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# Changing the world one student at a time? Uncovering subjective understandings of economics instructors' roles

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# Changing the world one student at a time? Uncovering subjective understandings of economics instructors' roles

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## Abstract

In the wake of the economic crisis, a number of student organisations and researchers came together to highlight the lack of pluralism and heterodox approaches in economics curricula. The high relevance of the pluralism debate becomes clear once set within the considerations of the implications of a given scientific discourse on reality. This is especially relevant for social sciences, where reality-creating is visible in e.g. the influence of economists on policy making. This study explores the role of instructors in co-constructing the dynamics of the pluralism discourse and debates. An empirical field study is conducted with lecturers in introductory economics courses at the WU Vienna University of Economics and Business where they place themselves within the pluralism discourse via a Q-study. Q is a mixed method typically employed for studying subjectivity inherent to a given, socially contested topic. It begins with a set of statements that undergo a sorting procedure on a relative ranking scale, and finishes with factor-rendering. Four voices are identified: *Moderate Pluralist*, *Mainstreamers*, *Responsible Pluralists*, and *Applied Pluralists*. The implications of the ideas brought by these voices are discussed from the point of view of discursive institutionalism, stressing in particular the role of ideas and discourse in institutional change. On top of what is here referred to as 'discursive readinesses for changes towards more pluralism, strategies for overcoming the difficulties on the institutional level need to be developed.

## 1. Introduction

*"A new scientific truth does not triumph by convincing its opponents and making them see the light, but rather because its opponents eventually die, and a new generation grows up that is familiar with it."(Planck 1949)*

In the wake of the economic crisis, a number of student organisations and researchers came together to highlight the lack of pluralism and heterodox approaches in economics curricula (see e.g. Söderbaum, 2005; Coyle, 2012; PCES, 2014). The notion of multiple crises thus extends beyond the widely cited social, economic and ecological spheres (Haberl et al., 2011, Brand et al., 2013, Scoones et al., 2015) to a crisis in education. As supporters of pluralism posit, currently,

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economics represents a rather narrow scope and content. This narrowness is reflected in the economics curricula “characterized by increasing mathematization, and the jettisoning of history of economic thought and economic methodology courses” (Negru, 2010: 6). From an organizational studies perspective, social sciences generally tend to be less dominated by a specific paradigm than natural sciences, yet economics in its current state seems to be an exception to this rule (Tsoukas and Knudsen, 2005). Economics can be classified as a very hierarchical type of reputational organization (ibid). Therefore, its core, built on abstract theorizing within the optimization paradigm, is perceived as a much more prestigious area of academic activity than applied research in ‘peripheral sub-fields’. In spite of such conceptual restrictions of economic theory as currently practiced, the belief that economics is *the* most scientific social science is quite common (Colander, 2005; Fourcade et.al, 2014).

The high relevance of the pluralism debate becomes clear once set within the considerations of the implications of a given scientific discourse on reality, or their interactive nature. The power of ideas posited by economists and political philosophers, often underestimated, was already explicitly pronounced by Keynes (1936). This is especially relevant for social sciences, where reality-creating is visible in e.g. the influence of economists on forming and shaping policy making and institutional designs through their advice based on theoretical and empirical considerations (Ferraro et al., 2005). The change demanded by the pluralist voices, thus, is a complex process that requires not only the engagement of student initiatives, but equal willingness and participation of researchers and instructors.

The students engaged in the movement at the moment, though a minority, are vocal and in the centre of attention. In this paper, the instructors are given a chance to speak, as the ones who guide the new generation of economists and policy-makers. With this group in our focus, we aim to unravel the role of instructors in co-constructing the change processes in question. An empirical field study was conducted with lecturers in introductory economics courses where they place themselves within the pluralism discourse via a Q-study. The voices of these instructors find their way through the narratives resulting from the study. Along with individual peculiarities, through these narratives the actors behind them reinforce certain (economics-inherent) ideas and norms. These, consequently, shape reality – a relationship that becomes the focal area of interest of our study. The implications of social sciences on reality are discussed from the point of view of discursive institutionalism (see e.g. Schmidt, 2008 and 2011), stressing in particular the role of ideas and discourse in institutional change.

The following section introduces the current pluralism debate, stressing the relation between the discipline of economics and the ‘outside world’. Section 3 gives an overview of the research design and methods. Section 4 presents the factors identified in the Q study in a form of narrative descriptions. The paper closes with a discussion delving more into detail on institutional change, and a conclusion listing study limitations and possible future research pathways.

## **2. Voices of change**

### **2.1 Current pluralism debate**

In his insights on the ‘dismal science’ of economics, Marglin (2008) takes the reader back to the times of the Great Depression and explains how this particular crisis created an environment open for challenging what was at that time primarily market-friendly discipline of economics.

This new wave of more critical economists brought along a wave of students attracted by critical endeavors into significant questions, e.g. on capitalism and inequality, or the dogma of efficiency. Nevertheless, “economics has since reverted to its market-friendly form with a vengeance” (Marglin, 2008: ix), focusing mainly on fostering mathematical abilities of students and putting larger questions aside. Calls for pluralism have proliferated over the last decades, expressed by both scholars and students, and intensified since 2008. Often misinterpreted as asking solely for the inclusion of heterodox schools of thought into economic curricula (Freeman, 2009: 24) scholars around the world argue that methods, theories and approaches of the economic mainstream have led to a situation where a narrow framework and a strongly monistic economic perspective severely constrain the questions asked (see e.g. JPE Special Issue, 2008; Negru, 2010; Mearman, 2014). Regarding the terminology, we follow Dobusch and Kapeller (2012) in seeing ‘the mainstream’ (or the currently dominant orthodoxy) as built on neoclassical economics at its core, with a varied commitment and interpretations of its central tenets.

The current debates on these matters are multifaceted and complex, with the distinction between pluralism and plurality as a basic starting point (see e.g. Mäki, 1977; Dow, 2008; Bigo and Negru, 2008). To take Mäki’s (1997) formulation, plurality, or the case in which a given category consists of plural entities, can exist in various areas, e.g. ontology, epistemology, methodology, ideology, or theory. Pluralism, then, expresses support for plurality. Thus, plurality can be seen more as a status quo of a given concept (in our case, the discipline of economics), while pluralism is defined as an approach critical of monism, or the hegemony of a particular school of thought, or lack of recognition of plurality embedded in the nature of this concept (Dow, 2008; Bigo and Negru, 2008). Despite the lack of consensus in the debates, “the minimum tenets of a pluralist position” (Negru, 2010:3) rest in approving and tolerating the existing diversity within economics as a discipline, or the rejection of “the idea that where we are – now or at any other time – can be reduced to a single doctrine or canon” (Denis 2013: 92). The pluralism narrative expresses the need for a framework “that allows for enacting calls for pluralism in research praxis independent of paradigmatic background” (Dobusch and Kapeller, 2012: XX), unifying not only representatives of heterodox schools of thought, but all those who are dissatisfied with the dominance of a particular approach both on the institutional and conceptual levels.

Changes in the educational realm are strongly advocated by supporters of pluralism. Organized structures appear both among students and instructors/academics, the UK Reteaching Economics<sup>1</sup> initiative being an example of the efforts of the latter group. Student criticism of the status quo of economics pedagogy has grown to such an extent that in early 2014, the *International Student Initiative for Pluralism in Economics* (ISIPE, 2014) was founded as a global initiative unifying their critique and demands. By the beginning of 2015, 65 student groups in 30 countries, all part of ISIPE, demanded the return of the real world to economic curricula (ISIPE, 2015). In brief, following the postulates of ISIPE and others (see e.g. Coyle, 2012; IREE Special Issue, 2009; PCES, 2014), this means a demand for broadening the perspectives on and the use of both different theoretical frameworks and methods (i.e. theoretical and methodological pluralism). This also means an increased recognition of historical embeddedness and context specificity of economic phenomena, as well as the inclusion of social, political and philosophical issues in teaching, enabling a better look at the social impact and moral implications of economics (i.e.

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<sup>1</sup> <http://reteacheconomics.org/>

interdisciplinary pluralism). The focus of mainstream economics on mathematical methods and its strong abstraction from reality is also attacked, with the discipline as currently practiced missing self-criticism. Further, students feel that current teaching does not equip them with critical knowledge to work on solutions for the problems society and the economy do and will face in the 21<sup>st</sup> century. In essence, they call for a pluralist approach to teaching economics, and bringing reality back to the classroom (ISIPE, 2015).

It is of utmost importance to link the two spheres, i.e. research and teaching, as changing economics pedagogy necessarily depends on practicing pluralism not only within economics curricula, but also in economics professions (Negru, 2010), often stuck in institutional constraints reinforcing the monistic status quo. Changes in the research realm generate changes in the realm of instruction (Davis, 2006). The pedagogical and academic spheres, therefore, are two sides of this non-monistic coin, which does not necessarily make the suggested changes easier. Focusing more on economic research, Dobusch and Kappeler (2012) suggest incremental rather than revolutionary change towards what they refer to as ‘interested pluralism’ based on: ecumenical pluralist principles, constructive engagement between different approaches to economics, seeing these as sources of potential contribution rather than disconnected entities that must be tolerated but not engaging with each other.

## **2.2 Why bother? Social sciences and reality**

Notably, the recent voices critical of the condition of (teaching) economics as currently practiced have been raised within the context of multiple crises, with economic and financial crises heavily exposing the limitations of what can be considered the dominant paradigm in the discipline of economics (see e.g. PCES, 2014; Negru, 2010). The relevance of the debate initiated by the pluralism movement, in other words, refers strongly to the interactive nature between a given scientific discourse and reality. In Giddens’ terms, this interplay between reality and social sciences is expressed as a ‘double hermeneutic’. He argues that the social sciences cannot be completely separated from reality of particular interest (Giddens, 1984: xxxiii). These considerations of ideas (whether knowingly or not) shaping worldviews, beliefs and attitudes bring us to the question of paradigms and paradigmatic change (see e.g. Kuhn, 1962 and 1970).

Within pluralism debates, Dobusch and Kapeller (2012) delve into the question and suggest seeing paradigm as a more descriptive term with social implications, rather than a term with epistemological connotations and logical implications. Here, a paradigm depicts “scientists and their perceptions as socially embedded in a certain occupational philosophy”, therefore conjoining the work of Kuhn with sociology of knowledge (as posited by e.g. Berger and Luckmann 1966, Gouldner 1970 cf Dobusch and Kapeller, 2012). A scientific paradigm, then, stands for a theoretical perspective built on a range of presuppositions, inevitably connected to common ‘styles of thought’ reflected on the institutional dimension (in e.g. conferences, academic journals), as well as methodological and evaluative (i.e. academic standard) dimensions. Seeing the pluralism debate as a call for paradigmatic change, the authors suggest a ‘pluralist (meta-)paradigm’ that could synthesise the diversity of approaches to economics (see Dobusch and Kapeller, 2012 for a full discussion). In exploring potential change and transformation here, we draw on political science in its institutionalist conceptualizations of ideas and discourse, and one of the most recent approaches to institutional change: discursive institutionalism, as outlined in the following sections.

### 2.2.1 Discursive institutionalism – ideas and discourse for institutional change

Regarding ideas and discourse, as well as discursive institutionalism (DI), we follow the explanations and line of argumentation of Vivien Schmidt (e.g. 2008, 2011). Ideas, to begin with, exist at three levels of generality: a) policies (specific policies or policy solutions posited by policy makers); b) programs, i.e. the underlying assumptions and organizing principles underpin policies, and defining their issues, goals, and methods to be used; and c) philosophies, i.e. even deeper underlying assumptions that, contrary to the policies and programs, are contested mainly in face of a crisis. Regarding the content, ideas are cognitive (“what is and what to do”) or normative (“what is good or bad about what is in light of what one ought to do”) (Schmidt, 2008: 307).

The persistence of certain ideas in becoming policies, programs, and philosophies is surrounded by question marks (Schmidt, 2008). Academics, for example, play one of the key roles in providing expertise that allows for validation of specific policies. For programs and philosophies, Kuhn’s (1970) approach represents a concentration on philosophy of science as the area of highest importance for success and fail. Delving more into this interaction, Schmidt (2008) adds that:

“In science, programmatic success is judged by scientists alone; in society, [it] is judged not only by social scientists but also by citizens. (...) Moreover, whereas ideational change in science results from internal processes, when the Kuhnian paradigm expires because it has exhausted its explanatory potential, ideational change in social science and society results also from external processes and events that create a receptive environment for new ideas” (2008: 308).

Consequently, Schmidt (2008) enriches Kuhnian paradigmatic change and points to theories of institutional change as more appropriate for the realm of social science. The third level, philosophies, has been the focus of Bourdieu (1994), Foucault (2000), and Gramsci (1971), as Schmidt points out (2008), conjoining ideas with power and domination.

Continuing, discourse, “a more versatile and overarching concept than ideas” (Schmidt, 2008: 309), is an interactive process that conveys ideas. Discourse “is not just ideas or ‘text’ (what is said) but also context (where, when, how, and why it is said). The term refers not only to structure (what is said, or where and how) but also to agency (who said what to whom)” (Schmidt, 2008: 305). Discourse conveys ideas of all three levels and two types, and finds its expression in various forms, e.g. narratives, frames, stories, images. It also finds its expression in scientific arguments “generating stories about the causes of current problems, what needs to be done to remedy them, and how they fit with the underlying values of the society (refs)” (Schmidt, 2008: 309). It can be either coordinative (i.e. among policy actors) or communicative (between political actors and the public). Tracing the failure and success of discursive processes includes looking into their ways, their audience, and context.

Centered around the role of ideas and discourse, and setting these within institutions, discursive institutionalism (DI) sees institutional change as inherently dynamic (Schmidt, 2008). It defines institutions simultaneously as structures and constructs internal to agents. Institutions change or persist because of two abilities of agents: ‘background ideational abilities’ (i.e. sense-making in reference to the ideational rules or “rationality” of a given setting), and ‘foreground discursive abilities’ (or the logic of communication, which enables change through deliberation

and debate about the rules) within a given ‘meaning context’. Interests in DI are subjective ideas, neither objective nor material. Norms are dynamic constructs, rather than static, and necessarily intersubjective.

In the study, we aim to build a better understanding of the perceptions on pluralism and teaching economics present among a body of instructors. The voices of these instructors are expressed via a Q study, exploring the ideas and norms characteristic of the emergent narratives. The following section will give an overview of the research design, with particular emphasis on the Q study.

### **3. Research design**

In order to gain a deeper understanding of the pluralism discourse in the Department of Economics at the Vienna University of Economics and Business, we employed a three-pronged mixed-method research design. The first step was to conduct a focus group with students active in the pluralism student group in Vienna to uncover their perspectives and develop preliminary codes. These codes were used for a qualitative content analysis of 52 journal articles, book chapters, blogs, newspaper articles and political statements. Based on this coding, we developed the statements used for Q-methodology, a structural mapping technique to uncover subjective understandings of the issue at hand, in our case pluralism and teaching in economics. Each of these steps will be explored in further detail below.

#### **3.1 Focus group**

The pluralism student group<sup>2</sup> in Vienna is part of the international network and has published a list of demands for a more inclusive and pluralist education in economics. We conducted a focus group to include the perspectives of these students. Our aim was to determine their views on the current state of the economic curricula, what changes are needed and what roles teaching and teachers play. A focus group, for the purpose of our research, is defined as “a group of individuals selected and assembled by researchers to discuss and comment on, from a personal experience, the topic that is the subject of the research” (Powell and Single, 1996:499). In general, the ideal number of participants lies between six and ten to facilitate interaction between all participants and offer the possibility to ask and answer questions. The focus group facilitates interaction between its participants and allows “to challenge, and probe, the views and positions espoused by individual members in a non-threatening, relatively naturalized social context” (Osborne and Collins, 2001:443). In our case, the focus group was conducted to uncover the participants’ view of teachers in conveying (or not conveying) pluralism in economics education. For this reason, the focus group consisted of six members of the pluralism student group, ranging in age from 19 to 26 and in education from first year bachelor degree students to those that had completed or are near completion of a master’s degree.

We facilitated a two-hour focus group, guided by a number of overarching questions (please see Appendix 1 for a list of questions). To ensure the engagement of all participants, the focus group was largely facilitated by one of the main initiators of the pluralist student group in Vienna. As researchers, we only intervened when questions that are relevant to our research were left out or unanswered. The focus group was tape-recorded and we took detailed notes on the order of speaking as well as non-verbal communication. The focus group recording was

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<sup>2</sup> [www.plurale-oekonomik.at](http://www.plurale-oekonomik.at)

transcribed and subsequently coded for emergent themes. These were then used as the basis for codes for the qualitative content analysis.

### **3.2 Qualitative content analysis**

In total, we analysed 41 documents (see Appendix 2 for list). These documents were chosen from a range of sources to adequately portray the ongoing discourse around pluralism in economics with a focus on teaching. As such, literature came not only from academic sources (journal articles and book chapters) but also from popular discourse on the topic (e.g. newspaper articles, blog articles as well as political statements). The coding was organised in three main categories: (1) critique of mainstream economics, (2) teaching economics, (3) pluralism as an alternative. In total, there were 25 sub-codes (see Appendix 3 for list). Both the overarching categories and 22 sub-codes were constructed on the basis of the focus group data while three additional codes were added during content analysis. The coding was conducted with MaxQDA, chosen because it supports group work. The documents were distributed evenly among group members and coded individually. To ensure that codes were used in a coherent manner, each code was supplemented by a detailed memo. To facilitate this joint understanding further, one paper was coded by all researchers involved in the project and subsequently discussed. The individually coded texts were then analysed jointly in the team to extract statements for the concourse to use for in the Q study. During this process, overlapping codes were merged to provide clear themes for the development of the concourse. The themes correspond to the codes listed in Appendix 3.

### **3.3 Q methodology**

The process of unravelling the perceptions of instructors of undergraduate economics courses on the pluralism and teaching is facilitated via an empirical field study with the use of Q methodology. Rooted in social psychology and created by William Stephenson in the 1930s (Stephenson, 1953), Q is a mixed method representing a qualitative but statistical approach focused on uncovering various discourses characteristic of understanding(s) of individuals' behaviour, and "the social and environmental worlds in which they live" (Barry and Proops, 1999: 337). Importantly, Q has the potential to reveal viewpoints and understandings of a given group, building holistic results with strong qualitative detail (Watts and Stenner, 2012: 4). Used primarily in psychology, Q has been gradually spreading into different disciplines and research areas, e.g. political sciences (Brown, 1980; Dryzek and Berejikian 1993), as well as questions of environmental policy research (see e.g. Barry and Proops, 1999; Addams and Proops, 2000, Webler et al., 2009, Lansing, 2013; Albizua and Zografos, 2014; Cairns and Stirling, 2014), human geography (Robbins and Krueger, 2000; Eden et al., 2005; Brannstrom, 2011), communication science (Stephen, 1985), and more.

Q is a "small n' methodology" (Cairns and Stirling, 2014: 27), usually including between 20-40 purposively selected participants, whose task is to rank a set of statements representing the discourse on a given topic relative to one another and fit these in a (usually) fixed- or forced-choice distribution (Watts and Stenner, 2012). In an attempt to capture whole configurations of viewpoints, the process of factor rendering starts with establishing inter-correlations between the Q sorts, looking into the level of agreement and discrepancy. The final interpretation of the factors, then, attempts to describe the key characteristics of individual factors corresponding to perceptions of groups that rank-ordered the Q set in heterogeneous ways (Watts and Stenner,



2012). In other words, clusters of similarly performed sorts emerge. In brief, then, Q includes roughly three stages: 1) creating the concourse, i.e. selecting statements that seize the diversity within the discourse on a given topic, and narrowing the concourse down to a representative subset, i.e. the Q sample or Q set; 2) selecting the participants who go through the sorting procedure, and 3) running a statistical factor analysis and interpretation procedure complemented with the input from post-sort interviews (Cairns and Stirling, 2014: 27). In what follows, we go through these stages in greater detail within the context of our study.

### 3.3.1 Narrowing down - concourse to Q set

The concourse representing the discourse on pluralism and teaching economics was constructed via two preceding broader steps, i.e. focus group (see 3.1) and QCA (see 3.2). Having a structured coding system made the process of selecting the statements that would constitute the final Q set significantly smoother, along with the participation of all the co-authors, assuring stronger triangulation. The statements constituting the final Q set were narrowed down to 47, keeping in line both with the recommendations of the optimal Q sample size between 20 and 60 statements (Webler et al., 2009: 15), or 40 and 80 statements (Watts and Stenner, 2012: 67). In order to test the comprehensive wording and thematic balance of the statements and assure the quality of the Q set, a pilot was carried out with 5 individuals from the Vienna University of Economics and Business (both researchers/instructors and students) who were not taking part in the study. The refined final version of the Q set can be found in Table 2.

### 3.3.2 How to Q: the P-set sorting the Q-set

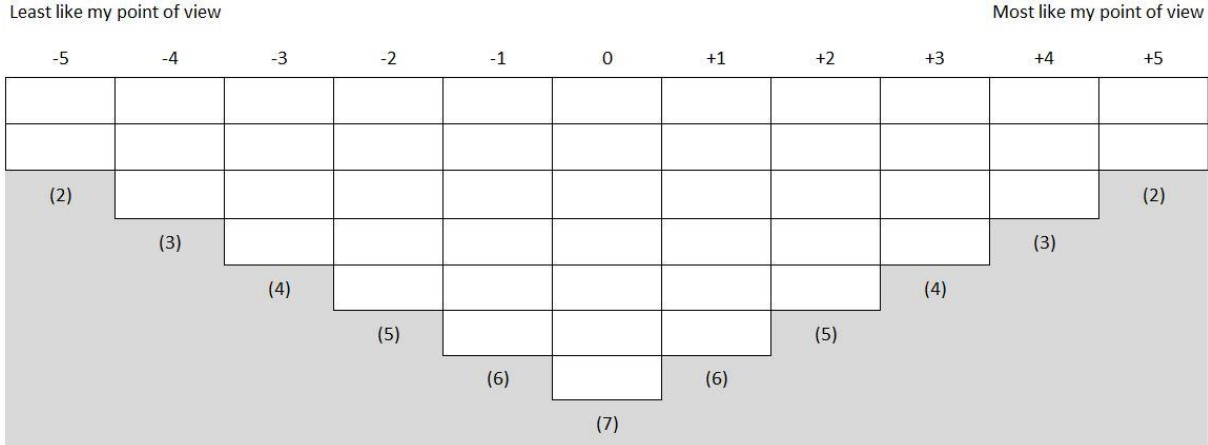
With the rationale of reaching the viewpoints of experts on a given topic (Watts and Stenner, 2012: 175), i.e. in our case those directly involved in teaching, participants (or the P-set) of the study were purposefully selected among instructors of undergraduate courses in economics. These included both instructors employed as internal or external lecturers in the Vienna University of Economics and Business, our home institution. A total of 84 people were contacted and the study was conducted with 24 individuals (16 male, 8 female), representing a rather diversified group (see Appendix 4). In sum, the age ranges from 26 to 53 years old, with the majority in mid-thirties; teaching experience spans from 1 to 25 years; educational background is predominantly economics (17 participants), with additional degrees in 7 cases e.g. development studies, mathematics, political science, or business administration. Regarding institutional affiliation, 17 participants work at a university and research institute setting, while the remaining 7 find their core employment at public agencies, e.g. Austrian National Bank or the Chamber of Labour (see Table 1).

**Table 1: Sectors with which participants were associated (for details see Appendix 1)**

<b>Sector</b>	<b>Number of participants</b>
University	16
Applied Research	2
Public Institution	4
Banking Sector	2

The task of the participants was to sort the statements from the Q set into a grid scaled from +5 (what they most agree with) to -5 (what they least agree with), the range of the distribution being in accord with Brown’s (1980) suggestions for Q sets numbering 40-60 items. In line with common practice in Q studies, the shape of the grid was pyramid-like, therefore triggering a forced distribution into each individual category on the scale (see Figure 1).

**Fig.1: The distribution shape for sorting the Q set.**



The sorting procedure took place mainly in face-to-face meetings, and was followed by post-sort interviews focused on discussing specific choices and the statements in broader terms, consequently enriching the quality of the data (Watts and Stenner 2012). In response to the inability of five participants to conduct the sorting in such a setting, a self-sorting package was prepared with the use of FlashQ software (<http://www.hackert.biz/flashq/demo/>). Such a combination of techniques of conducting the sorts has been practiced among Q researchers (see e.g. Gruber, 2011; Cairns and Stirling, 2014), and is not problematic in terms of distorting the validity of the study (see e.g. Hogan, 2010).

**3.3.3 Behind the scenes: statistical analysis**

For the analysis of the Q sorts, purpose-built Q software PQMethod was used, available as a free download at [www.lrz-muenchen.de/~schmolck/qmethod/](http://www.lrz-muenchen.de/~schmolck/qmethod/). The analytical procedure began with correlation of all the sorts to each other, resulting in a correlation matrix that stands for a measure of the relationship between any two Q sorts in terms of their (dis)similarity. Next, the generated correlation matrix underwent QCENT, or centroid factor, analysis grouping Q sorts that allocated the statements in a similar manner. Varimax rotation, then, maximizes the explained variance (Sweedeen, 2006; Watts and Stenner, 2012), hence corresponding to our aim of identifying the strongest commonalities and overlaps in subjective understandings of instructors on pluralism and (potentially changing) teaching economics. From the initially five extracted factors, only four were kept for interpretation. Their level of correlation can be seen in Table 3. In considering which factors to keep, the rotated solutions were scrutinized for having minimum two individual Q sorts significantly correlated with them (Brown, 1980: 293), i.e. closely approximating the viewpoint expressed by a given factor. Here, a statistically significant loading at the  $p < 0.01$  level is calculated according to the following relation:  $2.58/\sqrt{n}$ , where n stands for the number of items in the Q set (ibid). In our case that meant  $2.58/\sqrt{47}=0.37633$ , and was

subsequently increased to 0.40 following Watts and Stenner’s (2012) suggestions for possible ‘sharpening’ of the value significant loading. The four final factors also meet the criterion of Eigenvalues (EVs) exceeding 1 (see e.g. McKeown and Thomas, 1988; Watts and Stenner, 2012), and account for 44% of study variance. Table 4 presents the degree to which each participant’s sort correlated with each factor. A weighted averaging of all the individual significantly-loaded (or defining) Q sorts allows for creating factor estimates and, further, factor arrays (see Table 2) that can be seen as an idealised sorting pattern consistent with our 11-point (+5 to -5) distribution. Behind each factor array stands a group of defining Q sorts which have a significant loading on that factor only. A Q sort can also be neutral (without any significant loading) or confounded (with significant loadings on more than one factor), and excluded from factor-array creation<sup>3</sup>. Consequently, the ‘boarders’ between each factor are rather blurry, and interpretations are not immutable (Davies and Hodge, 2012: 52). The factor arrays served as the starting point of factor interpretations, which were conducted jointly by the co-authors with the use of the crib sheet (Watts and Stenner, 2012: 151-159) - a useful and simple tool for delivering sound and holistic results. The post-sort interviews of the relevant Q sorts were included in the interpretative process.

**Table 2: Statements in the final Q set, and the idealized sorting pattern (from -5 to +5) for each factor. Statement 1, for example, was ranked at -2 in Factor 1, +1 in Factor 2, -3 in Factor 3, and 0 in Factor 4.**

Statement	Idealized sort pattern			
	1	2	3	4
1. The discipline is inevitably and intrinsically plural, and our transmission of it to the next generation is rather singular.	-2	1	-3	0
2. The monopoly of the neoclassical paradigm at departments of economics has a considerable impact on the understanding of economics among major actors in society.	-2	1	-1	0
3. The study of ethics, politics and history are almost completely absent from the syllabus.	-1	0	3	-1
4. Economists do not simply depict a reality out there, they also make it happen by disseminating their advice and tools.	0	0	1	-3
5. Mainstream economics has become too removed from the real world.	-1	-2	-5	2
6. Economics performs a central ideological role in policy-making.	0	0	-1	1
7. Economics, as currently practiced, plays a crucial role in shaping human-environment relations in a detrimental way.	-1	-1	-2	0
8. The responsibility for the wider social and political consequences of economic activity should be accepted.	3	4	1	1
9. Economists can stand outside society and observe it objectively.	-5	-5	-2	-5
10. Economics education fails to adequately train students to have skills that are vital to succeed in the working world.	-3	-3	-3	-3
11. This disciplinary monoculture results in a society with little ability to critically question the foundations, assumptions and practices of the economic status quo.	0	0	-3	-2
12. The crisis has also laid bare the latent inadequacies of economic models with unique stationary equilibria and rational expectations.	1	2	-4	1
13. Thinking in terms of rationality and statistics limits the scope of economic inquiry.	-1	-1	-3	-2
14. The individualist economic model assumes the kind of rationality that no one	-1	1	0	3

<sup>3</sup> But, following Armatas et al. (2014: p. 450) “confounded Q-sorts can still be explained in terms of the resulting factor arrays onto which they significantly load. Those Q-sorts that are null are considered to be idiosyncratic viewpoints, which are not explained by any of the resulting factor arrays and do not contribute to the interpretation of the factor arrays”.

possesses.

15. Economists see other economists as their primary audience, rather than the public or policy makers.	-4	-1	0	2
16. Complexity in economic analysis adds to the richness of description, but it also prevents the analyst from seeing what is essential.	-3	-4	3	-4
17. Neoclassical models fail to capture a complex reality.	-2	3	-5	2
18. Neoclassical models are too simplistic to be employed in policy-making.	2	-3	5	-3
19. Models help structure economic reality.	5	-2	5	-1
20. The use of advanced mathematical techniques has become the goal in itself, to be pursued independent of the insights it provides.	-3	-2	-1	3
21. In the mainstream of economics, quantitative methods and algebraic formalization have supreme status whilst qualitative approaches are deemed inferior.	0	3	4	1
22. Economic arguments that have not been expressed in a form of mathematical models tend to remain invisible.	-1	0	1	-1
23. Mathematical formalism puts all arguments on an equal footing, allowing direct comparison, and a straightforward check on consistency.	0	-4	3	-4
24. The syllabuses tend to concentrate on the delivery of mainstream material and difficult critical questions are postponed.	0	1	-1	-1
25. The university must ensure that the academic environment within the Economics Department is open and representative of the diversity of economics.	3	5	-2	0
26. A pluralist approach carries the danger of teachers and their students abandoning economics out of frustration born of confusion and uncertainty.	-5	-3	2	-4
27. Encouraging pluralism brings the risk of talking about everything and nothing.	-4	-5	4	-5
28. The validity of economics should be judged based on its efficacy in improving human welfare.	2	5	0	3
29. There is a need to teach a different kind of economics and teach it differently.	2	3	-4	0
30. Economics is a fundamentally political subject, not a value-free science.	1	0	-4	4
31. To be constructive one must consider alternatives, and not just an alternative.	1	-1	1	1
32. Social reality is multi-faceted and thus requires a variety of perspectives if it is to be adequately described and explained.	1	4	-2	4
33. Each school of thought has strengths and weaknesses, and together they can make our understanding of the economic reality richer.	4	2	0	2
34. It is important to recognize that there are distinctive ways of conceptualizing and explaining the economy.	4	1	2	1
35. The economy should be understood as a complex, living, and continuously evolving social network of human relationships, not a machine.	3	1	2	5
36. Progress towards pluralism in undergraduate education requires parallel shifts from monism towards pluralism in postgraduate education and in research.	2	0	1	-2
37. The philosophy of science ought to be a central part of core economics modules.	0	-2	0	4
38. Economic theory is not universally applicable and depends on institutional, historical and social context.	4	4	0	5
39. In the majority of classrooms, it is implied that neoclassical economics is universally accepted as the state of the art.	-3	-1	0	-1
40. Currently, teaching and examination aims at demonstrating the ability to reproduce a prescribed theory.	-2	3	2	-2
41. Teaching economics should begin with economic phenomena and then give students a toolkit to evaluate how well different perspectives can explain them.	2	2	2	2
42. History of economic thought and economic history are essential for students to be able to evaluate the quality of economic theory.	3	2	1	3
43. The focus on multiple choice and short answer forms of examination leaves economics students with a lack of skills in problem solving and written communication.	1	-1	4	-2
44. Contestation is a vital part of academic practice and education.	5	-4	3	0
45. The responsibility for determining economics teaching needs to be returned to those that actually do it, rather than left in the hands of textbook publishers and teaching experts.	-2	-2	-1	-3
46. For students to have a chance to study different types of economics, instructors of	1	2	-1	0

economics have to broaden their competence.

47. Economics degrees are currently designed for the fraction of students who go on to become academic economists not the ones who go on to professional work.

**Table 3: Correlations between factors**

	Factor 1	Factor 2	Factor 3	Factor 4
Factor 1	1.000	0.473	0.205	0.452
Factor 2		1.000	-0.305	0.659
Factor 3			1.000	-0.305
Factor 4				1.000

**Table 4: Degree to which each participant's sort correlated with each factor**

No	Participants (by professional sector)	Degree of correlation of Q sorts with each factor			
		1	2	3	4
<b>Participants whose sorts correlate with just one factor:</b>					
7	University	0.2324	0.6197*	0.1568	0.2617
13	Public Institution	0.1176	0.1462	-0.3721	0.4087*
15	Public Institution	0.2811	0.5816*	-0.1193	0.2099
19	University	0.5595*	-0.3775	0.1688	-0.0069
21	Public Institution	0.6186*	0.1058	-0.0089	0.1812
41	Public Institution	0.1660	-0.1782	0.5062*	0.0451
43	University	-0.0423	-0.2505	0.5949*	-0.1404
57	Applied Research	0.5741*	0.1015	0.0364	0.2596
58	Applied Research	0.6156*	-0.1328	0.2031	-0.2862
60	University	0.2170	-0.3554	0.6847*	-0.1143
61	University	0.2363	-0.2045	0.5898*	-0.3765
62	Public Institution	0.2616	0.3132	-0.2478	0.6576*
63	University	0.7805*	0.1367	0.0483	0.0258
72	University	0.5248*	-0.0486	0.2099	0.0925
77	University	-0.0257	0.4998*	-0.0499	0.0352
80	University	0.1068	0.0922	0.6448*	-0.1066
82	University	0.5387*	0.0639	0.0181	0.3230
<b>Participants whose sorts correlated with more than one factor:</b>					
45	University	0.1915	0.3993*	-0.2371	0.5893*
48	University	0.4584*	0.1974	0.2982	0.5896*
70	University	0.7748*	0.4291*	-0.0661	0.0020

The constructed narrative descriptions from our take on the interpretative task of each factor are presented in the following section.

#### 4. Results section

The interpretations were identified based on the PQ method statistical analysis. Factor interpretation included loops of feedback between the co-authors of the paper focused on statistical results and data from post-sort interviews. The comments from consultations with the participants are included in the final narratives. The name assigned to each factor reflexes its

dominant nature. In total, sorts from 17 participants were captured in factor arrays, 3 were confounded, and 4 showed no significant loading. The individual statements from the Q set (see Table 1) relevant for the respective story lines are numbered in brackets.

### **Moderate Pluralists (Factor 1)**

This is the strongest factor with 7 participants' sorts loading significantly. These are predominantly voices with university affiliation (5), with a minority from public agencies. Factor 1 explains 16% of the study variance and has an EV of 4.6.

For moderate pluralists, complexity is a key part of economic analyses (16). Despite this engagement with complexity, moderate pluralists recognize that in analyzing reality, abstraction via models is helpful. As abstraction is the point behind models, criticizing them for being simplistic brings us back to criticizing their main aim (17, 19, 18, 20, 22). Though often simplistic, models do influence reality via policy, so the responsibility for the impacts of research and policy-making and the impossibility of objective observation must be accepted among economists (8, 9). Any analysis or understanding of economic phenomena is highly context-dependent (38). In teaching, the appreciation of complexity and context-dependence means that different schools of thought can tell different stories, all of which may enrich our overall understanding (33, 34). Both teaching and research should be built on contestation (44), since disciplinary monoculture inhibits the development of critical thinking skills (11). Historical context needs to be taught because this allows students to properly reflect on a given theory (16). It follows that pluralist teaching is beneficial and does not cause confusion (26, 27). In general, the teaching situation is not necessarily seen as problematic and designed mainly for students wanting to go into academia (1, 39, 40, 47). Real progress towards pluralism in teaching requires a more diverse research environment, which needs to be ensured by universities as institutions (25, 36). The audience of economists is as diverse as reality is (15).

### **Responsible pluralists (Factor 2)**

Three participants' sorts loaded significantly on this factor, 2 with a university affiliation and 1 from a public agency. Factor 2 explains 8% of the study variance and has an EV of 4.0.

For pluralists on a mission, the first step towards pluralism comes from the university as an institution responsible for ensuring academic diversity through e.g. hiring (25). However, the need of broadening the competences of instructors themselves is also recognized (46), thus emphasizing the individual level. They have strong sense of responsibility for their work and see a clear mission behind it, namely: improving human welfare (8, 9, 28). This mission has not been fulfilled properly (12). There is a general call for change in both the "what and how" of teaching economics (29, 40), turning away from the predominant monoculture (24) towards the currently lacking practice of contestation (44). These changes should be on both theoretical and methodological levels. Pluralism of theories is not confusing; rather, learning a variety of perspectives is inevitable in building a reflexive understanding of multifaceted social reality (1, 16, 27, 32). In regards to method, the inferiority of qualitative approaches is criticized (21), and the indiscriminate belief in the power of mathematical formalism to put everything on an equal footing is rejected (23). They suggest a cautious approach to modelling, particularly as an influence on policy making (17, 18, 19). There is no universality in investigations of economic phenomena – such investigations are always context-dependent (38).

### **Mainstreamers (Factor 3)**

Five participants' sorts loaded significantly on this factor, four of university background and one from a public agency. Factor 3 explains 11% of the study variance and has an EV of 1.1.

In broader terms, mainstream economics has not lost touch with reality (5). Reality is complex (35), yet comparison and transparency of results are important, and the way of dealing with this complexity is based on stark abstraction. Therefore, abstraction via models is most helpful (19). Regarding neoclassical models in particular, they might be simplistic for policy making (18), yet they do provide useful insights in explaining complex reality (17). If your models have an influence on reality and also structure it, economists cannot observe society 'from without' (4, 9). However, economists are not responsible for the wider social and political consequences of their advice (8), and the political implications and the impact that economists have is limited (6, 7, 30). In general, then, there is awareness of different perspectives (31, 34). Regardless, formalism, quantitative methods, and thinking in terms of rationality and statistics take a central role (13, 16, 21, 23). Against such background, pluralism brings the risk of frustration, confusion, and talking about everything and nothing (26, 27, 32). History and context-sensitivity is not of high relevance, economic theory has to offer comparability (38, 42). When it comes to teaching, there is criticism of the "how" (29, 40, 43), with a moderate call for change in teaching methods. In general though, there is no need for increasing the diversity of input at universities (25).

### **Applied pluralists (Factor 4)**

Q sorts from two participants load significantly on this factor, both with a public agency affiliation. Factor 1 explains 9% of the study variance and has an EV of 1.0.

Reality is complex; therefore, context-sensitivity is always there, contrary to universality (35, 38). Dealing with this complexity is directly related to our underlying assumptions (30), hence the need for stronger incorporation of philosophy of science and history of economic thought in the curricula (37, 42). Mainstream economics has become too removed from the real world (5). To better understand this complex nature of reality a range of perspectives is required; bringing various theoretical perspectives to the table enables that rather than causes confusion (32, 27, 16). Pluralism in its methodological sense is also needed, and putting mathematical formalism and assumptions of economic rationality on the pedestal must end (23, 20, 14). The 'how' of teaching is criticized (40, 43). These voices are also emphasizing the unquestioned link between the discipline of economics and policy-making (4, 15).

## **5. Discussion and conclusion**

### **5.1 Complexity & Co.**

The four factors can be perceived as actors in the change process under our investigation, herein referred to as the *Moderate Pluralists*, *Responsible Pluralists*, *Mainstreamers*, and *Applied Pluralists*. As ideas are the substance of discourse, the actors with their narratives add to the discursive landscape on pluralism and teaching economics. Starting from the content of ideas, the individual approaches brought by the four actors are reflected on both cognitive and normative levels. They cover aspects of "what is and what to do", and conjoin these with normative claims of "what one ought to do" and "what is good or bad to do". Through strengthening some ideas and norms, while weakening others, they influence this particular reality in a number of ways. In what

follows, we discuss three areas that seem particularly relevant in showing discrepancies and overlaps between individual narratives on the cognitive and normative levels: complexity, context-sensitivity and historical embedding, and responsibility.

The question of complexity refers directly to the nature of the economy and economic phenomena. Each group of actors perceives the economy in evolutionary rather than mechanistic terms, thereby acknowledging complexity as an inherent characteristic of the concept. The importance of this acknowledgment and the consequences it has for economic inquiries and teaching differs among the four groups. The priority that this shared acknowledgment reaches among the four groups differs, similarly to the consequences it has for economic inquiries and, furthermore, teaching. For both *Moderate Pluralists* and *Mainstreamers* abstraction is necessary to deal with complexity. The latter group strengthens their argumentation here with the need for comparability and transparency of results achieved exactly due to stark abstraction (as well as methodological formalism in broader terms). The former values abstraction as a tool of dealing with complexity less fiercely, but still more than the other two pluralist groups. Both the *Applied* and *Responsible Pluralists* take a firm stand on the matter and marry complexity with a call for more pluralist teaching in both theoretical and methodological sense, while the *Moderates* tilt more towards theoretical pluralism. It is the *Applied Pluralists*, though, for whom complexity ends up among the basic pillars of approaching economics, resulting in a clear call also for interdisciplinarity in pluralism.

Complexity is inevitably related to context sensitivity, historical embedding, and the question of universality of economic arguments – as other areas worth looking at with the cognitive and normative ideas in the background. For our pluralist voices, economic phenomena are by default context- and history-sensitive (referring to interdisciplinary pluralism), and thereby impossible to be analysed as universal. As such, understanding these phenomena requires a research environment characterised by diversity, and teaching environment that fosters critique, contestation and reflexivity through building an array of schools of economic thought into the curricula. Complementing both research and teaching environments with methodological pluralism is emphasized clearly by the *Responsible* and *Applied Pluralists*, with a less open stance of the *Moderates*. Quite to the contrary, the *Mainstreamers*, as mentioned above, stay firm with quantitative expression of economic arguments, formalism, statistics, and rationality as the key methodological guideposts. They recognize the need for awareness of the variety brought by different schools of economic thought, yet this is where they stop – restructuring the curricula towards stronger inclusion of this variety is seen as potentially leading to confusion and frustration of students – a quite common argument against pluralist teaching. The rather extreme views on the importance of assumptions underlying the ways of perceiving the sphere of economics come out with the question of incorporating philosophy of science in economic teaching. The *Applied Pluralists* are the only ones to see this as a fundamental requirement; the *Mainstreamers* disagree, while the *Moderate* and *Responsible* voices leave it without a comment.

A third area of interest regarding ideas posited by the four groups emerges around the questions of responsibility i.e. a) responsibility *of* economists in general, and b) responsibility *for* changing the status quo. While the first refers specifically to teaching economics, the second is broader and connected to the views on policy making. Regarding the status quo, the *Responsible Pluralists* see it in a most comprehensive way as lying both within universities' hands (through e.g. hiring and publication strategies), as well as individual economics instructors' hands (through e.g.



broadening competences). To the contrary, the *Mainstreamers* deny responsibility on both levels, perhaps due to the fact of their general questioning of the need for broader change of the teaching status quo. The *Moderates* limit themselves to 'blaming' university structures, while the *Applied Pluralists* disregard these questions to focus on responsibility in its second meaning. Here, they are the ones to take the lead in emphasizing the strong link between the discipline of economics and policy, pointing to the limitations of monocultural practices in their impact on policy making. As the participants behind this reading have a public institution affiliation, this link might be more pertinent to them. The *Moderates* recognize this responsibility towards policy-making, yet admitting to the limitations seems sufficient to them, without necessarily seeing more pluralistic economic practices as helpful in overcoming these limitations. The third pluralist group, the *Responsible Pluralists*, is most vocal in stating a strong sense of responsibility for their work in a sense of having a mission of improving human welfare (also via sensitive policy making). These wider social and political consequences of the discipline of economics are rejected by the *Mainstreamers*, who again come back to the strict limitations when it comes to economics-policy interaction and stop here.

## 5.2 Ideas and Discourse for Change

Cognitive and normative ideas captured in the four narratives are particularly relevant on the level of programs through defining central issues in economics and the ways of dealing with these. The actors play one of the key roles in providing expertise that allows for validation of economic policies. They legitimate specific problem-solving paths for ideas, and add to their long-term dominance. Discourse-wise, on the coordinative level academics and researchers through their suggestions get involved in creation and justification of particular policies (a relation that might in fact be questioned by at least one of the groups in the study). Through taking on teaching responsibilities, these same actors gain influence in the communicative discourse by shaping the views of students. Particular ideas are reinforced among the student body as brought by instructors perceived as experts in a given field.

With regard to institutional change, the formal institutional context plays a crucial role in the matter in question, e.g. changing teaching practices. As posited by pluralist movement, current discourse in both teaching and researching economics is closest to the *Mainstreamers* narrative. However, the fact that three out of four identified narratives are closer in their approaches and understandings of economic matter to pluralist mind-sets is rather uplifting in light of the debates on changing the status quo, at least in the setting investigated in the study. Pluralism in its theoretical, methodological, and interdisciplinary understanding is welcome and supported by all three pluralist groups, with the *Applied* and *Responsible Pluralists* being most comprehensive in their approaches, and the *Moderates* showing a limited openness to change. Despite the more or less subtle differences among the pluralist narratives in the data, one might say that both the background ideational abilities (sense-making of the rules) and foreground discursive abilities (communication enabling deliberation of the rules) inevitable in institutional change processes are strongly present among our groups. Moreover, the more comprehensive approach present among the pluralist factors carries the traits of interested pluralism outlined by Dobusch and Kapeller (2012) through taking economic processes as the centre of analytical attention and showing high awareness of complexity of social reality.

This study stands for an exploration of the discursive variety among a group of instructors of introductory courses in economics. On a more superficial level, we can see that all of the groups agree on the need for stronger incorporation of different methods of teaching. Going more into detail, our claim of ‘discursive’ readiness for change processes regarding more pluralist research environment and teaching economics among the groups and their narratives identified in the study can be seen as just a first step that marks openness for incremental change. However, in a formal institutional setting such as universities the question of interests and power come into play. In the case of economics (a rather ‘special’ daughter of social science in her treatment of e.g. different schools of thought), these questions might turn out to be particularly problematic. The marketization of science provides tools for institutional strengthening of the status quo. Citation studies show that in economics, academics from the peripheries to the mainstream are still far behind the world where citation is the central currency (Glötzl and Aigner, 2015). Therefore, we add to the calls for a more intense pluralism debate on the institutional level, both in practical and research terms.

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## Appendix 1

### Focus Group Preparation

- What is the main problem in teaching economics at the moment?
- What is missing?
- What are potential solutions, how can gaps be filled?
- What is the status quo of the change process? Is it mainly discursive and in the literature? Are the changes happening in curricula?
- What is the role of the students and teachers respectively in the change process?
- Question of employability?

How would you imagine a perfect version of (pluralist) teaching?

Where is the problem? (use terms below to probe if conversation does not flow)

- Institutional constraints
- Textbooks and other material constraints
- Unwillingness to engage by lecturers
- Unwillingness to engage by students
- De-politicization of economics of a subject and value-free orientation

Follow up question: Where can change come from?

Role of teachers

- Personal experience, e.g. someone really inspirational or someone really awful – why?

## Appendix 2

### Qualitative Content Analysis

## Appendix 2

### Qualitative Content Analysis

1. Beed, C., & Kane, O. (1991). What Is the Critique of the Mathematization of Economics? *Kyklos*, 44(4), 581–612. doi:10.1111/j.1467-6435.1991.tb01798.x
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## **Appendix 3**

### **List of subcodes**

The codes are based on emergent themes from the student focus group. Any codes marked with an asterisk\* were added during the qualitative content analysis for a holistic picture.

#### **Category one: Critique of Mainstream Economics**

Structurally/institutionally limiting

Mainstream/orthodox imperialism

Method-based

Blindingly simple

Mathematically sophisticated

Arrogant to other disciplines

Rational choice paradigm

Dissonance with reality

Monistic/one-sided

#### **Category two: Teaching Economics**

Teacher's profile

Employability (non-academic)

Providing critical skills

Historical embeddedness

Broader focus

Incentive structure

Multiplicity of theories

Research and teaching inseparable

Philosophy of science integral

#### **Category three: Pluralism as an alternative**

Criticism of pluralism\*

No ultimate truth

Ideological variability

Value-based

Reflective

Interdisciplinarity

Methodology matters

## Appendix 4

### Participant list

No	Professional self-description and discipline	Affiliation	Teaching experience in years
7	Project Assistant; Economics	University	4
12	External Lecturer; Economics	Banking Sector	2
13	External Lecturer; Economics, Development Studies	Public Institution	4
15	External Lecturer; Economics	Public Institution	11
16	Lecturer; Economics	University	3
19	Senior Lecturer; Commerce, IBA	University	17
21	External Lecturer; Economics	Public Institution	25
38	Researcher; Economics	University	7
41	External Lecturer; Economics	Banking Sector	6
43	Researcher; Economics, Mathematics, Informatics	University	5
45	Researcher; Economics	University	3
48	Researcher; Economics, Gender Studies	University	10
57	Researcher; Economics, Political Science	Applied Research	1
58	Researcher; Economics	Applied Research	5
60	Professor; Economics	University	15
61	Professor; Economics	University	6
62	External Lecturer; Economics	Public Institution	5
63	Researcher; Economics	University	-
70	Researcher; Economics	University	1
72	Researcher; Economics	University	3
77	Researcher; Economics	University	-
80	Researcher; Economics	University	8
82	Researcher; Economics, Political Science	University	2
84	Researcher; Economics	University	3



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