ultimately leading to the capitalist mode of production, could at least in part be seen as compatible with what is presented by AJR in Figure 4. (cf. MANDEL 1978:109ff) Marxist theory with its 'history is history of class struggle' may well be checked for compatibility AJR's social conflict view.

The latest paper of ACEMOGLU and ROBINSON is from 2017. Like the earlier publications of AJR – this is again a most erudite and inspiring read. It offers both, a rigorous modelling approach and historical material compiled for real-world-experiments.³⁴ As asked for by the authors themselves (AJR 2005:463f), more systematic work is presented here, in that a

³⁴ Athens, Sparta and Mani from ancient Greece, and more current but in close analogy Prussia, Switzerland and Montenegro; these country groups, so the authors claim, could well serve for a natural experiment.

formal, dynamic contest model is developed. It shows that for the inclusive state to evolve, the state and the civil society are actually competing for power, while a balance can be kept. In the case of the despotic state, the state can strengthen itself, also at the expense of civil society, while in the case a weak state, it is not able to curb namely violence and destructive powers of pre-moderns forms of organisation.

These proposals maybe criticised as the authors are still trapped in the state-vs-private dichotomy. What is called State-vs-Civil could be possibly renamed to State-vs-Private, whereby private may either be understood simply as not-state, or rather by private business. A perspective for the interplay of institutions as club goods and public goods, as well as questions of the origins of the state as such will still have to be elaborated. With respect to problems of globalisation and the loss of sovereign rights by the state this may be seen as rather acute. For the time being one might be left with what can be learnt from Orestie of Aishylos, where it was left to the Goddess Athena to resolve a conflict between human groups.³⁵

Summarising for the five questions

(1) Do institutions correspond to the violation of one or more of the five axioms of neoclassical economics? Concerned with very principle questions of growth and trade, this chapter was concerned largely with the axiom of “well-defined property rights”. The establishment and enforcement of property rights proved critical for growth. For the case of trade it is obvious that partners can only earn from comparative advantage when property rights are enforced in the same way. Violations of the convexity axiom can explain lopsided trade relations, as adjustments to enlarged markets may last too long to bear fruit. Furthermore it had to be noted that it is indeed deviation from the ideal of a market equilibrium (namely with respect to wage and productivity) that may drive socio-economic developments. Based on more recent literature, but also on older literature analysing colonial structures it became obvious, that it is rather conflict than convergence to equilibrium that shapes socio-economic development.

(2) Can the institution be captured as a public good? The most critical institution considered in this chapter was property rights. While treated as an exceptional possibility only, it became clear that if property rights were enforced by rival organisations, this would almost necessarily lead to conflict. So, ultimately it will take some public authority to enforce it as a public good, if an unconstrained conflict is to be avoided.

(3) Which kinds of institutional arrangements offer higher welfare levels? Within the limits of research that can be pursued by a thesis like this, evaluations of the selected literature clearly decided in favour of private property regimes. This thesis presented here was based on aggregate data only and therefore a differentiation for various articulations of property rights was not possible. Further research, namely considering to urgency for developing institutional arrangements for the global commons is needed.

(4) Are institutions humanly devised? Again, with an evaluation focused on private property regimes, conclusions can only be drawn for this. Thereby, it seems consensus that such regimes are typically an outcome of conflicts. So, only in the aftermath they may appear as

³⁵ Interestingly, the Austrian parliamentary system seems to refer to the power of this myth as well, having Athena placed in front of the parliamentary building.

social contract that would have been elaborated by some parliament or the like. So, it may be considered as humanly devised by the group winning the conflict. However, it would not be in line with the notion of an enlightened, modern design, it would rather be the outcome of some evolutionary process.

(5) Can institutional arrangements be inherently biased? In principle, a private property regime could be balanced. And, in principle again, this would not have to imply equal distribution. With marginal factor rewards equal to marginal factor productivity the regime could be called well balanced. Obviously, this is an unlikely outcome, after having considered the actual emergence of the institution. Being concerned with the issue of overall development in this chapter it turned out, that a bias in the case of the institution of private property is not only possible, it is often essential for development.

4.2 Geographical Indication

Scope of definitions, approaches and literature

Precise definitions are the backbone of any successful negotiation. Geographical Indications (GIs) “identify a good as originating in the territory of a Member, or a region or locality in that territory, where a given quality, reputation or other characteristic of the good is essentially attributable to its geographical origin” (Article 22.1). [\[web\]](#) This definition was adopted at the end of Uruguay Round trade negotiations as part of the agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). It came into force at the beginning of 1995 and is administered by the WTO. It covers what is relevant from a trade perspective but does not cover any aspects of the way these goods are produced or consumed. (www.wto.org, retrieved 9 August 2017)

A comprehensive definition is provided by the World Intellectual Property Organisation (WIPO): “Geographical indications are distinctive signs used to differentiate competing goods. They are collectively owned with a strong inherent origin-base, namely the geographical origin to which they refer. The reference to geographical origin – most regularly for agricultural products – combined with the use of traditional extraction and processing methods, presents an interesting marketing potential in terms of product branding. However, the use of geographical origin brands also presents a number of challenges. Owing to their collective nature, those who produce and market GIs must engage in collective action with regard to production methods, quality standards and control, as well as product distribution and marketing.” (www.wipo.int, retrieved 9 August 2017) [\[web\]](#)

These two definitions already show how differently the issue can be approached. The reduced definition of the TRIPS agreement itself sufficiently qualifies what matters for customs administration and trade theorists. The criterion “origin” sufficiently captures what could be used to set up artificial, non-tariff barrier. However – as will be shown – the other distinguishing factors mentioned by WIPO, namely collective ownership of GIs and collective action, play a more critical (and more interesting) role than just the origin.

The literature available on GIs can also be distinguished along the lines of the two definitions above:

- An important part of literature is very much concerned with price premiums that may be gained due to origin, or something that is linked to the origin of the product. Reference may be made to some specific soil or climate, allowing for high quality. A large part of the

literature is concerned with a price premium that may be gained from this specific regional quality. Going deeper, there are analyses on the basis of ACKERLOF's (1970) problem of asymmetric information, violating the axiom of perfect information. Without a GI identifying a product as coming exclusively from the region in question, consumers would not want to pay a premium, or possibly not buy it at all. On the other hand, it is argued that such a GI entails the danger of being an unjustified non-tariff trade barrier, leading only to a loss of overall welfare and additional bureaucracy. Collective action is a topic here only with respect to marketing activities. For a rather sceptical stance on GIs one may refer to JOSLING 2006a, 2006b. Somewhat more positive but quoted in the publications here also concerned only with trade aspects is MATTHEWS (2014, 2016). He also discusses the issue in the context of globalisation and what is termed now as glocalisation. The immediate context of research and discussion in recent years was largely given by TTIP, CEFTA or the Japan-EU trade deal.³⁶

- The other part of the available literature looks at the perspective of producers and the ways they deal with the collective-action problem. The available literature on this issue is again in itself mixed. Some authors approach GIs as matter of farm income, and management problems (cf. GIOVANNUCCI et al. 2009), while others shift the emphasis to overall rural development, whether in rich or developing countries. Mostly this literature conducts case studies. (cf. e.g. www.wipo.int for 23 case studies, of which 20 are from developing or emergent economies. [web]; cf. also RANGNEKAR, D. (2004))

GIs as assets within their institutional framework

The tradability of a good is based first of all i) on the institution of private property in the good itself. Possibly this is not in need of any labelling as its character and usefulness may be immediately obvious to everybody. If the latter is not given, i.e. the axiom of perfect information is violated, ii) a supplement providing the missing information has to be added. This may be a trademark, a GI, information on the compliance with a standard, or something else. These supplements will have to be supported by institutions. As opposed to the trademark, which is owned privately and may thus be traded (strictly: the ownership may be traded), the GI is owned publicly, with a right of use granted to the club of producers in the region concerned. Neither the property nor the use-right may be traded by the club. (In other cases a use right may be tradable, as when sublease is permitted.) In this case, the non-tradability is a self-imposed restriction; self-imposed by and on the public, and self-imposed by joining or not leaving the club.

Despite the quite different institutional foundations of trademarks and GIs, they do not principally differ with respect to their influence on tradability of the good concerned. The problems addressed by them are the same, as are the ways in which they are addressed. The degree to which they may prove successful in assuring tradability, depends exclusively on the specificities of the product and its market.

What really makes a difference, are the implications for production. While a trademark is a private good, owned by a natural or legal person, a GI is a public good, for which a use right

³⁶ GIs are now part of the CETA agreement (article 20.16 to 20.23). [web] The EU offers information on the EU-Japan negotiations. [web] A document on the assessment of barriers to trade says that GIs will be dealt within the WTO framework [web].

is granted to a club. This difference is relevant in that for trademarks the organisational principles of production are determined top-down, while for the club – defined by the GI – these principles depend on collective action. For trademarks a hierarchical structure is self-evident, while a decentralised, democratic system would correspond to the GI. This does not mean that a trademark-based business could not introduce elements of decentralised decision-making, internal competition etc. (Literature on franchising offers considerable insight into this.). Neither does it mean that a club could not be run by hierarchical structures. Taking this to its extremes means that either could fully emulate the principles of their respective counterparts.

Confronting the complexities of the real world

While theoretically the case for a GI does not seem so difficult, implementation calls for further clarification and differentiation. To begin with, a link to a region will have to be substantiated. First, it will be undisputed that such a link will require the good concerned to be produced only there. But it will hardly be required – as being unrealistic – that all the inputs used for this production are provided by the region. The question then is where to draw the line. This leads to quite a variety of specific definitions that have to be covered adequately by regulations for production and so forth.³⁷ This should not necessarily cause a problem for the aspect of trade and trade agreements; here only the name matters, as for a trademark.

But, as may have been expected, naming is not without problems either. A specific name may be used in two countries, protected under their respective laws. In cases of liberalised trade or the disintegration of a free-trade area agreement will not be easy.³⁸ In some countries names may have long since become generic, while in others the same names are legally protected. Names are assets and stumbling blocks at the same time, defended by vested interests, sometimes even for legitimate reasons. For all this, they cannot be established from scratch on criteria of optimal functionality.

In the following paragraphs a brief look at how the current situation of names, labels etc. has evolved as an indispensable asset allowing for communication and exchange makes it clear

³⁷ For the European Union this is covered by Regulation (EU) No 1151/2012. [[web](#)] Protected Geographical Indication (PGI), Protection Designation of Origin (PDO). Another label, often presented alongside those just mentioned, and covered by the same EU regulation is the TSG (Traditional Specialities Guaranteed). Its production does not have to be linked to a region, but the recipes have to be special and must have been passed down for at least one generation. The aspect shared with PDO and PGI is the collective ownership of the label. All the aspects that are discussed with respect to collective ownership in PDOs and PGIs apply to TSG as well. As linking knowledge to a region is even more difficult to argue than a link to physical products (as with PDOs and PGIs), this adds to the disputed issues in trade negotiations. Why, for example, should knowledge not be taken abroad by members of a family who have cooked and processed with this recipe for generations? The family (and possibly even a large number of families) possibly had to flee their country for political reasons, or migrated for other reasons. A large number of questions will complicate negotiations on GIs. Designations of origin, geographical indications and traditional terms for wine are covered by Council Regulation (EC) No 479/2008, in Chapter III. [[web](#)]

³⁸ Prominent cases are the Budweiser trademark dispute or the use of the name Pils(er)ner.

how intricate this issue is. Continued attempts simultaneously to streamline and diversify can be observed.

This history of GIs goes back to ancient times, with Greeks stamping their amphorae with regional seals. In the same sense France developed the concept of *terroir*, distinguishing wines, with a legal framework for this development being established only gradually. Spain and Italy adopted the same system. Germany and Austria did not refer principally to regions, but also used the names of grape varieties to distinguish wines. With EU integration and later with EU enlargement, a delicate balance had to be kept, also integrating national regulations into one shared regulation. (cf. FN 37) Other options safeguarding these intellectual property rights were implemented, marking by design, also with official monopoly licensing producers (“k.u.k”, for example), etc. With the 1883 Paris Convention a framework was established allowing for shared legal protection of names at international level. But obviously, the sheer multitude as well as the multifaceted options of product distinctions with all their specific interests supporting them made it difficult to streamline them for the sake of a clear and simple legal framework. Increasing mobility would call for greater coherence and efficient conflict resolution. For better or worse, vested interests and general inertia have shaped the overall picture. In public and at the negotiation tables, GIs remain high on the agenda.

National legislation and enforcement mechanism usually have their own specific histories and legal systems. In the USA protection has been given to GIs since 1946, with Florida for oranges, Idaho for potatoes or Washington State for apples as examples. The same administration structures are used as for trademarks; GIs are generally kept close to the concept of trademarks. (USPTO s.a.) The EU has set up the DOORS database for the administration of GIs, with now 1,586 entries (24 August 2017; 12 down compared to 24 April 2016 [[web](#)]); for wine the Bacchus database covers regions and qualities [[web](#)]. The EU has opened these databanks, inviting other countries to register as well in order to avoid conflicts.

GIs were long primarily a national issue; with trade liberalisation, international agreements have to pave the way for mutual acceptance. Piecemeal solutions may thereby be as pragmatic as protracting and ultimately aggravating problems. Bilateral agreements, for example, may in fact lead to additional conflict potential: restrictive standards between two countries may be undermined by lower standards in trade with a third country. Multilateral agreements were made as early as 1883 (the Paris convention, now with 194 members), covering GIs as well as trademarks, patents and designs, so various kinds of intellectual property rights. The Lisbon Agreement was established in 1958 aimed at avoiding homonymous appellations of origin and thus potential naming conflicts. However, with only 28 signatory states its international recognition is rather limited, even though the global reach is not small; former French colonies signed (obviously emulating a kind of British Commonwealth), as well as a number of countries formerly part of the Comecon. With France as signatory country, compatibility with other EU members may be taken for granted. The Lisbon Agreement was accompanied by the definition of the Lisbon System, intended to register GIs of all signatories. Reference is also made to the Madrid agreement, principally providing for the mutual acceptance of trademarks and GIs. A corresponding agreement on a Madrid System, used for the registration of trademarks etc., was signed by 115 states, including heavyweights like the USA, and China (Status 13 August 2017). [[web](#)] A most comprehensive database has been established by the WIPO as a Global Brand Database, registering intellectual property-rights claims such as trademarks, logos, official emblems,

appellations of origin and GIs. By May 2016 there were no less than 25 million entries, rising to more than 30 million by August 2017. [\[web\]](#)

In 1994, along with the establishment of the World Trade Organisation (WTO) on the basis of the Marrakesh Agreement, GIs were integrated into this framework as part of an agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS). While only two paragraphs are devoted to GIs (23, 24), they thereby became part of the overall trade negotiation. While GIs and trademarks remained very much a legal matter in the context of an organisation like the WIPO, a more economically oriented development may be expected from this integration into the WTO framework. (cf. RANGNEKAR, D. (2003))

Is it worth it?

Doing considerable work on the implementation and evaluation of GIs as well of trademarks – so not biased by design in its preference for one or the other option – the WIPO is almost euphoric about GIs: “Whether it is tequila from Mexico, Italian parmigiana cheese, or Colombian coffee, the unique geographical features of where these products are produced results in their equally unique qualities. (www.wipo.int, retrieved 10 August 2017) [\[web\]](#) The International Trade Centre (2009:xvii) estimates that at the time of the publication of its report there were about 10,000 GIs worldwide, with a trade volume of more than \$50 billion.

High as this number is, it still remains an open question whether this could not also be achieved on the basis of the institution of trademarks. The effort to harmonise the names internationally is considerable, the enormous number of trademarks plus the number GIs may be considered a premodern, Babylonian confusion, impeding trade and wasting welfare that could otherwise arise from it.

The purely economic argument against the GI-protection scheme is clear: If there really were a gustatory difference due to climate, soil or other conditions, a GI would not be needed. This quality difference could be made known in other ways, most easily under a trademark regime. JOSLING (2006b:341f), for example, assumes that many GIs do not really offer specifically regional quality; it would rather rely on a ‘*mystique of terroir*’. (ibid. 360) “Its protection by local law would merely have the effect of generating rents until consumers learned (through repeated tasting) of the fatuity of such labels.” (ibid. 341) To him, GIs are spreading false hopes. For rational producers two strategies could be derived from JOSLING’s considerations: first, there is an option for some micro-GIs, serving the demand of agri-tourism. Secondly, those principally ambitious and motivated enough to take steps for international marketing should not leave it at registering for a GI. Showing entrepreneurial spirit and thus “weaning themselves from .. smothering protection” they should go directly for the international market with a trademark product. (ibid. 360f)

Determined as JOSLING is in his statements, he does concede that ultimately “empirical evidence is needed to answer the question of whether GIs promote sound marketing or restrict competition.” (2006b:339). Furthermore, as he discusses the situation of developing countries, he firstly notes that GIs are inclined towards EU products (namely wine), so that producers in the developing world are in disadvantaged position by path dependency. But on the other hand he concludes from the experience of the rich countries that countries with now growing income are beginning to show some preference for domestic agricultural produce. (JOSLING 2006a:6, 23ff) Indeed, one could well imagine that a “Ghana First!” campaign could

help reduce the import of European surplus product. But obviously this does not have to rely on an elaborate GI scheme.

The production aspects of GIs

The sections above discussed the aspect of tradability of a good, and thereby also of the danger of using a GI just for the purpose of protecting uncompetitive production. (Of course, one could even aim for this and find legitimate reasons for such a policy, but this would not make it necessary to establish an international regime of GIs.) JOSLING (2006b), typically concerned with questions of trade, namely transatlantic trade, focused on this trade aspect. Nevertheless, in his contribution from 2006a he at least introduces another argument, quoting Broude (2005): “The essence of the argument is that cultural identity, and the pride that comes from recognition of excellence in a particular manifestation of traditional local knowledge, has a public good dimension. He sees the possibility of ‘valorizing the cultural expression embodied in the [product] and converting it into a commercial premium.’” (JOSLING 2006a:23) While he remains sceptical, he re-directs the view from marketing and trading of a product to the production of it. The knowledge generated in a region is recognised as an asset, which may best be tapped and reinforced by a suitable organisation. Restricting it to the ownership of a single private company may instead have a crippling effect.

TAUBMANN (2012), director of the IP Division at the WTO, addresses the question of intellectual property rights not just with respect to ownership and incentives, but dissociated for these concepts. He recognises “that traditional knowledge systems are indeed innovative, dynamic and directly relevant to practical needs; that collective and cumulative forms of innovation and creativity have value and worth in themselves.” (p xv) While he derives his arguments from respective observations, their ultimate thrust leads to questioning the predominance of a concept of an individually attributable asset of intellectual property: “yet IP need not be about commodification or, ironically ‘propertisation’ as such.” (p xvii) This shifts the focus to the creation and maintenance of knowledge as a social process; to the extent that such a social process may be linked to a region and collective ownership, it also gives GIs a forward looking perspective.

In that knowledge is introduced here by referring to Broude (as quoted by JOSLING 2006b) and TAUBMANN as something actually linked to a region, the scope of the object under scrutiny is extended. It is no longer only about property right in the name of the product traded, but also about a property right in production know-how. What is more, so far the link to a regional origin (soil, climate) has clearly been physical. With knowledge as resource this is no longer the case. Knowledge is introduced as a public good that emerged as such, in a ‘culture medium’, so to speak, allowing for the optimal exchange of socio-economic nutrients. Commodifying it (e.g. by patenting it and licensing it to users under the restriction to keep it secret) would mean depriving it of its nutrients.

With the general observation of socially evolving knowledge and culture as a characteristic of a region, further differentiation will give a clearer picture: such knowledge may be observed as technological expertise, but also as organisational and communicative know-how.³⁹ To

³⁹ WIPO and the EU consider this relevant for a region and thus offer specific intellectual property right schemes for it. For the EU this is Traditional Specialities Guaranteed (TSG, cf. also FN 20).

capture it in the sense of BROUDE and TAUBMANN (as quoted above), it should not be measured – as statistics would typically suggest – by the number of higher-education graduates or the number patents registered, etc. Research should rather examine habits, attitudes and also institutions that may be formalised by the inhabitants of the region, i.e., by the club determining its rules for processes generating, spreading and maintaining knowledge.

BARJOLLE and CHAPPUIS (s.a.) elaborate on these questions conceptually and by reference to the production of Gruyère. They observe a general trend towards increasing market power of retailers and the hierarchical merger of processors. On the other hand– co-existing with the first – they observe continued artisanal production under poor natural and geographical conditions.

The case of Gruyère

The region of Gruyère has a long-standing cheese-making tradition. Sales of Gruyère AOP stabilised at a level close to 30,000 t. In 2016 its exports to other countries amounted to 12,000 t, of which 7,500 t were sold to EU countries, 3,000 to the USA. 219 dairies (54 of them in Alpine areas, others in villages) process the milk from 2,200 milk producers. Nine refineries collect the wheels of cheese, store them, allow them to mature, and finally market them. (Annual report 2016 [\[web\]](#)) Compared to the 2004 annual report, the number of dairies had decreased from 259. [\[web\]](#) This downward trend is confirmed by comparing the numbers with those given by BARJOLLE and CHAPPUIS (s.a., p. 8); for 1999, the numbers were somewhat higher, so structures are not frozen here either: 3,200 milk producers, 284 dairies and 15 traders (or ripeners).

As an organisation, the *Confrérie du Gruyère* was founded only as late as 1981. In 1997 the Appellation d'Origine Protégée (AOP; the equivalent to the EU's PDO) came into force. Now called the *Interprofession du Gruyère* this forms what economic theory calls a club; legally it follows the Swiss Code Civil as an association conducting commercial operations. The highest decision-making body is the democratic Assembly of Delegates, with 20 milk producers, 20 cheese-makers, and nine refiners, representing 1,600 "faithful" members. It elects a committee and a president. A board of directors and the administrative staff run operational activities following the guidelines for the development of the association. (Annual report 2016 [\[web\]](#), and statutes [\[web\]](#))

BARJOLLE and CHAPPUIS (s.a., 4f) point out that the Gruyère AOP could – or would – not have been established from scratch; its emergence may be characterised as path dependent. With dairy production having already existed for centuries, there was also a long tradition of competition between farmers. Customers in nearby cities could always choose from different farmers, and so drive up general quality. When vertical differentiation took place with specialised dairies due to technical change, and with transport becoming easier at the beginning 20th century, producers also had to face competition from outside, while at the same time an opportunity was offered to provide cheese for more distant consumers. Thus for dairies the market became very competitive again, demanding high quality. Up to this point, text-book-like competitiveness and flexibility shaped the market. However, the relationship between farmers and dairies already called for some contraction. Both sides depended on each other, with milk being perishable and rather expensive to transport, and dairies being in a lock-in situation, as they would want to avoid idle capacity. Third-party control and frequency assured quality and smooth conflict resolution. Problems of asymmetry

of information were avoided. The determinants of transaction cost (uncertainty, specificity, frequency) would clearly call for a form of cooperation as it could be based contracts. So there was a shared interest and a good option to keep transaction costs low. Neither the market nor hierarchy shaped the relationship between participants. The further vertical disintegration with dairies and ripeners followed the same lines. The hybrid form of the organisation encountered today emerged at that time.

For all that, the decisive question for this thesis remains how the *Interprofession du Gruyère*, can keep its market share in the face of large-scale and financially powerful competitors. One reason, as already discussed above, remains a price premium due to the special gustatory quality that industrial cheese cannot offer.⁴⁰ Some consumer loyalty to tradition and the rural image of Gruyère may add to this. But the point here should be whether indeed the overall cost of this hybrid organisation can be lower, and thus its efficiency higher, than that of a clearly hierarchical, industrial organisation. Considering the complexity of the contractual arrangement applied this may raise doubts.

One more argument against the hybrid/club-model of producer's organisation is the relative ease with which an industrial organisation can change its output quantity. BARJOLLE and CHAPPUIS discuss this rather extensively. (ibid. p. 13ff) Such decisions – whether short term or strategic – can stabilise prices or support a more or less aggressive marketing strategy. Such considerations may indeed challenge a democratically organised club, based on one-member/one-vote principle. For this, the maturity of the organisation, allowing for qualified discussion and possibly painful decisions is a critical asset.

On the positive side for hybrid organisations BARJOLLE and CHAPPUIS (ibid. p. 13f) suggest there is the potential for mutual trust between those involved. As argued above, this critically depends on the acceptance of a third-party quality control. In contrast, purely hierarchical organisations potentially lose a lot of energy due to general distrust and at least subliminal conflict. An advantage of hierarchical/industrial organisations compared to completely decentralised organisations lies in the use economies of scale. These may materialise not only in the area of industrial equipment but also for legal services, research and development, training, and promotion of the product. Except for the industrial equipment – which by definition is not available to artisanal and small-scale production – the hybrid organisation can exploit these advantages just as well as the industrial organisation. Sample contracts help in negotiations, knowledge can be shared in the club (possibly well honoured), and promotion is a shared interest in the first place. As the vertical differentiation of farmers, dairies and ripeners shows, they make even use of economies of scale in equipment where they are indeed advantageous. What is more, and possibly most decisive, is the option to tap a large potential of creativity and motivation not on offer elsewhere.

Ultimately, the extent to which either a price premium allows Gruyère to keep its market share and stay successful in US and elsewhere, or to what extent it is indeed a competitive internal organisation, will remain an empirical question. In any case, all this is not

⁴⁰ In their FN 14 BARJOLLE and CHAPPUIS point out that industrialised cheese production would have to rely on homogenizing and pasteurising the milk at the beginning of the process, allowing for longer transport. Otherwise the raw material would not comply with a regular, constant quality standard needed for industrial production and the unaltered quality of the cheese itself. Such standardisation would necessarily call for concessions in the level of quality.

beyond economic rationale. GIs do not have to rely on artificial trade barriers, nor are they more dependent on subsidies than their industrial competitors. BARJOLLE and CHAPPUIS conclude: “If the enterprises alone are not competitive, it appears that the system as a whole is.” (ibid. 16)

Responsibility of the general public to provide institutional support for GIs?

As competitive as GI-clubs may or may not be – do public authorities have to provide for a special institution supporting this explicitly? After all, with the general legal foundations of intellectual property rights, company law and the civil code, there are templates on offer to solve the collective action problem that inhabitants or producers of a region may face. But as explained, trademarks – as private goods – show an inherent tendency towards hierarchical forms of organisation. As private goods, they may even be traded. Thus they cannot be immediately attractive for a group of producers. Offering GIs and a legal framework for clubs specifically suited to them widens the range of options people can readily choose from. Any question as to their justification can then be left to the competition between them.

With GIs as one option from the range of legal provisions for solving collective problems it may help to trigger a process that would otherwise not have taken place. If it does, it is undeniably useful. On the other hand, picking up again on the discussion on *Institutions or Geography?* (cf. chapter 4.1), leaving a minimised set of optional institutions would again restrict developments to a technical optimisation problem. Inasmuch as any minimising selection of such a set predetermines the selection of social options, this will show some bias.

Real life and outlook

In real life it will be observed that all civilised forms of organisation are somehow hybrid. There will be no purely hierarchical and no purely decentralised organisation. Conceptually, clubs using GIs begin somewhere in between. As already mentioned, the legal frameworks of collective marks, certification schemes and even (typically individually owned) trademarks will make it possible to actually emulate the GIs and vice versa to whatever extent. The forthcoming use of comprehensive IT management of supply chains, including IT-based contracting etc., will give a new impetus to this development. Questions as to who will actually control the supply chain, whether the incentives can be aligned well in this way, or whether rents will otherwise be channelled in new directions remain open. The International Trade Centre (2009:xvii) concedes that GIs have “considerable reputations in countries ranging from France and the United States to India and Mexico”, while at the same time “we are just beginning to understand why some are successful and others are not.” Considering the current developments in IT, in food processing and genetics, these deficiencies in understanding have tended to increase in recent years. Institutional economics might help overcome this obvious deficit.

An issue not discussed so far is the possibly positive external effects that may arise from activities linked to GIs. With respect to the cultural landscape, this will depend on the specific case. But typically, positive effects on the attractiveness of the region for tourists are likely. On the other hand, the GI product will gain from external effects of tourism and a generally positive image of the region. Positive effects on social cohesion may also be observed in that members of the club producing on the basis of the GI will not be dismissed as easily as hierarchically organised corporations can dismiss their employees. In practical terms this

may mean that some re-training or innovation will be organised within the club, while the corporation can externalise the cost for such activities. In turn the corporation will argue that it can only offer a tax base for efficient public labour-market programmes, if it goes strictly for efficiency itself. In any case, justifying extra subsidies for GI-Clubs – or corporations – will require careful examination.

Summarising for the five questions

(1) Does this institution violate one or more of the five axioms of neoclassic economics? As set out above there may be a violation of the axiom of perfect information, in that without a GI the information on the origin of a product may not be available symmetrically to producers and consumers. As such this would not have to be considered as so special; asymmetric information may rather be the regular case, perfect information remains unachieved anyway. Economists have learned to live with *bounded rationality*. Furthermore, gathering additional information may simply not exceed the additional welfare provided by it. A second aspect concerns the unjustified appropriation of a region's name by producers from other regions. Without a GI, this would be a violation of a traditionally assumed property right. Only by legally establishing this property right could this be clarified or avoided in the first place. On the other hand, the evolution of generic names does have a justification too; so, private property in a name may actually have a negative effect on overall welfare. A conflict-resolution mechanism would be needed to reach a conclusion.

(2) Can the institution relating to a GI be captured as a public good? For clarification again, a GI itself is just a good. To a club using it, it is an asset and – to the extent not given by nature – produced by the club. The institution immediately related to it lies in the enforcement of the right to use in this GI. This institution is a public good. Institutions indirectly related to GIs are those established by the club for its internal organisation using this GI for promotion. These institutions are club goods.

(3) Which kinds of institutional arrangements offer higher welfare levels? GIs themselves are club goods; the institution supporting them, in that it enforces the right of use, is public. The alternative would be a commodified GI, i.e. a trademark. Differences and possibilities for mutual emulation have been discussed. It turned out that GI systems may well be more efficient, although this will have to be checked case by case. Organisational differences notwithstanding, both private corporation and club strive for efficiency, and so they principally have to deal with the same problems: principal-agent problems, free-rider problems etc., regardless of whether they arise as internal or external effects.

(4) Are the institutions related to GIs humanly devised? Habits and attitudes play a considerable role in the ways in which producers from a specific region are willing and able to cooperate. Maturity, becoming manifest in the decision-making process of the clubs concerned, is an important asset. It contributes critically to the evolution of the GI itself, and to the functionality of the production process. Habits, attitudes and the maturity of a club are typically not humanly designed, but outcomes of long-standing developments. In WILLIAMSON's exposure of the levels of economic organisation it would be situated at level 1, "Social Theory" (cf. Figure 2). Nevertheless, some modernisation is observable, in that formal associations are being established (they are actually mandatory for EU schemes), voting procedures are agreed, or third-party control is introduced into the system.

(5) *Is a GI system inherently biased?* If a price premium is paid for a GI product, for whatever reason (a gustatory difference, credence, mystique), it reflects the value of the GI as an asset. If the GI were not given, product piracy would not be actionable. If this product were traded under the same conditions as close substitutes, this GI could not support any special rent-seeking; the conjecture that GIs work as non-tariff barriers in favour of their producers cannot be substantiated. To the extent that this price premium is determined due to soil and climate, it increases the value of the land, and thus the wealth of the landowners. To this extent there is a bias of the GI in favour of the landowner. Questioning the justification of this would mean questioning land ownership in general. To the extent that the premium is not determined by geographical conditions but by socio-economic factors, i.e. by local attitudes, habits, the maturity of decision making processes etc., the premium should be allocated to factors that bring this about. For this, standard economic thinking will look at the various players along the supply chain. Operationalising it will ask whether the respective share in the premium will be allocated according to efficiency criteria, i.e. whether the respective marginal revenue is distributed according to marginal productivity at each level of this chain. As a commodification of attitudes, habits and maturity is not very constructive, other ways will probably be found to allocate the premium.

4.3 Agricultural policy in Austria

Austrian agriculture is not only quite diverse with respect to its geographical conditions, it also looks back on a history of marked changes in its political and economic surroundings. With the final abolition of serfdom, in 1848 farmers not only gained their freedom, they also lost the institutional framework that had previously stabilised their inclusion in society as a whole. The problems resulting from this aggravated and finally triggered an agrarian crisis in the 1860s. Individual independence had not been sufficiently accompanied by the strengthening of modern marketing structures, and neither had it been supported by structures in financing or technology transfer. Only later could cooperative organisation begin to fill the gap. (cf. SANDGRUBER (2002:368f) Food shortages after WWI became politically traumatic as access to agricultural products in the former crown lands was no longer unrestricted. Austrian agriculture itself was not prepared to provide for the needs of the bigger cities. So it took a major effort to increase production. Overall economic conditions had led to a labour surplus, i.e. labour not employable by the dwarfed manufacturing sector. Only traditional agriculture was able to absorb these people, often facilitated by family linkages. A first – though small – wave of often credit-financed mechanisation and the generally unsettled market situation led to over-indebtedness for many farms. Efforts to stabilise the situation by state intervention came late or remained dysfunctional. A plan to reschedule farm-credits, offered after the “Anschluss” by the now governing regime, led any former political commitment to Austria and its already maimed democracy to crumble. The fact that the plan offered did not materialise to the extent promised would not change its initial impact. (cf. HANISCH 2002:110), MEIXNER, SIEGEL 2003:157f; LANGTHALER (s.a.))

Table 1: Structural change and price developments in food and agriculture in Austria

	farms (000)	AWU (000)	ha/farm	MFP	Ind. A	Real Ag BPI	Real Food CPI
1964	382	565	10.4	42.9	15.8	208.0	135.7
1970	368	467	10.5	53.7	17.8	173.4	130.8
1980	318	303	12.0	82.8	42.9	149.1	117.8
1990	282	223	12.6	97.4	85.6	130.7	108.2
1995	239	189	15.3	100.0	100.0	100.0	100.0
2000	218	166	16.8	109.5	96.6	82.3	99.3
2010	173	130	18.8	125.2	150.9	74.1	103.4
2016	166	118	n.a.	n.a.	140.3	70.9	106.0

Sources: KNIEPERT (2008), BMLFUW (various years), Statistik Austria (various years), own calculations
 Number of farms with 1964 interpolation of 1960 and 1970; AWU: Agricultural Work Unit, ha/farm: ha of agricultural used area 1960 for 1964, 1999 for 2000; MFP: Multifactor Productivity (based on labour, capital and variable inputs, not on land), Indicator A: Real factor income per agricultural work unit (EAA); Real Ag BPI: Basic Price Index for agricultural products, deflated by Consumer Price Index (2015 for 2016) ; Real Food CPI; Food price index, deflated by Consumer Price Index. All indices with 1995 = 100.

From the post-war years onwards, Austrian agriculture experienced continuous structural change. With the number of agricultural work units (AWU) decreasing from 1964 to 1990 by an annual average of 3.5%, a bigger share of people left the sector than in the following years up to 2016, where this change averaged 2.2%. Between 2000 and 2016 this figure even fell to 1.5%. The fact that the early years showed the more drastic changes is also supported by a comparison of numbers of persons counted as working in agriculture between 1951 and 1961: within these ten years, this figure fell from 1,080,000 to 765,000, which is again on average 3.5% per year. In 1951 one in three Austrians (32.3%) worked in agriculture. By 1960 this had fallen to 22.7%, still more than one of five, but in 2013 this proportion was just 4.5% (BMLFUW 1962:8, 171). The number of farms fell from 433,000 to 166,000 between 1951 and 2016 (ibid.), so that in 2016 only 0.7 AWU were needed to run the average farm, compared to 1.5 AWU in 1964. This is in line with the sharp increase of the multi-factor productivity index, which is largely determined by the sharp decrease in labour-force input. Mechanisation and the increasing use of chemicals also played their role in changing agriculture in the 1950s and 60s. Nevertheless, some countertrend is also to be noted, in that Austria became a trailblazer for organic farming from the 1980s onwards. With tourism providing a large share of foreign exchange, awareness was raised concerning the value of cultural landscape. Indicator A shows that real income per AWU increased significantly over the decades, despite a fall in agricultural output prices⁴¹ in real terms. Real food prices for consumers decreased as well, though not to the same extent, as the cost for wholesalers and retailers did not contribute to this. It may be noted that these prices fell relative to the average price development even during the price-supporting and protectionist period.

The fact that at roughly 20 ha/farm the average farm size is still well below respective numbers for most western European countries, as is the proportion of people employed in agriculture (4.5% of overall employment; BMLFUW 2016:171), should not immediately be

⁴¹ Output prices here as “basic prices”, i.e. including commodity subsidies, but not direct payments of the SPS or of environmental programmes.

interpreted as an indication of backwardness. Firstly, of course, such comparisons run the risk of comparing things that are not comparable.⁴² Secondly, part of the Austrian agricultural policy is not to undermine the option of part-time farming. Combined employment is also encouraged by the EU, namely in connection with pillar 2 policies.

Summing up the development up to EU accession in 1995, it was increasing yields, structural change, and growing awareness of the quality of products that raised the competitiveness of Austrian agriculture to levels allowing for less price protection. After initial worries, food security was comfortably given. New challenges, concerning a drain from rural areas and ecological problems became relatively more pressing.

For the EU it was the MacSharry reform of 1992, closely linked to the results of the Uruguay Round Agreement. Central to this was the abolition of long-standing price-support policies and thus the alignment of domestic with world markets. This part of the reform was successful, measured by the price transmissions that can be observed between world and domestic markets. Import levies and export subsidies were reduced considerably; quotas – namely the milk quota – were relaxed and ultimately abolished. (Details will be discussed below in the context of a possible bias of agricultural policy.) With EU accession, EU policies were applied to Austria without any transition period, albeit with digressive compensation payments over the first four years of membership. In comparison to other countries Austria made considerably more use of the option to implement a nationally co-financed environmental programme. Furthermore, support for farmers in disadvantaged (mainly mountainous) areas remained a distinguishing feature of Austrian agricultural policy. With Fischler as EU Commissioner, agricultural policy prepared for further EU enlargement. This led to a re-arrangement of direct payments and a programmatic strengthening of rural area policies by a wide range of instruments the EU.⁴³

OECD (2017:48, 50) estimates show that in the EU-28 in 2014-16 only roughly 12% of gross farm receipts were conditional on the adoption of specific production practices, which is double what it was for the EU-15 in 1995-97, but shows that capacity to influence is limited. Only in Switzerland is the share higher, in all other countries it is lower, if it is given at all. The nominal protection coefficient (capturing market price support as the difference between

⁴² Such numbers are notoriously difficult to interpret, as something like ‘average farms’ may represent a mix of very different components with very different weights. For example, no one would consider the Netherlands, with farm size about half that of Germany or Denmark, as backward in agriculture. It is simply its high proportion of market gardening that reduces the numbers. It is no accident that EUROSTAT does not publish absolute income for farmers across Europe. The fact that not only fewer, but also a decreasing percentage of people are leaving agriculture also says more about further adjustment needs than aggregate productivity comparisons.

⁴³ The Agenda 2000, intended to adjust the Common Agricultural Policy to the needs of EU enlargement, should be mentioned. [\[web\]](#) After all, accession countries like Poland, Hungary, and Romania would become heavy weights with respect to production, other like the Baltic countries, the Czech and Slovak Republics, Slovenia, and also Bulgaria also showed potential and demand for rural development. The Declaration of Cork of 1996 focused on rural development. A programme launched later directly or indirectly on the basis of this was the Special Accession Programme for Agricultural and Rural Development – SAPARD. The Leader programme (Liaison entre actions de développement de l'économie rurale), first launched in 1991, was and is very much in line with the Cork Declaration.

world market and domestic prices) fell from 1.3 in 1995-97 to 1.05 for the EU28 in the period from 2014-2016. According to the EUROPEAN COMMISSION (2017:6) in 2015, 66% of direct payment schemes in Austria were linked to natural constraints, 2% to young-farmer programmes and voluntary coupled support. In 2016 the production value at output prices reached €6.8 billion With €4.1 billion for variable inputs and €1.8 billion for depreciation, it is “other” subsidies – valued at €1.5 billion – (i.e. all subsidies minus commodity subsidies, transfers, and payments under young-farmer programmes) that matter considerably for the income factor. (STATISTIK AUSTRIA 2017). The overall agricultural budget of Austria was €1.9 billion (BMLFUW 2016:94).

Agricultural law as the basic document for options in policy formulation

For a purely economic analysis, farmers’ income would be *the* critical variable. All other aspects would be restrictions or incentives. If free exchange were allowed, price mechanisms would lead to maximum welfare.⁴⁴ Nevertheless, in all Austrian agricultural legislation farmer’s income is only mentioned indirectly, in that farmers should be enabled to take part in general social and economic welfare.

This thesis proposes to capture agricultural policy as a *container institution*.⁴⁵ This is appropriate, as indeed the political process is organised as taking place on two different stages. For the general public it is the overall outcome of this policy that matters, not the details of how this comes about. Then there are general expressions of policy objectives. These can be operationalised on this level by some indicators, whether calculated as aggregates on the basis of detailed statistics, or as proxies, complementing the overall picture. Representatives and experts inside the container discuss and may change the set of policies, specific institutional arrangements, etc. (e.g. direct payments instead of price support, individual contracts for eco-systems services instead of statutory law). Those inside the container are held accountable by those outside on the basis of the mentioned indicators etc. This institutional arrangement complies with the principles of representative democracy. The general public is not to be overburdened with details, but should have the last word on the intended overall outcome.

⁴⁴ In typical optimisation models this would be the number to be maximised. As long as the model is not extended to general equilibrium, household income is kept exogenous. Based on the principle that markets clear if they are not restricted, supply is sufficient for households.

⁴⁵ The term *container institution* or an equivalent for it is not found in the literature on institutional economics. Yet *container* as terminological component, qualifying a second term, is used in a similar sense in other fields. It makes it possible to capture some conglomerate of heterogeneous material as one unit of consideration. As such it is not only used for the most familiar concrete cases, but also as referring to analytical building blocks. The inner structures are a matter of concern from the inside perspective only. The outside appearance, its volume and its boundaries are of shared interest from the inside and the outside perspective. From the outside perspective the inner structure does not matter, but the place and the interaction of the container in the wider context does. In both directions claims may be raised and accountability will be demanded. So the use of ‘container approach’ has been found in the field of information technology [web], organisation [web], or as container institution in cultural management [web] [web]. In economics terms like household and firm serve the same purpose.

Agricultural policy objectives change with the overall change of society, its economic and political development. To some extent, these changes can be traced by reference to the three agriculture laws that have been enacted by Second Republic.⁴⁶ All three call for rather general policy objectives. For the 1960 law these may be summarised as related to social, economic and consumer issues. Disadvantaged areas, namely mountainous farming, were mentioned explicitly. What was added in the second version (1976) is cultural landscape and rural areas. The third version (1992) added social cohesion, ecological compatibility and – a policy change – the organisation of production, processing and commercialisation in a market-oriented way. This means refraining from the type of market intervention so characteristic of the period before EU accession (with milk and sugar receiving some, but now expired extension). So this aspect of international policy consensus (cf. chapter 2.3) – *get the prices right!* – has found its way into Austrian agriculture legislation.

The declared change to market orientation is also documented by the change in instruments. Whereas the laws of 1960 and 1976 include all kinds of interventionist instruments (price regulation, levies, storage, etc.), the law of 1992 mentions production-neutral direct payments, compensation for compliance with higher ecological standards, and support for the improvement in the operational infrastructure.

The *bäuerliche Landwirtschaft*⁴⁷ is central to all versions of this law. It is mentioned twice in the 1992 version, while the other objectives may be interpreted as second-order objectives; as contributing, or being complementary to it. Despite the experience of sometimes drastic food shortages after WWI and WWII, and in contrast to economists' general assumption of that production does not take place for its own sake but that its ultimate goal is consumption, the first two versions of the law call only for the *Bedachtnahme* – i.e. the taking into account – of the interests of consumers. This was changed in the 1992 version, in that population were to be provided with high quality produce in the best possible way.

Bäuerliche Landwirtschaft – somewhere between subsistence and industrialised farming – is not easily defined or operationalised. In particular, demarcation vis-à-vis industrialised farming is not straightforward. Industrial agriculture is typically characterised as making use of economies of scale and specialisation to the maximum possible extent. Mechanisation is central to it. Furthermore it is said to rely on the externalisation of social and ecological costs. In contrast, 'bäuerliche Landwirtschaft' is typically assumed to be a family farm, although specialisation is observed here as well. The preference for the 'bäuerliche Landwirtschaft' is obviously deeply rooted in family traditions. It also may follow socio-cultural stereotypes based on images like those of the British yeoman or the German *Freibauer*, known from times before modernisation. In their time these were privileged farmers, as they owned the land they worked on, thus representing independence and being well able to defend their livelihoods. The image has been carried through the ages by Biedermeier paintings, *Heimatfilme* (sentimental films with a regional background) and the like. With reference to externalisation of cost, proponents of the *bäuerliche Landwirtschaft* see this avoided by the

⁴⁶ Landwirtschaftsgesetz 1960 LWG, BGBl 155/1960 [[web](#)], Landwirtschaftsgesetz 1976 LWG, BGBl 299/1976 [[web](#)] Landwirtschaftsgesetz 1992 LWG, BGBl 1992/357 [[web](#)], konsolidierte Fassung retrieved on 04.08.2017 [[web](#)]

⁴⁷ In the first two versions the term "Bauernstand" was used, which clearly carries an ideological connotation. Interesting as this may be, this thesis will not elaborate on this explicitly.

implementation of sustainable production techniques, particularly characterised by – more or less – closed-nutrient circulation. Furthermore, traditional agriculture would provide positive external effects, by maintaining landscape, village culture, attractiveness for tourists, and social cohesion for the villages and society at large. Some influence on this may be expected from the role of cooperatives, the exchange of agricultural services (primarily machinery). Based on all this, its proponents claim its levels of efficiency to be higher than those of industrial agriculture. So as for the process of industrialisation in general, any judgement on the 'bäuerliche Landwirtschaft' calls for socio-economic analysis and not just a technical or purely economic efficiency assessment. With this, the scope and the tension of this discussion is obvious. This thesis is not concerned with which of these concepts is closer to what could be called a modern form of agriculture, based on principles of enlightenment. Nor is the value of tradition to modern agriculture to be evaluated here. Nevertheless, what should be kept in mind is the complexity of the case, and the need to consider the socio-economic context of production.

Discussing and summarizing for the five questions

(1) Does the institution in question here indeed correspond to one or more market failures? Are one or more axioms violated? With the container-institution 'agricultural policy' and the changing of institutions within this container, the answer will have to cover a developing phenomenon.

Political decision-makers and the general public during the late 1940s and early 1950s looked back only on a bleak past. The agrarian crises of the 1860s and of the interwar period were deeply rooted in collective memory. Now again, with only a provisional government, the goods that were in short supply were not just bread and butter. General stability was the task of the day.

With serious deficiencies in the technological and legal infrastructure it was hard to imagine a spontaneous evolution of somehow competitive markets. Agriculture could well fall back on subsistence, seeing the bigger cities relying on food aid. The fact that it did not work out that way does not mean that it could not have happened. On farms, traditions dominated decision-making, which may have had a stabilising function, but which at the same time questions the rationality needed for a functioning market system. A consideration of the entrenched authoritarianism in Austria calls individual utility maximisation as a cornerstone of John Stuart Mill's liberal project principally into doubt. The immediate experience did not support any market optimism either. The axiom of property rights was violated during and also after the war, as farmers were forced to deliver. Still an occupied country, and with all options for political developments given, not even land ownership could be taken for granted. Further axiomatic foundations (information, convexity) were of minor importance, if at all.

In this situation a rigorous system of market regulation was adopted, as it had already been established in 1931 as a last effort of the then still democratically organised system. At that time the Austrian social partnership had also supported it. (cf. HANISCH 2002:101). The way agriculture developed from the 1950s until today has already been described above. The catalogue of objectives became more comprehensive, and the selected instruments changed; first gradually, as the problem of low domestic supply was (more than) solved, and then more radically, taking EU accession as an opportunity for this. The question here is: did this development remove the doubts about the preconditions of a market system for Austrian

agriculture? If so, would this suggest going for a completely liberalised market? Or did other problems arise, justifying new instruments?

Without going too much into detail, the removal of initial doubts may well be confirmed, following current conventional economic wisdom. Firstly, farmers themselves gained in the ability to trade on markets, or at least to integrate themselves into this system. For Polanyi this would have been a further deformation of human nature, for John Stuart Mill it would be proof for his project of the independent and enlightened individual. With the cooperative system playing a major role, with enlarged markets and a good infrastructure, and finally with antitrust laws providing for an emergency brake for problematic cases possibly left over, not even a violations of the convexity axiom would have caused concern.

On the other hand, new tasks and problems arose up. They emerged due to the growing danger of negative external effects (e.g. nitrate pollution) and decreasing positive external effects (e.g. loss of traditional landscape, social cohesion). What is more, higher overall welfare would imply a growing concern for animal welfare, food safety etc. Politics reacted to this.

(2) Can the institution of "agricultural policy" as such be captured as a public good?

"Agricultural policy" as an institution is established by national law; it is applicable to everybody, without exclusion. Nor could this law somehow be diminished in its application. So inasmuch as it meets both criteria of a public good, it can conceptually be captured as such. It is critically provided by a complex decision-making process and established at the nation-state level. To some extent, rules set up by cooperatives also provide for a stable economic environment. So in this case, a well-functioning system of cooperatives with its rules as club goods may substitute for the national effort. Before modernisation, family structures may have substituted for the state, though applicable only for those within the family or clan. As mentioned above, there is a discussion that before the abolition of serfdom the rules of that system would have provided for stability and only their dismantling in 1848 brought about the agrarian crises of the 1960s. This would be in line with POLANYI's (cf. 1978 [first 1944]:61f) appreciation of the role of the Stuarts and Tudors during early waves of enclosures in Britain. For some components only introduced by the 1992 law, (e.g. landscape) it may again be club rules that might to some extent fulfil expectations. In contrast, this will not be the case for ecological issues, for which – to take it further – even the nation state may have to be re-categorised as club, as it is not strong enough to solve problems of the global commons by itself.

(3) Which kinds of institutional arrangements offer higher welfare levels? As the case observed here covers a long period, the question can be answered from two perspectives: i) a static one, checking for different options at each moment of time, and ii) a dynamic one, checking for possible costs of adjustments. As there are too many different institutions given here, the following analysis highlights only aspects, exemplifying the principal features.

During the first phase, from the 1950s to the middle of the 1980s, agricultural policy was largely implemented as a strictly regulated market. Target (i.e. effectively minimum) prices supported farmers' income and served as an incentive to increase production. As intended, production increased considerably. Microeconomic theory and the respective statistical evaluation can show that this policy was ultimately funded by consumers, who could otherwise have relied on cheaper imports. With excess supply from the late 1970s onwards, and if it had been for income support only also before that, if in addition the transaction costs

would not have been higher, then a liberalised product market with direct income support would have been more efficient, i.e. would have offered higher welfare. But, as set out above, defining farm income as the only policy objective would miss the point: the principle objective was general stability and food security. With modernisation on the agenda, its disruptive effects should be ameliorated. With this, the dynamic aspect comes into play, for which the microeconomic toolbox is theoretically suited, although empirically supported quantification remains difficult. A cautious appraisal may leave it at this: during the period observed, agricultural policy managed an indeed drastic and continued structural change, often with a heavy burden for farmers and their families. Major changes in the overall political environment (EU accession, EU enlargement) with considerable impact on the farm situation were carried out based on a broad political consensus. Whether such an outcome could have been achieved at a lower price will be difficult to answer.

Technological development, and thus the lowering of transaction costs, played a critical role in the further development of the institutional setting. Regulating prices was obviously much easier than administering payments for individualised ecosystem-services, for example. Only with lower transaction costs could it now be feasible to propose what the OECD, for example, described as a “positive reform agenda”. Two issues were to be addressed by agricultural policies: first market failures, and only then income issues. This prioritisation is a given, as policies coping with market failures may themselves have income effects. (cf. VAN TONGEREN 2008:2). The differentiation of policy instruments, together with the 1992 agricultural law, and thus also with the differentiation of the set of institutions, mirror the attempt to achieve this. Nevertheless, it remains disputed whether the presupposed commodification of a complex matter like biodiversity, landscape or animal welfare etc. may ever become measurable in the way needed. So the attempt to establish “well-defined economic, social, and environmental objectives”⁴⁸ and implemented policies in this field might firstly suffer from mis-specification and incomplete specification (in textbook terminology: it may end up with incomplete contracts and the resulting principle-agent problems). Secondly, it may suffer from higher transaction cost than a less precisely targeted, but similarly or even more effective policy.

Formulating a complete policy (in the sense of contract theory), or in other words striving for a perfect institutional arrangement for agriculture, may ultimately fail for a lack of information. As captured by ACKERLOF’s (1970) market-for-lemons problem, a reasonable policy may not be established, as one or the other side lacks the necessary trust. This trust, an institution itself, will have to be generated. To do so, not all details – even for those working in this often hard to follow field – can possibly be discussed sensibly with all those concerned – principally all Austrian citizens. Discussing agricultural policy as a package (or, as it is called by this thesis, as a container institution) on two levels is intended to help generate the necessary trust. This obviously has a price itself: the parliamentary system and the Austrian social partnership that is in charge of negotiating the set of institutions inside, and in addition the volume and cost of the complete container with respect to other major policies, and of communicating the consensus reached. It is obvious that such a system has its price. On top

⁴⁸ As supported e.g. by the Declaration of Cork 2.0 at a conference organised by the EU Commissioner in 2016. [\[web\]](#) [\[web\]](#)

of this, the administration of whichever set of institutions is enacted will have a cost, as of course will the compensation paid to the agricultural sector for services or restraint. The options for the latter are statutory law, standard contracts or individual contracts. The greatest cost may arise if no policy is applied at all.

(4) Is the “agricultural policy” institution humanly devised? With the selection of agricultural policy as the institution to be discussed here, informal and traditional institutions playing their role in shaping agriculture are excluded. The focus is given to, is the formal organisational system of policy-making, i.e. the realm of the human making of institutions. This includes parliament, with its elected members, parties and committees. Furthermore, agriculture is represented in the Austrian social partnership system by its own chamber, alongside the chamber of commerce, the chamber of labour and the trade unions. What is more, § 7 of agricultural law requires the establishment of a commission made up of all parliamentary parties and each of the representatives of the social partnership, with the minister having the right to invite experts and farmers. As information is essential for any rational decision, the annual “Green Report” and a large number of other sources and data are available.

(5) Is this institution inherently biased? Principally, as just explained, all sections of society are represented in the decision-making process. In that parliament and the social partnership are included, people are represented as citizens and as members of a social group. In principle, impartial information is readily available. Thus comprehensive consideration of all aspects relevant to those concerned is made possible. Based on all this, agricultural policy is democratically legitimised.

Agriculture is usually seen as over-represented compared to other policy areas. A possible reason for this becomes obvious, as there is a dedicated ministry for agriculture, while there is just one ministry for almost all other industries taken together. (The fact that the ministry also covers food and in recent years the environment rather reinforces the lopsided impression, as the ministers have always been agrarian.) The fact that agriculture has its own chamber points in the same direction. This bias can be explained by path dependency, with agriculture in the past playing a much more important role for the whole of the economy and the society.

The dominance of the arable sector within agricultural representative bodies (chamber, professional organisation) has been discussed. “Hörndl gegen Körndl” (“horn against corn”, i.e. milk and cattle versus crop production) is a traditional standard, supported by the fact that it typically coincides with small versus big farms. There is some historical explanation for this as well, as the Austrian nobility had its economic base largely in arable land and forestry. The extent to which this imbalance is relevant today will be a matter of continued dispute.

One case in point may be raised here, offering some insight. This concerns compensation payments granted as adjustment for policy-induced changes. As mentioned above, microeconomic theory offers tools to estimate the cost of such adjustments. Nevertheless, as many aspects are affected, an empirical estimate of a justified compensation is difficult. Typically, an immediate price change affects the income perspective of producers and at the same time the real budget of households. For the producers, investment in equipment, buildings and human capital may lose profitability. In retrospect, a decision to qualify for a particular occupation (in this case farmer) may lose its rationale. For farmers, used to thinking in generations, this is a profound problem. If a policy change questions the protection of legitimate expectations, compensation may well be considered as a price to be

paid for it. For this, difficult as it may be to estimate it econometrically, a data-backed analysis may in principle serve as a basis for negotiations.

Austrian farmers were confronted with just this problem when it came to EU accession in 1995. Compensation for immediate price reductions was negotiated based on some evaluation of data. The payments ultimately agreed were degressive and limited to four years. (cf. e.g. on this SCHNEIDER 1994:51ff, SCHNEIDER 1995:333ff, BMLFUW 1996:161ff, BMLFUW 1999:159f).

A principally similar situation applied during the Uruguay Round negotiations, from 1986-1994. Scheduled to be finalised by 1990, the negotiations had to be prolonged, as – among other problems – no agreement had been achieved on agriculture. Subsequently, the EU Commissioner MacSharry launched a reform of the Common Agricultural Policy (CAP), allowing for a breakthrough. The most critical aspect of this was the introduction of direct payments, compensating farmers for prices adjusting to world market levels. To make these payments acceptable for trading partners, they were not to offer production incentives. They were therefore linked to the area planted and to livestock levels (suckler cows, heifers, steers), not to production itself. In 2003 these payments were replaced by the Single Payment Scheme, now re-linking all payments to land area only. In 2015 this was superseded by the Basic Payment Scheme. From start and during all subsequent CAP reform negotiations, these payments were discussed in relation to set-aside obligations, capping/modulation, cross-compliance, etc. The (only logical) limited duration of these payments – as compensation for transitional adjustments – was overcome by attributing other objectives. The principle advantage of direct payments compared to price support was discussed and confirmed by academics and research institutes. (cf. e.g. OECD 1994, TANGERMANN 2014:22ff).

On the other hand, this reform turned out to be a missed opportunity, in that direct payments were introduced without any serious link to external effects and thus to the provision of public goods. Before the reform, better targeting was a major issue in many policy papers; support that had previously been coupled to prices was to be de-coupled, but at the same time re-coupled. (again: e.g. OECD 1994) Re-coupling to area was thus the simplest solution. Whether this resulted from the pressure to go ahead with the reform in order to comply with demands from trading partners will remain a matter of conjecture. Liberalising the commodity market was the easy part, for which the opportunity was not to be wasted. Substantial re-coupling to the cultural landscape, ecological objectives etc. was postponed. The expected economic outcome of this is the capitalisation of payments in favour of landowners. (cf. KLAIBER et al. 2015). Here too, the extent to which this happened because the difficulties of implementation were underestimated, or to what extent it was due to political influence will also have to be left to conjecture. MATTHEWS (2017:20f) observes an entitlement culture, which he would like to see replaced by contracts for the provision of specific services. In this sense he also supports the 2016 Cork 2.0 Declaration, but leaves open why there has been so little progress since the first Cork Declaration, in 1996. As has been seen in chapter 4.2, MATTHEWS does work on respective concepts that take account of their transaction cost and complexity (in this case Geographical Indicators). But it may be questioned whether agricultural economics is indeed prepared to support such concepts effectively.

TANGERMANN (2014:39, own translations) concedes that the development of CAP reforms “was a rather depressing outcome for academic agricultural economics.” He also mentions

the now disappointed expectation of the time that these payments would not be removed at a later date. (Of course, hardly anybody could have expected that not even inflation would help in the following decades.) But while he also discusses contracts for eco-system services for example (ibid. pp. 36ff), he seems to be indecisive as to whether payments should have been re-coupled (targeted, possibly with contracts) or removed altogether (ibid. p. 39).

At least in retrospect the MacSharry Reform appears to be a most successful coup by landowners. Looking back on centuries of landownership as practically untouchable (at least in Western Europe), they could wait for things to come. As in other industries (e.g. coal, rail, shipping, the Church), once acquired, entitlements would not easily be removed. Neither would they seriously be confronted with operational models for service contracts.

So is the agricultural policy institution in Austria biased? With an agricultural budget of €1.9 billion in 2015, transferred from tax-papers to the farm sector and its administration, plus some further – though reduced – transfers from consumers to producers due to protection, it is hard not to conclude that the bias is most obvious. Nevertheless, the decision-making process shaping this policy is as democratic and transparent as can be. Over the decades, it has first mainly been historical experience and later more explicitly matters of social cohesion, regional development, ecological concerns, and certainly also some sentimental national self-perception that has facilitated this policy. Given this, there is certainly room for improvement, particularly to improve the agricultural policy contract on the level of its specific instruments.

4.4 Five questions on NIE – summed up

In Chapter 3 four central contributions, constituting the foundations of what became known as NIE were presented. They were compared in view of what they share conceptually, but also in view of possible differences. For this chapter 4 three examples were selected to which NIE was to be applied. Thereby, specific attention was paid to five questions that had been left open in chapter 3 or needed further clarification. The answers that could be given proved to be determined to a certain extent by the specificities of these examples. Still, some generalised answers may be given here, offering some more conceptual stability, but possibly also calling for more research on the issue.

(1) Do institutions correspond to the violation of one or more of the five axioms of neoclassical economics? This question had been programmatic in the sense that a formalised approach of NIE has not yet been universally established.⁴⁹ To allow for a structure as simple as possible (while, of course, as complex as necessary), concepts of institutions should – if possible – be compatible with concepts established in economics. So, the axiomatic foundation of neoclassical economics should be tested for this. For all examples, this approach met the expectations. So, the rational for institutions can be explained on the violations of neoclassical axioms.

(2) Can the institution be captured as a public good? As with (1), this question was asked on the basis of the same programmatic plan. It now can be confirmed that institutions observed with three selected examples could indeed be captured as public or club goods (or, for that

⁴⁹ For some other work on this cf. e.g. ACEMOGLY and ROBINSON (2017)

matter, as common pool resources). As private goods institutions do not make sense. They have to be generated in social context, and they are essentially social.

(3) Which kinds of institutional arrangements offer higher welfare levels? This question will have to be answered case by case. For the first example a conclusion was not possible, as the analysis could only be conducted on a very aggregate level. For the other two, it could be seen that institutional arrangements can compete with each other. Depending on very specific conditions they may show different levels of efficiency. Critical for this is transaction cost as well as differences in cost of production. What kind of institution will fare better cannot be decided once and for all, as the respective conditions might change. In any case, one should not assume one blueprint arrangement to be superior.

(4) Are institutions humanly devised? This question is closely linked to the general question whether socio-economic processes can be planned or whether they are just the outcome of some evolutionary process. The origins of these processes might even be beyond the grip of scientific analysis. So, possibly they follow economic laws, in that the more competitive institution will prevail. (This could apply, even if in concrete situations they are imposed by brute force.) Otherwise, they may be designed actively by stakeholders, parliamentarians, club members, etc. Following the idea of enlightenment and modernisation, it may be conjectured that the lower levels in Figure 2 will be entered first, while the higher levels will be entered with continued progress.

(5) Can institutional arrangements be inherently biased? All examples indicated that institutional bias is a critical issue. It is closely linked to general notions of justice. Thereby, bias may generally be judged positive in that it may promote a wanted development. There may also be a trade-off between biasedness of an institution and societal stability. What can be observed furthermore is that the lower levels in a hierarchy of institutions as presented in Figure 2 will always reproduce what is determined as biased on the next higher level. So, as soon as there is a bias on an upper level, this will be translated all the way down to level 4, the level of immediate exchange.

5 Conclusion

What is it? Why is it? What it should be? These are questions a student might be occupied with. Standard economics offers answers on the efficient use of resources for the purpose of consumption. It will offer answers also on how the availability of resources can be sustained and how new resources and technologies may be developed. For all this, economics points to choices taken by individuals on the bundles of goods and services they want to consume, as well as to the effort they are willing to undergo for this, keeping both sides in balance. It would be these choices that directly and indirectly decide on the allocation of resources and the whole production process. If all individuals were allowed free choice, the outcome would be one of maximum welfare.

Promising as this is, it remains questionable whether this process can indeed work without major frictions and whether it brings about the expected result. More specifically, it may be asked: under what conditions this can happen. While economic research typically addresses such questions on a very detailed, technical level, this thesis approaches it from the perspective of principle. For this, it summarises these conditions on an abstract level as five axioms underlying neoclassical theory, which in universities is taught as economics as a minor subject or in introductory classes for majors. Economics is thereby taught as a pure price theory.

Following neoclassical economics, individuals do not have to know let alone decide in consideration of the complexities of economic processes; they do not have to care about what their decisions induce on the resource side, or what repercussions they will have on other individuals, or other parts of society anywhere on the planet. They may indeed follow their immediately felt needs. The price mechanism would provide for the necessary adjustments, ever new opportunities and maximum welfare. The only tasks for economic policy are to safeguard just one of these axioms, namely 'well-defined property rights', and to remove any possible obstacles to price adjustment.

In its chapter 2.3 this thesis shows how this standard of economics has pervaded all sectors of western economies since the 1980s. Commodification of formerly public or common resources was a most important aspect of this, as it was for each wave of the establishment of markets. And indeed, long-standing inefficiencies in the provision of specific products and services could be eliminated on the basis of this economic paradigm. It supplanted Keynesian economics, which had lost its influence after being unable to provide an answer on the problems of stagflation in the 1970s. Furthermore it spread to emerging economies and to the transforming countries in Central and Eastern Europe. Its influence went well beyond the purely economic sphere. But in the process its limitations also became manifest. It failed drastically when applied as shock therapy to Russia or Ukraine, its policy proposals for ecological problems could not deliver convincing references, the crises of 2007/2008 should simply not have happened. Increasing economic inequality was not an issue for it in the first place.

In order to shed some light on the reasons why this paradigm encountered its limits, the presuppositions for a successful commodification and thus of the establishment of market relationships are analysed in chapter 2.4. It can thereby be shown that the potential of such policies is indeed very high, even in areas that may at first seem hardly accessible to them. On the other hand it can be shown that commodification is not necessarily more efficient than

a public-good solution. Furthermore, attention is given to essentially social goods, as they cannot be commodified without destroying them in their very substance, which will lead to the disruption of the socio-economic fabric they help to stabilise. It can be concluded that the strategy of commodification and the establishment of a market cannot work in all cases. For those cases where it can work in principle, it requires a careful design of institutions and institutional arrangement supporting it. What is more, this arrangement may have to change over time when relative scarcities of the principal factors change; so changes in demography, technology and the resource situation will have to be taken into account. But its institutional foundations were not sufficiently considered by neoclassical theory during its self-perceived heyday in the 1980s.

In the history of economic thought the institutional approach was mostly seen as antagonistic to the price-theory approach. But with the work by mainly four researchers – COASE, WILLIAMSON, OSTROM and NORTH – the foundations were laid to what came to be known as New Institutional Economics (NIE). With this it is not only prices that would guide individuals' decisions, but also institutions as rules of behaviour. So since the mid-1970s a new school of thought evolved. Papers and monographs, conferences, summer schools, and the foundation of an international society supported this. A comprehensive handbook was published by Ménard and Shirley in 2005.

With their varying social scientific backgrounds their methodological approach is not monolithic. Welcome as such interdisciplinarity is, a conceptual grip on research subjects will require more effort than a clear-cut price theory applied to a standard commodity market. In chapter 3 some selected literature from these authors is reviewed with respect to shared concepts but also with respect to differences and extensions they offer. In principle, they all accept neoclassical economics, as it can well explain immediate market exchange under specific economic and legal conditions, i.e. when pure economics is supported by an appropriate institutional arrangement. However, as it is accepted as valid under specific conditions, it should be obvious that it cannot be used as a general blueprint for all economic activities. NIE rather observes and analyses the role of institutions encountered in economics as complements or substitutes to the market mechanism. For this its proponents rely on approaches adopted from their respective methodological backgrounds. Based on this, this thesis puts forward some further conceptual considerations which are then tested in chapter 4 on three research areas that may be suited for teaching, but which also help to clarify open questions on the way NIE can be applied.

With respect to its philosophy of science, NIE calls for strict criteria, including causality and falsifiability. On the other hand, limitations to this are encountered concerning the emergence of institutions, particularly with respect to the interplay of various determinants, their mutual repercussions and reinforcements. In such cases questions may rather be left open or holistic concepts may receive some attention. While methodological individualism for neoclassical economics is the only accepted concept, in NIE sociological concepts of class, strata etc. may find their place. This goes together with the consideration of goods like knowledge, stability, security etc. as – at least – not fully commodifiable resources. Long-term developments will be considered with respect to changes of undercurrents that would be kept exogenous by other research. An analysis of a direct confrontation between unequal economic systems will not only look at price differentials demanding adjustment, but make other socio-economic factors explicit as well.

From the literature constituting NIE it can be derived that the economic process is differentiated by the role played by uncertainties. One of various possible levels of the analysis is thereby intended to cover all immediate market exchange. Neoclassical economics would not consider any further level necessary. It would claim to be able to capture, discount or assess all relevant future aspects of an economic activity. The same is claimed for activities taking place far away. So for neoclassical economics all activities can be captured as or translated into virtually immediate market exchange. In contrast, NIE observes actually existing institutions, taking account of uncertainty and risk. Depending on the time horizon and/or the social level (personal, the public, multigenerational) these institutions will be determined in different ways, and therefore deserve special attention.

Economic uncertainty is one kind of violation of the neoclassical axiom of 'perfect information'. Other violations of this axiom are known from information asymmetries, from the limited cognitive capacities of human beings, etc. For all of these cases, specific institutions may have evolved or may have been designed by respective stakeholders. In an analogous way, institutions corresponding to violations of the rationality axiom will be subject of consideration for NIE. The range of respective institutions corresponding to the violation of these axioms ranges from religious laws all the way to sample contracts for agricultural services, from habitual behaviour to traditional modes of conflict resolution, from constitutionally guaranteed use rights in electronic infrastructure all the way to the public service mission of a national broadcaster etc.

Violations of the convexity axiom will also be a matter of concern for NIE. In this case, it will also be of concern for neoclassical economics, particularly when extended to industrial organisation. So market structures, different forms of competition and corresponding anti-trust measures will primarily be treated in a similar way. NIE will be distinct insofar as neoclassical economics and industrial organisation are oriented on pure efficiency; for industrial organisation this is even more restricted, as it does this very much from the perspective of the firm. NIE, insofar as it is concerned with long-term perspectives and interaction with constitutional and legal developments, will thus evaluate monopolisation in this extended context. Furthermore, NIE may consider the provision and distribution of public or common goods in institutional arrangements other than the market; with this, options to keep external effects internal or internalise external effects will also be discussed in a more complex arrangement than neoclassical economics would do.

The latter aspect is also important with respect to long-term developments of socio-economic systems. In an ideal, fully economised (i.e. perfectly neoclassical) system, institutional arrangements would be designed and changed in accordance with changing relative scarcities, i.e. in accordance with demographic, technological, and resource developments. However, this has hardly ever been observed in history. Instead history is characterised by frictions, revolutions, wars and collapse. So it is the greater or lesser deviations from this ideal and their occasional relief that matter. For NIE this would be an issue not only in a Schumpeterian sense, allowing for more technological or economic innovation, but as possibly driving overall socio-economic developments. Institutions will be shaped not only following relative scarcities, but at least temporarily they will follow interests, possibly imposed by brute force, not by some marginal changes in factor productivity. Based on this, path dependencies and socio-political coalitions may play a major role, so that a calculated equilibrium will not have much meaning as an expected point of convergence. Peaceful and

sustainable development will call for appropriate changes in the articulation of property rights when technology, demography and the general resource situation change.

So in summary of the results in chapters 3 and 4, this thesis explains the rationale of institutions as corresponding to possible violations of neoclassical axioms, whereby the market with its axiom of 'well defined property rights' and the mutually agreed exchange is to be excluded from this, as this is already an institution in itself. (In neoclassical economics it is the only institution that exists.) The need and usefulness of other institutions comes into play for what neoclassical economics calls market failure. Whereas the latter will propose aligning all actual circumstances to its standard arrangement of the ideal market, NIE will offer a large variety of alternative institutional arrangements for different situations. By doing so it takes account not only of cognitive limitations of market participants but also of the limited contribution that science can make to forecasting economic or political developments. Deviations from market equilibria are not just considered as a loss in welfare due to monopoly power or market intervention but also as driving socio-developing developments in one or another direction. Such processes are in themselves complex, as they underlie the repercussions and the influence of socio-political coalitions emerging from essentially unstable situations. Institutions can thereby themselves be conceptualised as public or club goods, so they fit well into general economic thinking. They may themselves be substitutable and grow or erode like other stocks of capital. They are essentially social goods, in that they are generated and take effect with respect to relations between individuals or classes. Depending on the situation in which they are generated, they will show socio-economic bias resulting from this.

So the thesis developed here accepts the axiomatic core of neoclassical economics as just what it is meant to be: not as a truthful characterisation of human beings, not as offering a blueprint for economic organisation, and certainly not as guidance for education (which some textbook authors obviously do not wish to refrain from, thus discrediting the concept as a scientific tool), but as a theoretical device for economic analysis. It will be used where it offers explanatory power. Conversely, the limitations of neoclassical economics can be identified and characterised by reference to the violations of these axioms. For these cases, the role of institutions can be discussed – whether these emerged in an evolutionary way or were consciously designed.

Taking neoclassical axioms as a conceptual reference results from the fact that current teaching of economics and expectations linked to it cannot simply be ignored. To this extent, a pragmatic concession is made. However, it should be clear that a systematic analysis of institutions (as introduced by original or old institutional economics) could also have been taken as starting point for introducing market exchange and marginal efficiency into this system. The overall outcome would be the same.

When this thesis asked whether institutions have been devised humanly or whether they emerged in an evolutionary process, this was done with a view to the role of modernisation and enlightenment. Some selected institutions were evaluated for this. First of all, it became clear that the evolutionary process is not free of charge. For those that fail, it is particularly painful and obviously unfair. Nevertheless, economists often argue that leaving it to such a process might in the end provide the most efficient, otherwise undetected solution. In this sense, the evolutionary process deserves credit for its creativity. But what is increasingly problematic about this is the uncertainty that characterises it. Today, the processes of trial

and error may include the danger of complete global collapse. So the destructive part may eclipse whatever creative moment had been hoped for. For this case, the only option is to consciously design maybe not the most efficient, while unknown, but the most appropriate institutional arrangement. With the democratic nation state, ways have been found to develop institutions consciously and under consideration of how citizens are affected by them. Other ways to do so have also been found. While some principle success can be observed, the capacity of mankind to go for rational solutions may still be questioned.

The controversy between neurologists on the one hand and the sociologists on the other, as was introduced in chapter 2.1, has shed some doubt on human capacity to take complex decisions. Of course, if all five axioms of neoclassical economics were never violated, then human biology, i.e. the immediately perceived personal needs, could decide to take action and no problem would arise from that. But, as has been seen, these axioms are violated, seriously and regularly. Facing the complexities of economics and of the challenge of social organisation, things cannot be left to an evolutionary process. Conscious decision-making will call for an exchange of different views, principally between all people concerned. Self-analysis will be called for, and readiness to develop and accept societal decision-making. This is obviously very much in line with what is discussed in this thesis as the development of institutions, with ethical rules being part of them. Whether the capacity is given will remain an open question here, but if it is given at least in principle, it will be a matter of continued stimulation to develop it to the degree needed. For anything else, knowledge about efficiency enhancement will just serve as instrumental knowledge for a temporarily manipulable but blind process. Ultimately, this leads back to the question whether developments follow a form of material determinism that may only be open to random redirections, or whether humans can indeed influence these developments by their own will. Such a question is not to be answered by a thesis like this. But it should be clear that economics plays its part in it.

While working on this thesis the author once again could not avoid impression that most current newspaper articles or the public debate in general refer explicitly or implicitly to the importance of institutions. World Bank or OECD reports do no longer rank slogans like *'Getting the prices right'* highest. It now seems that the neoclassical notion of economics is still prevalent only in textbooks and at universities. When Ronald COASE was asked in an interview in 1997 how NIE would affect or change conventional economic wisdom, he answered: "In my mind, the New Institutional Economics is economics. It's what economics ought to be." So is proposing to bring institutions into economics a case of carrying coals to Newcastle? From the perspective of COASE and NIE this would quite logically be the case. But with reference to the public debate, the role of institutions, their own limitations and the place they can sensibly take in economic theory and policy, advice will still have to be developed. In the wording of the public debate it would have to be clarified that neither regulation nor deregulation, but the right kind of regulation would serve economic welfare best. With reference to teaching – as this will ultimately substantiate the general public debate – the role of institutions should no longer be consigned to some advanced lectures chosen only by a few major students. Or, if offered, it should not be kept isolated on some heterodox island. As this thesis has made clear, institutions do not play some secondary role in economics. The contrary is true. It is institutions that allow, stabilise, or substitute for price mechanisms and markets. And it is only institutions that allow for shaping social developments. Giving more prominence to the role institutions from the first lecture onwards will give a more complete and substantial insight into economics as a social science.

Literature

- ACEMOGLU, D., JOHNSON, S., ROBINSON, J. A. (2001): The colonial origins of comparative development, An empirical investigation, in: American Economic Review 91, 5, pp. 1369-1401
- ACEMOGLU, D., JOHNSON, S., ROBINSON, J. A. (2005): Institutions as Fundamental Cause of Long-Run Growth, in: Handbook of Economics: Growth, Vol. IA, Elsevier, pp 385-472
- ACEMOGLU, D., ROBINSON, J. A. (2012): Why Nations Fail: The Origins of Power, Prosperity, and Poverty, Crown Business
- ACEMOGLU, D., S., ROBINSON, J. A. (2017): The Emergence of Weak, Despotic and Inclusive States, mimeo
- AKERLOF, G. A. (1970): The Market for „Lemons“: Quality Uncertainty and the Market Mechanism, in: The Quarterly Journal of Economics, Volume 84, Issue 3, (Aug. 1970), 488-500 [[web](#)]
- ALCHIAN, A. A. (1950): Uncertainty, Evolution, and Economic Theory, in: The Journal of Political Economy, Volume 58, Issue 3 (Jun., 1950), 211-221.
- ALCHIAN, A. A., DEMSETZ, H. (1972): Uncertainty, Evolution, and Economic Theory, Production, Information Costs, and Economic Organisation, in: American Economic Review 62: 777–795.
- ARROW, K. J. (1950): A Difficulty in the Concept of Social Welfare, in: The Journal of Political Economy, Vol. 58, No. 4, pp. 328-346
- ARROW, K. J., DEBREU, G. (1954): Existence of an Equilibrium for a Competitive Economy, in: Econometrica, Vol. 22, No. 3, pp. 265-290
- BANERJEE, A., DUFLO, E. (2011): Poor Economics – A Radical Rethinking of the Way to Fight Global Poverty, PublicAffairs, New York
- BARJOLLE, D., CHAPPUIS, J.-M. (s. a.), Transaction costs and artisanal food products [[web](#)]
- BLAUG, M. (1985), Economic Theory in Retrospect, Press Syndicate of the University of Cambridge, 4th edition
- BMLFUW (various years), Grüner Bericht – Bericht über die Situation der österreichischen Land- und Forstwirtschaft
- BOETTKE, P. J., COYNE, C. J. (2005): Methodological individualism, spontaneous order and the research program of the Workshop in Political Theory and Policy Analysis, in: Journal of Economic Behavior & Organization, Vol. 57 (2005) 145–158
- BROMLEY, D. W. (1989), Economic Interests and Institutions – The Conceptual Foundations of Public Policy, Oxford, Blackwell
- BROUSSEAU, E., GLACHANT, J.-M. (2008), (eds.): New Institutional Economics – A Guidebook, Cambridge University Press, New York
- BUCHANAN, J. M., (1965): An Economic Theory of Clubs, in: Econometrica, Vol. 32, No. 125, pp 1-14

- BUCHANAN, J. M., MUSGRAVE, R. (1999): Public Finance and Public Choice: Two Contrasting Visions of the State, MIT Press [[web](#)]
- CARLTON, D. W., PERLOFF, J. M. (2015): Modern Industrial Organisation, Pearson, forth, global edition
- CHADWICK, E. (1859): Results of Different Principles of Legislation and Administration in Europe; of Competition for the Field, as compared with the Competition within the Field of Service, in: Journal of the Royal Statistical Society, pp. 381-420. [[web](#)]
- COASE, R. H. (1937): The Nature of the Firm, in: *Economica*, New Series, Volume 4, Issue 16 (Nov. 1937), p. 386-405
- COASE, R. H. (1960): The Problem of Social Cost, in: *The Journal of Law and Economics*, Vol. III , p. 1 – 44
- COASE, R. H. (1997): Interview with Ferrarni, T., Nye, J. Bullard, A., Eyzaguirre at the Inaugural Conference of the ISNIE, in: Newsletter of the International Society for New Institutional Economics, Volume 2, Number 1 (printed spring 1999) [[web](#)]
- COASE, R. H. (2005): The Institutional Structure of Production, in: Ménard, C., SHIRLY, M. (2005, eds.), *Handbook of New Institutional Economics*, pp. 31- 39
- COASE, R.H. (1984): The New Institutional Economics, *Journal of Institutional and Theoretical Economics*, 140, 229–231.
- COMMONS, J. R. (1931): Institutional Economics, *American Economic Review*, vol. 21 (1931), pp.648-657 [[web](#)]
- CORNES, R., SANDLER, T. (1996): *Theory of Externalities, Public Goods and Club Goods*, 2. Edition, Cambridge University Press
- DALY, H. E. (2008): A Steady-State Economy, Paper presented to the Sustainable Development Commission, UK, 24 April 2008.
- DAN, S., POLLITT C. (2014), NPM Can Work: An optimistic review of the impact of New Public Management reforms in central and eastern Europe Positive on CEE
- DEBREU, G. (1959), *Theory of Value, An Axiomatic Analysis Of Economic Equilibrium*, Yale University Press, New Haven and London
- DEMSETZ, H. (1967): Toward a Theory of Property Rights, in: *The American Economic Review*, Vol. 57, No. 2, Papers and Proceedings of the Seventy-ninth Annual Meeting of the American Economic Association (May, 1967), pp. 347-359 [[web](#)]
- DIAMOND, J. (1997): *Guns, Germs, and Steel – The fates of human societies*, W.W. Norton & Company
- DIAMOND, J. (2005): *Collapse – How Societies Choose to Fail or Succeed*, Penguin Books
- DIEFENBACHER, T. (2009): New Public Management in public sector organisation: the dark side of managerialistic ‘enlightment’, in: *Public Administration*, 87(4), p. 892-909 [[web](#)]
- DIKÖTTER, F. (2010): *Mao's Great Famine: The History of China's Most Devastating Catastrophe, 1958–62*
- DIMMELMEYER, A. and HEUSSNER, F. (2016): Institutional Economics, in: *Exploring Economics* [[web](#)]

- DNES, A. W. (1995): Franchising and Privatisation, in: THE WORLD BANK, Private sector, Note No. 40
- EUROPEAN COMMISSION (2017), CAP Explained – Direct Payments for Farmers 2015-2020 [[web](#)], with link to more detailed data [[web](#)]
- EWALT, J.A.G. (2001): Theories of Governance and New Public Management: Links to Understanding Welfare Policy Implementation.
- FRANGAKIS, M. (2009): Privatisation trajectories in Europe: a cross-sector view, in: pp 208-218, in: FRANGAKIS, M. et al. (eds.), Privatisation against the European Social Model, Palgrave Macmillan
- FREY, B.S. (1990): Ökonomie ist Sozialwissenschaft – Die Anwendung der Ökonomie auf neue Gebiete, Verlag Franz Vahlen
- FRIEDMAN, M. (1953): The Methodology of Positive Economics, in: Essays in Positive Economics, pp. 3-43, University of Chicago Press
- FUKUYAMA, F. (1989): The End of History, in: The National Interest (16), pp. 3-18
- FURUBOTN, E. G., RICHTER, R. (2005): The Contribution of the New Institutional Economics, 2nd edition, The University of Michigan Press [[web](#)]
- FURUBOTN, E. G., RICHTER, R. (2010): The New Institutional Economics, An Introduction, in: E. G. Furubotn and R. Richter (eds.), The New Institutional Economics of Markets, Cheltenham, UK: Edward Elgar [[web](#)]
- GATTERBAUER, H., HOLZER, G., WELAN, M. (1993), Agrarpolitik und Agrarrecht in Österreich, Diskussionspapier Nr. 21-R-93, Institut für Wirtschaft, Politik und Recht – Universität für Bodenkultur Wien
- GEORGESCU-ROEGEN, N. (1971): The Entropy Law and the Economic Process, Cambridge, Massachusetts, Harvard University Press
- GERVAIS, D.J., (2012), Traditional Innovation and the Ongoing Debate on the Protection of Geographical Indications, in: Peter DRAHOS, P., FRANKEL, S., Intellectual Property and Indigenous Innovation, Australia National University Press
- GERVAIS, D.J., (2012): Traditional Innovation and the Ongoing Debate on the Protection of Geographical Indications, in: Peter Drahos, P., Frankel, S., Intellectual Property and Indigenous Innovation, Australia National University Press [[web](#)]
- GHOSH, A. (2013): Indian Growth during the Nehru Era, in: The Indian Economist, February 13, 14
- GIOVANNUCCI, D., JOSLING, T., KERR, W., O'CONNOR, B., Yeung, M.T. (2009). Guide to Geographical Indications – Linking Products and Their Origins, International Trade Centre (ITC), Geneva [[web](#)]
- GREIF, A. (1993): Contract Enforceability and Economic Institutions in early Trade: The Maghribi Traders' Coalition, in: The American Economic Review, in Vol. 83, No. 3, pp. 525-548

- GREIF, A. (1994): Cultural Beliefs and the organisation of Society: A Historical and Theoretical Reflection of Collectivist and Individualist Societies, in: The Journal of Political Economy, Vol. 102, issue 5, pp. 912-950
- GREIF, A., LAITIN, D.D. (2004): A Theory Of Endogenous Institutional Change, in: American Political Science Review, Vol. 98, No. 4, pp. 633-652
- HABERMAS, J. (2016 [first 1973]), Erkenntnis und Interesse, Suhrkamp, Frankfurt
- HABERMAS, J. (2009), Freiheit und Determinismus, in: ders., Zwischen Naturalismus und Religion, Suhrkamp, Frankfurt
- HANISCH, E. (2002), Die Politik und die Landwirtschaft, in: BRUCKMÜLLER, E. HANISCH, E, SANDGRUBER, R., WEIGL, N. (2002), Geschichte der Land- und Land und Forstwirtschaft im 20. Jahrhundert, Ueberreuter, Wien
- HARDIN, G. (1968): The Tragedy of the Commons, Science 162 (1968), pp. 1243-1248 [\[web\]](#)
- HESS, P. N. (2013): Economic Growth and Sustainable Development, Routledge
- HICKS, J.R. (1937): Mr. Keynes and the "Classics"; a suggested interpretation, in: Econometrica, vol. 5, pp. 147-159 [\[web\]](#)
- HODGSON, G. M. (1988): Economics and Institutions – A Manifesto for a Modern Institutional Economic, Polity Press, Cambridge
- HODGSON, G. M. (2007): Evolutionary and Institutional Economics as the New Mainstream?, in: Evol. Inst. Econ. Rev. 4(1): pp. 7-25
- HORKHEIMER, M. (1937), Der neueste Angriff auf die Metaphysik, in: Zeitschrift für Sozialforschung, Vol. 6, No. 1, pp. 4-53
- HORKHEIMER, M., ADORNO, T. (1994 [first 1944]), Dialektik der Aufklärung, S. Fischer, Frankfurt
- INTERNATIONAL TRADE CENTRE (2009): Guide to Geographical Indications – linking products and their origins, Geneva [\[web\]](#)
- JOSLING, T. (2006a): What's in a Name? The economics, law and politics of Geographical Indications for foods and beverages, IIS Discussion Paper No. 109
- JOSLING, T. (2006b): The War on Terroir – Geographical Indications as a Transatlantic Trade conflict, in: Journal of Agricultural Economics, Vol. 57, No. 3, 337-363
- JOSLING, T.E., TANGERMANN, S. (1996): Agriculture in the GATT, Macmillan, Basingstoke
- KATHOLISCHE AKADEMIE BAYERN (2004, ed.), Stellungnahme von Professor Dr. Jürgen Habermas, Stellungnahmen von Josef Kardinal Ratzinger [\[web\]](#)
- KEYNES, J.M. (1936): The General Theory of Employment, Interest and Money, Mac Millan, London
- KLAIBER, A., SALHOFER, K., THOMPSON, S. (2015), Capitalization of the SPS into Agricultural Land Rental Prices under Harmonization of Payments, in: International Association of Agricultural Economists, 2015 Conference [\[web\]](#)

- KNIEPERT, M. (2008), Zur Rückrechnung der Land- und Forstwirtschaftlichen Gesamtrechnung Österreichs 1964-1989 nach dem ESVG95. Jubiläumsfonds der österreichischen Nationalbank, Wien [\[web\]](#)
- LANGTHALER, E. (o.Jg.), „Entschuldung“ und „Aufbau“ der österreichischen Landwirtschaft: Alte Antworten, neue Fragen, Aufsatz entstanden im Laufe des APART-Projekts zwischen agrarischer Lebenswelt und NS-System 1938–1945, (2005-2008)
- LEWIS, W. A. (1954): Economic Development with Unlimited Supplies of Labour, in: The Manchester School. 22: pp. 139–91
- LEWIS, W. A. (1979): The Slowing Down of the Engine of Growth, Lecture to the memory of Alfred Nobel
- MALTHUS, T. R. (1798): An Essay on the Principle of Population, London [\[web\]](#)
- MANDEL, E. (1978), Marxistische Wirtschaftstheorie, Suhrkamp, 5. Auflage
- MANKIW, N. G., TAYLOR M. P. (2017a): Microeconomics, Cengage learning, 4. edition
- MANKIW, N. G., TAYLOR M. P. (2017b): Macroeconomics, Cengage learning, 4. edition
- MARSHALL, A. (1920, [first 1892]), Principles of Economics, Macmillan London [\[web\]](#)
- MARX, K. (1982, [first 1867]), Das Kapital, MEW, Bd. 23, Berlin, Karl Dietz-Verlag
- MATTHEW, A. (2014), Geographical indications (GIs) in the US-EU TTIP negotiations [\[web\]](#)
- MATTHEW, A. (2016), What endgame for GIs in the TTIP negotiations? [\[web\]](#)
- MATTHEW, A. (2017), Why further reform?, Rise Foundation [\[web\]](#)
- MEADOWS, D. H., MEADOWS, D. L., RANDERS, J., BEHRENS III, W. W. (1972): The Limits to Growth: a report for the Club of Rome's project on the predicament of mankind, Universe Books
- MEIXNER, W., SIEGEL, G. (2003), Bergbauern im Tourismusland – Agrargeschichte Tirols im 20. Jahrhundert, in: BRUCKMÜLLER, E. HANISCH, E, SANDGRUBER, R., Geschichte der Land- und Land und Forstwirtschaft im 20. Jahrhundert, Ueberreuter, Wien
- MÉNARD, D. and SHIRLEY, M.M. (2005, eds.): Handbook of New Institutional Economics, Springer
- MÉNARD, D. and SHIRLEY, M.M. (2011): The Contribution of Douglass North to New Institutional Economics, in: Economic Institutions, Rights, Growth, and Sustainability: The Legacy of Douglass North. [\[web\]](#)
- MILL, J.S. (1860): On Liberty, London
- MILL, J.S. (1863): Utilitarianism, London
- MISES, L. v. (1944): Bureaucracy, New Haven, Yale University Press [\[web\]](#)
- MOORE, B. (1966): Social Origins of Dictatorship and Democracy - Lord and Peasant in the Making of the Modern World, Boston
- MOULINES, C.U. (2008): Die Entwicklung der modernen Wissenschaftstheorie (1890-2010) – Eine historische Einführung, Lit-Verlag, Hamburg

- MURREL, P. (2005): Institutions and Firms in Transition Economies, in: MÉNARD, D. and SHIRLEY, M.M. (2005, eds.): Handbook of New Institutional Economics, Springer
- MUSGRAVE, R. A. and MUSGRAVE, P.B. (1983): Public Finance in Theory and Practice, MacGraw-Hill
- NORTH, C. D. (1990): Institutions, Institutional Change and Economic Performance, Cambridge University Press
- NORTH, C. D. (1990): Institutions, Institutional Change and Economic Performance, Cambridge University Press
- NORTH, C. D. (2005): Institutions and the Performance of Economies over Time. in: Handbook of New Institutional Economics, Springer, p. 21-30
- NORTH, C. D., THOMAS, R. P. (1973): The Rise of the Western World, Cambridge University Press [[web](#)]
- NORTH, C. D., WALLIS, J. J., WEINGAST, B. R. (2009): Violence and the Rise of Open-Access Orders, in: Journal of Democracy, Vol. 20 [cf. also [web](#)]
- NWANERI, V. C. (1970): Equity in Cost-Benefit Analysis – A Case Study of the Third London Airport, in: Journal of Transport Economics and Policy, Vol. 4, No. 3 (Sep., 1970), pp. 235-254
- OECD (1994): Agricultural Policy Reform: New Approaches – The role of direct payments Paris
- OECD (2000): Trust in Government – Ethics Measures in OECD Countries, Paris [[web](#)]
- OECD (2002): Restructuring Public Utilities for Competition, Policy Brief, February 2002
- OECD (2003): Privatising State-Owned Enterprises – An Overview of Policies and Practices in OECD Countries
- OECD (2009): Privatisation in the 21st Century: Recent Experiences of OECD Countries – Report on Good Practices
- OECD (2011): Tuning-AHELO Conceptual Framework of Expected and Desired Learning Outcomes in Economics, OECD Education Working Papers, No. 59, OECD Publishing, Paris.
- OECD (2017), Agricultural Policy Monitoring and Evaluation 2017, Paris [[web](#)]
- OLSON, M. (1965): The Logic of Collective Action, Harvard University Press, 4th edition
- OSTROM, E. (2005a), Doing Institutional Analysis: Digging Deeper than Markets and Hierarchies, in: MÉNARD, C., SHIRLEY, M. (2005, eds.), Handbook of New Institutional Economics, Springer, pp. 819-848
- OSTROM, E. (2005b): Understanding Institutional Diversity, Princeton University Press
- POLANYI, K. (1978 [first 1944]), The Great Transformation – politische und ökonomische Ursprünge von Gesellschaften und Wirtschaftssystemen, Suhrkamp
- POLLITT, C., v. THIEL, S., HOMBURG, V. (2007): The new public management in Europe, in: Management Online Review
- PRICE, C. M. (1977): Welfare Economics in Theory and Practice, Macmillan

- RAGHAVAN, C. (1990): Re-Colonisation GATT, The Uruguay Round and the Third World, Third World Networks, Penang
- RANGNEKAR, D. (2004), The Socio-Economics of Geographical Indications - A Review of Empirical Evidence from Europe, UNCTAD-ICTSD Project on IPRs and Sustainable Development, Issue Paper No. 8, Geneva [\[web\]](#)
- RODRIK, D., SUBRAMANIAN, A., TREBBL, F. [RST] (2002): Institutions Rule: The Primacy of Institutions over Geography and Integration in Economic Development, NBER Working Paper Series No. 9305 [\[web\]](#) [2004 also in the Journal of Economic Growth, 9 (2), 131-165]
- RODRIK, D. (2011): The Globalisation Paradox – Why global markets, states, and democracy can't coexist, W.W. Norton and Company
- ROMER, P.M. (1987): Growth Based on Increasing Returns to Scale Due to Specialisation, in: The American Economic Review, Vol. 77, No. 2, Papers and Proceedings of the Ninety-Ninth Annual Meeting of the American Economic Association, pp. 56-62
- ROMER, P.M. (2009): Why the world needs charter cities, TED-Talks, video and transcript [\[web\]](#)
- ROTH, G. (2005), Gehirn, Gründe und Ursachen, in: Deutsche Zeitschrift für Philosophie 53, 691-705
- RUTHERORD, M. (1996): Institutions in Economics – The Old and New Institutionalism, Cambridge University Press
- SAMUELS, W. J. (1995), The Present State of Institutional Economics." Cambridge Journal of Economics 19, Nno. 4, pp. 569–590
- SAMUELSON, P. A. (1938), A Pure Theory of Consumers Behaviour, in Economica NS, Nr. 5, pp. 61-71
- SAMUELSON, P. A. (1947), Foundations of Economic Analysis, Harvard University Press.
- SANDGRUBER, R. (2002), Die Landwirtschaft in der Wirtschaft, in: BRUCKMÜLLER, E. HANISCH, E, SANDGRUBER, R., WEIGL, N. (2002), Geschichte der Land- und Land und Forstwirtschaft im 20. Jahrhundert, Ueberreuter, Wien
- SCHNEIDER, F., HOFREITHER M.F. (1990), Privatisierung und Deregulierung öffentlicher Unternehmen in westeuropäischen Ländern, Manz, Wien
- SCHNEIDER, M., (1994), Chancen und Risiken der Landwirtschaft im EU-Binnenmarkt, in: Wifo-Monatsberichte 1994, pp. 46-61
- SCHNEIDER, M., (1995), Bilanz der ersten Erfahrungen mit der Gemeinsamen Agrarpolitik, in: Wifo-Monatsberichte 5/95, pp. 333-338
- SEITZ, K., WINDFUHR, M. (1989): Landwirtschaft und Welthandelsordnung - Handbuch zu den Agrarverhandlungen der Uruguay-Runde im GATT, Verlag Dienste in Übersee
- SENTI, R. (1995): Major Topics of the Uruguay Round, in: BREUSS, F. (ed.), The World Economy after the Uruguay Round, Schriftenreihe des Forschungsinstituts für Europafragen, Wien, Service-Fachverlag

- SENTI, R. (1986): GATT – Allgemeines Zoll- und Handelsabkommen als System der Welthandelsordnung, Schulthess Polygraph Verlag, Zürich
- SHIRLEY, M. M. (2005), Institutions and Development, in: MÉNARD, D. and SHIRLEY, M.M. (2005, eds.): Handbook of New Institutional Economics, Springer
- SIMON, H. A. (1978): Rational Decision-Making in Business Organisations, Nobel Memorial Lecture.
- SINGER, W. (2004a), Selbsterfahrung und neurologische Fremdbeschreibung, in: Deutsche Zeitschrift für Philosophie 52, 8, S. 235-256;
- SINGER, W. (2004b), Hirnforschung – die neue Leitwissenschaft des Jahrhunderts, in: Frankfurter Allgemeine Zeitung, Nr. 6 vom 8. Januar 2004, S. 33
- STATISTIK AUSTRIA (2017), Landwirtschaftliche Gesamtrechnung Österreichergergebnisse, Ergebnisse 2016, Schnellbericht 1.36, Wien
- STIGLER, G. J. (1961): The Economics of Information, in: The Journal for Political Economy 69(3), pp. 213-225
- STIGLER, G.J., BECKER, G., (1977): De gustibus non est disputandum, in: The American Economic Review. American Economic Association. 67 (2), pp. 76–90
- STIGLITZ, J. E. (1988): Information and the Change in the Paradigm in Economics, in: The American Economic Review, Vol. 92, No. 3, (Jun., 2002), pp. 460-501
- STIGLITZ, J. E. (1988): On the Market for Principles of Economics Textbooks: Innovation and Product Differentiation, in: Journal of Economic Education, Spring 1988, 171-177 <http://academiccommons.columbia.edu/catalog/ac:159778>
- STIGLITZ, J. E. (2002): Information and the Change in the Paradigm in Economics, in: The American Economic Review, Vol. 92, No. 3, (Jun., 2002), pp. 460-501 [[text](#), [lecture and video](#)]
- TANGERMANN (2014:38ff): Direktzahlungen: Ein bleibender Bestandteil der EU-Agrarpolitik?, in: Schmidt, E. und Vogel, S., The Common Agricultural Policy in the 21st Century, Wien, Facultas, pp. 19-42
- TANGERMANN, S. (2014): Direktzahlungen: Ein bleibender Bestandteil der EU-Agrarpolitik?, in: SCHMIDT, E., VOGEL, S., The Common Agricultural Policy in the 21st Century, facultas, Wien
- TAUBMANN, A. (2012): Indigenous Innovation: New Dialogues, New Pathways, in: DRAHOS, P., FRANKEL, S., Intellectual Property and Indigenous Innovation, Australia National University Press [[web](#)]
- TODARO, M. P., SMITH, S. C. (2011): Economic Development, Pearson, 11. edition
- TUGENDHAT, E. (2007), Willensfreiheit und Determinismus, in: ders., Anthropologie statt Metaphysik, C.H. Beck. [[web](#)]
- USPTO - UNITED STATES PATENT AND TRADEMARK OFFICE (n.d.), Geographical Indication Protection in the United States [[web](#)]

- VAN TONGEREN, F. (2008), Agricultural Policy Design and Implementation: A Synthesis, OECD Food, Agriculture and Fisheries Working Papers, No. 7, OECD Publishing. [\[web\]](#) [\[web\]](#) [\[web\]](#)
- VATN, A. (1995), Institutions and the Environment, Edward Elgar, Cheltenham, UK
- Vries, J. de (2010), Is New Public Management Really Dead? In: OECD Journal on Budgeting, Vol. 2010/1, pp. 1-5
- WALLIS, J.J., NORTH, D.C. (1986): Measuring the Transaction Sector in the American Economy, 1870-1970, in: ENGERMAN, S.L., GALLMAN, R.E. (eds., 1986), Long-Term Factors in American Economic Growth, University of Chicago Press, pp. 95 – 162 [\[web\]](#)
- WEBER, M. (1922): Wirtschaft und Gesellschaft, Tübingen, J.C.B. Mohr (Paul Siebeck) [\[web\]](#)
- WEIL, D. N. (2013): Economic Growth, Pearson, 3. Edition
- WILLIAMSON, O.E. (1976): Franchise Bidding for Natural Monopolies - In General and with Respect to CATV, in: The Bell Journal of Vol. 7, No. 1 (Spring, 1976), pp. 73-104
- WILLIAMSON, O.E. (1996): The Mechanisms of Governance, Oxford University Press
- WILLIAMSON, O.E. (2000): The New Institutional Economics: Taking Stock, Looking Ahead, in: Journal of Economic Literature Vol. XXXVIII (September 2000) pp. 595–613
- WILLIAMSON, O.E. (2007): An Interview with Oliver Williamson. Interviewers were Geoffrey Hodgson and David Gindis, Journal of Institutional Economics, 3: 3, 373-386 [\[web\]](#)
- WORLD BANK (2007): Getting prices right through policy reforms in developing countries. Agriculture for Development policy brief. Washington, DC: World Bank.
- WORLD INTELLECTUAL PROPERTY ORGANISATION (WIPO) (n.d.), Geographical Indications – An introduction, WIPO Publication No. 952E, Geneva [\[web\]](#)
- WORLD TRADE ORGANISATION (WTO), (n.d.), The TRIPS Agreement – Overview [\[web\]](#)
- ZUKIFLI, A. (2015): The Growth of Islamic Finance Sector through New Institutional Economics [\[web\]](#)

Internet, Databanks

Collins Free Online Dictionary

<https://www.collinsdictionary.com/>

Economics Learning Standards

<http://www.economicslearningstandards.com/>

EUR-Lex – Access to European Union Law

<http://eur-lex.europa.eu/homepage.html?locale=en>

Exploring Economics

<https://www.exploring-economics.com/de/>

Global Brand Database (at WIPO)

<http://www.wipo.int/branddb/en/>

International Franchising Association

<http://www.franchise.org>

International Student Initiative for Pluralism in Economics – ISIPE

<http://www.isipe.net/>

Merriam-Webster

<https://www.merriam-webster.com/>

Netzwerk Plurale Ökonomik e.V.

<http://www.plurale-oekonomik.de/home/>

Online Ethymology Dictionary

<http://www.etymonline.com/index.php?term=franchise>

Society for Institutional & Organisational Economics

<https://www.sioe.org/>

The Concise Encyclopedia of Economics

<http://www.econlib.org/index.html>

List of figures

Figure 1: Decision tree for an appropriate attribution of goods to categories, following compatibility with neoclassical axioms.....	30
Figure 2: Economics of Institutions	41
Figure 3: On the „deep“ determinants of income	63
Figure 4: The process of shaping political and economic institutions	65

List of tables

Table 1: Structural change and price developments in food and agriculture in Austria	78
--	----

List of abbreviations

AWU	Annual Work Units
AOP	Appellation d'Origine Protégée
AOP	Appellation d'Origine Contrôlée
CAP	Common Agricultural Policy
CGE	Computable General Equilibrium
CPR	Common Pool Resource
EAA	Economic Accounts of Agriculture
EU	European Union
GATT	General Agreement on Tariffs and Trade
GDP	Gross Domestic Product
GET	General Equilibrium Theory
IAD	Institutional Analysis and Development Framework
IMF	International Monetary Fund
IP	Intellectual Property
ISNIE	International Society of New Institutional Economics
JOIE	Journal of Institutional Economics
JITE	Journal of Institutional and Theoretical Economics (formerly Zeitschrift für die gesamte Staatswissenschaft)
NIE	New Institutional Economics
NPM	New Public Management
OECD	Organisation of Economic Cooperation and Development
PGI	Protected Geographical Indication
PDO	Protected Designation of Origin
SIOE	Society of Institutional and Organisational Economics (formerly ISNIE)
TRIPS	Trade Related Intellectual Property Rights
TSG	Traditional Specialities Guaranteed
US	United States of America
USD	US Dollar
WW I	World War I
WW II	World War II
WB	World Bank
WIPO	World Intellectual Property Organisation
WTO	World Trade organisation

Curriculum Vitae

Name	Martin Kniepert
Birthday	7 February 1959
Birthplace	Karlsruhe
Country	Germany
Nationality	German
Family status	married
University	Universität für Bodenkultur Wien
education	Economist
Professional career	2011 - present Senior Lecturer (BOKU) 2014 - 2016 Expert for the development of agricultural statistical systems in Kosovo (TAIEX) 1999 - 2014 Project partner of Statistics Austria concerned with the implementation, development and quality assurance of the Economic Accounts of Agriculture. 1998 - 2002 Temporary consultant to the OECD 1994 - 2011 Research Associate at the Institut für Wirtschaft, Politik und Recht der Universität für Bodenkultur Wien (since 2005 Institute for Sustainable Economic Development) 1993 - 1994 Research assistant at the Institut für Wirtschaft, Politik und Recht der Universität für Bodenkultur Wien 1989 - 1992 Staff member of the Verein zur Förderung entwicklungspädagogischer Zusammenarbeit, Hamburg 1989 - After studies at Universität Freiburg/Brsg./Germany, Sussex University/England and Universität Hamburg/Germany finishing as Economist (Diplom Volkswirt)

Vienna, August 2017

BEREITS ERSCHIENENE DISKUSSIONSPAPIERE INWE

- DP-01-2004 Alison BURRELL: Social science for the life science teaching programmes
- DP-02-2004 Jože MENCINGER: Can university survive the Bologna Process?
- DP-03-2004 Roland NORER: Die Kompetenzverteilung auf dem Gebiet des Agrarrechts
- DP-04-2004 Leopold KIRNER, Stefan VOGEL und Walter SCHNEEBERGER: Geplantes und tatsächliches Verhalten von Biobauern und Biobäuerinnen in Österreich - eine Analyse von Befragungsergebnissen
- DP-05-2004 Thomas GLAUBEN, Hendrik TIETJE and Stefan VOGEL: Farm succession patterns in Northern Germany and Austria - a survey comparison
- DP-06-2004 Erwin SCHMID, Franz SINABELL: Implications of the CAP Reform 2003 for Rural Development in Austria
- DP-07-2004 Manuela LARCHER: Die Anwendung der Interpretativen Methodologie in der Agrarsoziologie
- DP-08-2004 Erwin SCHMID, Franz SINABELL: Multifunctionality of Agriculture: Political Concepts, Analytical Challenges and an Empirical Case Study
- DP-09-2004 Erwin SCHMID: Das Betriebsoptimierungssystem – FAMOS (FARm Optimization System)
- DP-10-2005 Erwin SCHMID, Franz SINABELL: Using the Positive Mathematical Programming Method to Calibrate Linear Programming Models
- DP-11-2005 Manfred WELAN: Die Heimkehr Österreichs - Eine Erinnerung
- DP-12-2005 Elisabeth GOTSCHI, Melanie ZACH: Soziale Innovationen innerhalb und außerhalb der Logik von Projekten zur ländlichen Entwicklung. Analyse zweier Initiativen im Distrikt Búzi, Mosambik
- DP-13-2006 Erwin SCHMID, Markus F. HOFREITHER, Franz SINABELL: Impacts of CAP Instruments on the Distribution of Farm Incomes - Results for Austria
- DP-14-2006 Franz WEISS: Bestimmungsgründe für die Aufgabe/Weiterführung landwirtschaftlicher Betriebe in Österreich
- DP-15-2006 Manfred WELAN: Wissenschaft und Politik als Berufe – Christian Brünner zum 65. Geburtstag
- DP-16-2006 Ulrich MORAWETZ: Bayesian modelling of panel data with individual effects applied to simulated data
- DP-17-2006 Erwin SCHMID, Franz SINABELL: Alternative Implementations of the Single Farm Payment - Distributional Consequences for Austria
- DP-18-2006 Franz WEISS: Ursachen für den Erwerbsartenwechsel in landwirtschaftlichen Betrieben Österreichs
- DP-19-2006 Erwin SCHMID, Franz SINABELL, Markus F. HOFREITHER: Direct payments of the CAP – distribution across farm holdings in the EU and effects on farm household incomes in Austria
- DP-20-2007 Manfred WELAN: Unwissenheit als Grund von Freiheit und Toleranz
- DP-21-2007 Manfred WELAN: Bernhard Moser, Regierungsbildung 2006/2007
- DP-22-2007 Manfred WELAN: Der Prozess Jesu und Hans Kelsen
- DP-23-2007 Markus F. HOFREITHER: The "Treaties of Rome" and the development of the Common Agricultural Policy
- DP-24-2007 Oleg KUCHER: Ukrainian Agriculture and Agri-Environmental Concern
- DP-25-2007 Stefan VOGEL, Oswin MAURER, Hans Karl WYTRZENS, Manuela LARCHER: Hofnachfolge und Einstellung zu Aufgaben multifunktionaler Landwirtschaft bei Südtiroler Bergbauern – Analyse von Befragungsergebnissen
- DP-26-2007 Elisabeth GOTSCHI: The "Wrong" Gender? Distribution of Social Capital in Groups of Smallholder Farmers in Búzi District, Mozambique
- DP-27-2007 Elisabeth GOTSCHI, Stefan VOGEL, Thomas LINDENTHAL: High school students' attitudes and behaviour towards organic products: survey results from Vienna
- DP-28-2007 Manuela LARCHER, Stefan VOGEL, Roswitha WEISSENSTEINER: Einstellung und Verhalten von Biobäuerinnen und Biobauern im Wandel der Zeit - Ergebnisse einer qualitativen Längsschnittuntersuchung
- DP-29-2007 Manfred WELAN: Der Österreich-Konvent – eine konstruktiv-kritische Zwischenbilanz
- DP-30-2007 Markus F. HOFREITHER: EU-Haushaltsreform und Agrarbudget - nationale Kofinanzierung als Lösungsansatz?
- DP-31-2007 Stefan VOGEL, Oswin MAURER, Hans Karl WYTRZENS, Manuela LARCHER: Exploring Attitudes Towards Multi-Functional Agriculture: The Case of Mountain Farming in South Tyrol
- DP-32-2007 Markus F. HOFREITHER, Stefan VOGEL: Universitätsorganisation und die intrinsische Motivation zu wissenschaftlicher Arbeit
- DP-33-2007 Franz WEISS: Modellierung landwirtschaftlichen Strukturwandels in Österreich: Vergleich einer Modellprognose mit den Ergebnissen der Strukturhebungen (1999-2005)
- DP-34-2007 Ambika PAUDEL, Stefan VOGEL: Community Forestry Governance in Nepal: A Case Study of the Role of Service Providers in a Community Forest Users Group.
- DP-35-2007 Karmen ERJAVEC, Emil ERJAVEC: Communication Strategies of EU Reporting: The Case of Adopting the European Union New Financial Perspective in Slovenia.
- DP-36-2008 Manfred WELAN: Kontinuität und Wandel der Zweiten Republik
- DP-37-2008 Manuela LARCHER, Stefan VOGEL: Haushaltsstrategien biologisch wirtschaftender Familienbetriebe in Österreich – Ergebnisse einer qualitativen Längsschnittuntersuchung
- DP-38-2008 Martin KNIPERT: Perspektiven für die agrarische Förderpolitik in Oberösterreich bis 2020 – Neueinschätzung wegen Preissteigerungen erforderlich?
- DP-39-2008 Theresia OEDL-WIESER: Rural Gender Studies in Austria – State of the Art and Future Strategies
- DP-40-2008 Christine HEUMESSER: Designing of research coalitions in promoting GEOSS. A brief overview of the literature
- DP-41-2009 Manfred WELAN: Entwicklungsmöglichkeiten des Regierungssystems
- DP-42-2009 Veronika ASAMER, Michael BRAITO, Klara BREITWIESER, Barbara ENENGEL, Rainer SILBER, Hans Karl WYTRZENS: Abschätzung der Wahrscheinlichkeit einer Bewirtschaftungsaufgabe landwirtschaftlicher Parzellen mittels GIS-gestützter Modellierung (PROBAT)
- DP-43-2009 Johannes SCHMIDT, Sylvain LEDUC, Erik DOTZAUER, Georg KINDERMANN, Erwin SCHMID: Using Monte Carlo Simulation to Account for Uncertainties in the Spatial Explicit Modeling of Biomass Fired Combined Heat and Power Potentials in Austria
- DP-44-2009 Manfred WELAN: Österreich und die Haydnhymne - Politische und kulturhistorische Betrachtungen
- DP-45-2009 Martin SCHÖNHART, Erwin SCHMID, Uwe A. SCHNEIDER: CropRota – A Model to Generate Optimal Crop Rotations from Observed Land Use
- DP-46-2010 Manuela LARCHER: Zusammenfassende Inhaltsanalyse nach Mayring – Überlegungen zu einer QDA-Software unterstützten Anwendung
- DP-47-2010 Sonja BURTSCHER, Management and Leadership in Community Gardens: Two Initiatives in Greater Christchurch, New Zealand
- DP-48-2010 Franziska STRAUSS, Herbert FORMAYER, Veronika ASAMER, Erwin SCHMID: Climate change data for Austria and the period 2008-2040 with one day and km2 resolution
- DP-49-2010 Katharina WICK, Christine HEUMESSER, Erwin SCHMID: Nitrate Contamination of Groundwater in Austria: Determinants and Indicators
- DP-50-2010 Markus HOFREITHER, "Progressive Kofinanzierung" und GAP-Reform 2013
- DP-51-2011 Bernhard STÜRMER, Johannes SCHMIDT, Erwin SCHMID, Franz SINABELL: A modeling framework for the analysis of biomass production in a land constrained economy – the example of Austria

- DP-52-2011 Erwin SCHMID, Manuela LARCHER, Martin SCHÖNHART, Caroline STIGLBAUER: Ende der Milchquote – Perspektiven und Ziele österreichischer Molkeereien und MilchproduzentInnen
- DP-53-2012 Manuela LARCHER, Anja MATSCHER, Stefan VOGEL: (Re)Konstruktion von Selbstkonzepten am Beispiel Südtiroler Bäuerinnen – eine methodische Betrachtung
- DP-54-2013 Hermine MITTER, Mathias KIRCHNER, Erwin SCHMID, Martin SCHÖNHART: Knowledge integration of stakeholders into bio-physical process modelling for regional vulnerability assessment
- DP-55-2014 Martin KNIEPERT: Die (Neue) Institutionenökonomik als Ansatz für einen erweiterten, offeneren Zugang zur Volkswirtschaftslehre
- DP-56-2014 Johannes SCHMIDT, Rafael CANCELLA, Amaro Olímpio PEREIRA JUNIOR: Combing windpower and hydro-power to decrease seasonal and inter-annual availability of renewable energy sources in Brazil
- DP-57-2014 Johannes SCHMIDT, Rafael CANCELLA, Amaro Olímpio PEREIRA JUNIOR: An optimal mix of solar PV, wind and hydro power for a low-carbon electricity supply in Brazil
- DP-58-2015 Paul FEICHTINGER, Klaus SALHOFER: The Fischler Reform of the Common Agricultural Policy and Agricultural Land Prices
- DP-59-2016 Manuela LARCHER, Martin SCHÖNHART, Erwin SCHMID: Risikobewertung und Risikomanagement landwirtschaftlicher BetriebsleiterInnen in Österreich – deskriptive Befragungsergebnisse 2015
- DP-60-2016 Markus F. HOFREITHER: Dimensionen agrarpolitischer Legitimität
- DP-61-2016 Karin GRIEßMAIR, Manuela LARCHER, Stefan VOGEL: „Altreier Kaffee“ – Entwicklung der Südtiroler Produktions- und Vermarktungsinitiative als regionales soziales Netzwerk
- DP-62-2016 H. Allen KLAIBER, Klaus SALHOFER, Stan THOMPSON: Capitalization of the SPS into Agricultural Land Rental Prices under Harmonization of Payments
- DP-63-2016 Martin KNIEPERT: What to teach, when teaching economics as a minor subject?
- DP-64-2016 Sebastian WEHRLE, Johannes SCHMIDT: Optimal emission prices for a district heating system owner
- DP-65-2016 Paul FEICHTINGER, Klaus SALHOFER: Decoupled Single Farm Payments of the CAP and Land Rental Prices
- DP-66-2016 Ulrich B. MORAWETZ, Dieter MAYR und Doris DAMYANOVIC: Ökonomische Effekte grüner Infrastruktur als Teil eines Grünflächenfaktors. Ein Leitfaden.
- DP-67-2016 Hans Karl WYTRZENS (ed): Key Challenges in Rural Development: Bringing economics, management and social sciences into practice - ELLS Summer School Proceedings
- DP-68-2017 Giannis KARAGIANNIS, Magnus KELLERMANN, Simon PRÖLL and Klaus SALHOFER: Markup and Product Differentiation in the German Brewing Sector.
- DP-69-2017 Heidi LEONHARDT, Maria JUSCHTEN, Clive L. SPASH: To Grow or Not to Grow? That is the Question: Lessons for Social Ecological Transformation from Small-Medium Enterprises

Die Diskussionspapiere sind ein Publikationsorgan des Instituts für Nachhaltige Wirtschaftsentwicklung (INWE) der Universität für Bodenkultur Wien. Der Inhalt der Diskussionspapiere unterliegt keinem Begutachtungsvorgang, weshalb allein die Autoren und nicht das INWE dafür verantwortlich zeichnen. Anregungen und Kritik seitens der Leser dieser Reihe sind ausdrücklich erwünscht.

The Discussion Papers are edited by the Institute for Sustainable Economic Development of the University of Natural Resources and Applied Life Sciences Vienna. Discussion papers are not reviewed, so the responsibility for the content lies solely with the author(s). Comments and critique are welcome.

Bestelladresse:
Universität für Bodenkultur Wien
Department für Wirtschafts- und Sozialwissenschaften
Institut für Nachhaltige Wirtschaftsentwicklung
Feistmantelstrasse 4, 1180 Wien
Tel: +43/1/47 654 – 73600
e-mail: Iris.Richter@boku.ac.at