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Paradigms and policies: The state of economics in the german-speaking countries

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Paradigms and Policies: The state of economics in the german-speaking countries°

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Abstract

This paper studies the research interests, paradigmatic orientation and political orientation of about 700 full professors of economics at universities located in German-speaking countries. In doing so, we captured biographical and institutional information on these professorships by collecting data from personal and professional websites as well as publicly available CVs to derive indicators on the research orientation, the paradigmatic stance and the political involvement. The main contribution of this paper, hence, is empirical in nature. It documents the fairly homogenous paradigmatic stance of German-speaking academic economics, as criticized in recent debates on pluralism in economics, but also identifies venues of change within the existing paradigmatic setup. Furthermore, we show that a big share of German economists, active in economic policy advice bodies have institutional connections to the ordoliberal research program. This politico-ideological conjunction thus provides a possible explanation for the "German special path" in economic policy after the financial crisis.

Keywords: socio-economics, economic sociology, institutions, economic thought, Germany

JEL: A11, A14, B5

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1 The global financial crisis and the paradigmatic structure of economics?

The global financial crisis (GFC) in 2007/08 and the subsequent economic crises in Europe and the US initiated a period of increased concern for and intensified criticism of the current state of academic economics. On the one hand academic economics has been criticized by in- and outsiders for not having warned against financial fragility and increasing imbalances in financial markets (Colander *et al.*, 2009; Krugman, 2009) as well as for lacking an integrated and comprehensive framework for understanding financial calamities ex-post (Beker, 2010). On the other hand distinct economists and economic advisors were made personally responsible for the financial turmoil, because their direct support for financial market de-regulation policies in the run-up to the crisis was interpreted as a result of conflicting interests due to the personal entanglement of the financial industry and academic economics (Carrick-Hagenbarth & Epstein, 2012). On a more general level it was argued that the dominant economic paradigm, which is organized around the axiomatic core of neoclassical economics, leads to a systemic underestimation of financial instability (Beker, 2010; Elster, 2009; Kotz, 2009) and leaves one ill-equipped to understand the dynamics of the crisis. These findings further added to the debate on the paradigmatic development of current economics as in recent years many economists urged for a more pluralistic orientation of economic science in academic research and teaching (Dobusch & Kapeller, 2012; Garnett & Reardon, 2011; Hodgson *et al.*, 1992).[1] Several student initiatives claimed for a more pluralistic approach to economics teaching in recent years, which particularly criticized the unrealistic assumptions and models of mainstream economics. Pioneered by a French students movement for a "Post-Austistic Economics" (later: Real Word Economics) in 2000, initiatives for a more pluralistic and realistic economic teaching gained additional momentum after the GFC. In 2014 the International Students initiative for Pluralism in Economics (ISIPE, 2014), comprising more the 100 student groups in 34 countries, published a plea for pluralism and interdisciplinarity in economic teaching "help to enrich teaching and research and reinvigorate the discipline" (ISIPE, 2014), which has also found support among a series of prominent economists.

These pleas and petitions can be interpreted as a reaction to the emergence of a rather narrow and closed conceptual monism in economics, which is accompanied by a corresponding marginalization of alternative approaches, typically subsumed under the label 'heterodox economics' (Lee, 2008; Rothschild, 2008a). After the GFC and despite the manifold criticisms put up against the neoclassical mainstream, there are hardly any indications of a fundamental paradigmatic shift in economics (Pühringer, 2015; Green & Hay 2014; Earl, 2010). Earl (2010, p. 222) thus summarizes this controversy by observing that although

"critics of the mainstream are much better organized in institutional terms […] there is little sign that they are having any significant impact on the economics establishment. It anything, mainstream economics is in a stronger position than it ever was to resist internal pressures for change than it ever was."

Parallel to these academic conflicts arising from the monist paradigmatic structure of current economics, a similar discourse focusing on economic policy has evolved, which also centers on the narrow recipes of standard economics in times of depression. Conventional economic policy in this contexts mimics the lopsidedness of economics as an academic discipline and leads to a "silo approach" (OECD, 2014) in economic policy making. Particularly during the Eurozone crisis, Germany was confronted with opposition when implementing austerity-oriented economic policy in Europe, with some vocal critics coming from the US and the UK (Krugman, 2012, 2013; Münchau, 2014; The Economist, 2015). In the debate it was argued, that specific conservative and orthodox interpretations of standard textbook models characterize German economics and therefore policy advice is still influenced by ordoliberal ideas. In contrast, Michael Burda, head of the German Economic Association (the *Verein für Socialpolitik*), claims that there is nothing peculiar about German economics, which is well in line with the consensus developed by the global scientific community (Burda, 2015). While there is a growing recent literature on the impact of ordoliberal tradition on academic economics and economic policy in Germany (Bonefeld, 2012; Dullien & Guérot, 2012; Feld *et al.*, 2015; Pühringer, 2018), up to our knowledge there are hardly any comprehensive empirical studies on the current paradigmatic and political orientation of the German economics profession[2]. By filling this gap, this paper not only contributes to the general debate on change in economics, but also allows to a better illumination of the supposed characteristics of economics in Germany, Austria and Switzerland.

Specifically, this paper studies the research interests, paradigmatic orientation and political orientation of about 700 full professors of economics at universities located in German-speaking countries. In doing so, we captured biographical and institutional information on these professorships by collecting data from personal and professional websites as well as publicly available CVs to derive indicators on the research orientation, the paradigmatic stance and the political involvement. The main contribution of this paper, hence, is empirical in nature. It documents the fairly homogenous paradigmatic stance of German-speaking academic economics, as criticized in recent debates on pluralism in economics, but also identifies venues of change within the existing paradigmatic setup. Additionally, we show that

the impact of ordoliberal thought is unique to German economics and can hardly be traced in Austria or Switzerland. Although only a quite small total fraction of German economists is actively engaged in the ordoliberal research program, we found that ordoliberal approaches still play a major role when it comes to designing and implementing economic policies.

The remainder of this paper is structured as follows. The following section provides an overview to current debates on the paradigmatic structure of economics and the status of heterodox economic approaches, respectively. Section three introduces our methodological approach, which especially consists of an indicator-based analysis for the academic research profiles of German-speaking economists. In section four we discuss our main findings regarding sociodemographic data, the academic research profile of German-speaking economists as well as their political involvement. Section five offers some concluding remarks.

2 Mainstream, heterodoxy and the debate on pluralism

The debate on the marginalization of specific schools of economic thought and the supposed homogeneity of the economic mainstream is manifold. On the one hand, particularly neoclassical mainstream economists argue that the existence of a strong core in current economics is to be interpreted as a sign of maturity and intellectual health of the economic discipline in general (Lazear, 2000). Garnett and Reardon (2011) label the claim that there exists a scientific consensus about "good" economics, i.e. core concepts, a common axiomatic structure and a defined set of accepted methods as "Samuelsonian monism". This Samuelsonian monism approach had a direct impact on the marginalization of economic schools outside the mainstream as well as the decrease in interest in the history of economic thought. While both tendencies can be interpreted as indicator of paradigmatic closure, the latter also signifies an increasingly ignorant attitude towards the history of the own discipline. A critique of this bias against the history of economic thought was yet provided in the early by Kenneth Boulding (1971), asking provocatively: "After Samuelson who needs Adam Smith?".

Beside this strong belief in monism as a sign of scientific maturity other authors claimed that mainstream economics comprises a set of heterogeneous approaches and, thus, emphasize that a potential marginalization of heterodox economic approaches is not based on paradigmatic differences. Colander *et al*. (2004) for instance draw on the great variety of different theoretical models to stress the diversity of the economic mainstream. They characterize the

economic profession „as a diverse evolving set of ideas, loosely held together by its modeling approach to economic problems“(Colander *et al*. 2004, p. 487). Therefore they detect an “edge of economics” which consists of novel research fields, such as evolutionary game theory, ecological economics, behavioral/psychological economics, complexity theory, experimental economics, computer simulation und advanced econometric work dealing with the limitations of classical statistics. In this view, these different areas only have a loose common axiomatic basis in terms of the tenets of neoclassical economics. In a similar vein Davis (2006) argues that since the 1980s the dominance of neoclassical economics has been superseded by a plural mainstream. Colander *et al*. (2004, 490) thus state that “Mainstream economics consists of ideas that the elite in the profession finds acceptable”. Colander (2010) and Colander *et al*. (2010) moreover argue that the marginalization of heterodox economists rests on their “purported poor conduct, misconceptions and bad attitudes” (Thornton, 2017).

In contrast, particularly heterodox economists emphasize the narrow paradigmatic boundaries of current mainstream economics, which heavily impact academic institutions, like the job market or the publication culture. In addition, these authors identify active strategies to marginalize heterodox approaches. Stilwell (2006, 2016) and Lee (2009) for instance argue that the marginalization of heterodoxy is also caused by intolerance, suppression and discrimination by the economic mainstream. Dobusch and Kapeller (2009) show how the path-dependent characteristics of paradigmatic development (Kuhn, 1970; Sterman & Wittenberg, 1999) also operate in economics. Kapeller (2010) adds that citation-based evaluation of research quality favor mainstream economic approaches due to an inherent size-bias in evaluative citation metrics (greater fields exhibit more citations, which is translated into higher measures of quality). Additionally, these contributions show that mainstream economic journals are hardly responsive to heterodox approaches, while heterodox contribution do indeed recognize, discuss and cite the mainstream view.

Due to the increasing importance of academic rankings in the current research governance in academia under the heading of new public management (Osterloh & Frey, 2015) this citation behavior also translates into marginalization processes of heterodox economists at the universities. The French Association for Political Economy (FAPE) for instance found that due to a “size-bias” favoring mainstream publications the share of heterodox economists appointed tenured position in economics departments sharply declined after the introduction of citation-based scoring system by the French government in 2005 (FAPE, 2014). Lee (2007) as well as Lee & Elsner (2010) found a similar case indicating the “power of scientometrics”

in economics (Aistleitner *et al.*, 2016) to the disadvantage of heterodox economists in the application of the "Research Assessment Exercise" in UK in the early 2000s.

Summing up, the definition of an economic mainstream is a contested issue and often depends on the positioning and the individual perspective of those scholars, who suggest a specific categorization (Dow, 2002). Nevertheless, there is a broad consensus that various economic approaches exist outside the mainstream's research programs, which are commonly termed "heterodox economics". Although heterodox economic approaches are based on a quite heterogeneous set of economic theories and methodologies (Dequech, 2008; Dobusch & Kapeller, 2012; Lawson, 2005), they also share a series of conceptual features (e.g. fundamental uncertainty, endogenous money, the importance of increasing returns etc.) and have the common perception of being excluded from the professional elite of economics. John King for instance denotes that "economics is unique among the social sciences in having a single monolithic mainstream, which is either unaware of or actively hostile to alternative approaches" (King, 2013, p. 17). Blaug (2001, p. 147) argued that heterodoxy transcends the notion of being united only by opposition, when stating that heterodoxy "no doubt has many sources but at its foundation takes its departure […] from a certain type of mind, a certain congenial style of thinking". Nonetheless the post-crisis years witnessed an some improvement with regard to the institutionalization of heterodox economics (with heterodox societies, websites, journals, see e.g. Heterodox Economics Newsletter, 2017, No. 207). In the field of economic research particularly the Heterodox Economic Directory (HED), first published in 2005 (Lee *et al.*, 2005) and actually in its sixth edition plays a crucial role as it "aims to document the institutional diversity and breadth of the heterodox economic community within academia" (Kapeller & Springholz, 2016, preface) and was comprised in a common effort of economists from different heterodox schools. Among other things, the HED comprises a collection of 144 economic journals, which are open to submissions incorporating heterodox perspectives, served as indicator for the categorization of the paradigmatic profile of economists in this paper.

Due to its perceived marginalization many heterodox economists tend to portray economics in a dichotomous vein, sometimes neglecting the internal developments and contradictions within mainstream economics (Bowles & Gintis, 2000). Lee (2011, p. 540) for instance states: "Economics is often perceived as a discipline with contested scientific inquiry; the two main protagonists are mainstream or neoclassical economics and heterodox economics. (Heise & Thieme, 2015) even use the Lakatosian metaphor of a "battlefield of paradigms" (Lakatos,

1974) to describe the decline of heterodox economics in Germany. On the other hand, over the years there have been several attempts to stress the need for more pluralism in economics and hence explicitly include neoclassical mainstream economics. From a rather pragmatic history of economic thought perspective Blaug (2001, p. 156) argues that "there is nothing predetermined about our current theories and if years ago, economics had taken another turn at a critical nodal point, we would today be advocating a different theory." Rothschild (1999, p. 5) emphasizes that a "plurality of paradigms in economics and in social sciences in general is not only an obvious fact but also a necessary and desirable phenomenon in a very complex and continually changing subject". The call for pluralism in economic science often implicitly includes the claim for more interdisciplinarity (recently see ISIPE, 2014) and thus is directed against "economic imperialism", i.e. the belief in the supremacy of standard economic methodology resting on individualism, scarcity, optimizing rationality, equilibrium and efficiency (Lazear, 2000; Stigler & Becker, 1977); for a critique see: (Fine, 2002; Fine & Milonakis, 2009; Rothschild, 2008b).

Recent empirical studies in the field of economic sociology found out that economics occupies a unique position within the social sciences not only in terms of its paradigmatic homogeneity, but also in terms of citation behavior and interdisciplinary responsiveness (Fourcade, 2009; Fourcade *et al.*, 2015). Fourcade *et al.* (2015) thus conclude that economics is (i) more elite-oriented, (ii) more hierarchically structured than other social sciences, (iii) situated in an insular position within the social sciences and (iv) more ignorant of other social sciences. While the first two findings indicate that the "elite in the profession" (as invoked by Colander *et al*. 2004, 490) is composed out of rather narrow groups of interrelated institutions and actors, the latter two findings point to the self-image of economics as the "queen of social sciences". This self-image is nicely epitomized by Freeman (1999, p. 141), who stressed that "sociologists and political scientists have less powerful analytical tools and know less than we do, or so we believe". This implicit pecking order among the social sciences also reflects in the perception of many economists that their discipline is "more rigorous" or even "more scientific" and hence also a "genuine science" (Lazear, 2000, p. 99)[3]. Gross & Simmons (2007) found that the approval rate to the statement "In general, interdisciplinary knowledge is better than knowledge obtained by a single discipline" strongly differs between economics (42%) and other social sciences (sociology: 73%, political science: 60%, psychology: 79%). In the same vein, Colander (2005, p. 184) showed that among economics graduate students 77% of the respondents agreed that "economics is the most scientific of the social sciences."

3 Methodological approach

Central object of this study presented is an empirical survey of professors of economics based at universities in Germany, Austria and Switzerland conducted from autumn 2014 to spring 2015. The study based on online biographical research of CVs and information provided by websites of universities and other scientific associations. We decided to focus on full professors at public universities in the German-speaking area holding a chair in economics departments and thus excluded assistant and associate professors and professors at Universities of Applied Sciences (Fachhochschulen, FH). Despite university reforms in recent years induced by the Bologna Process of the EU the academic education sector in Germany is still rather hierarchically structured and reflects the long tradition of the German "Ordinarienuniversitäten" organized around "professorial chairs" (Lehrstühle) (Stichweh, 2010) and thus "holding a chair" at a university department is still an indicator of academic reputation in German speaking countries. For instance, many Universities of Applied Sciences are not allowed to award doctorates and thus are strongly constrained in terms of academic reproduction.

In a preparatory step, we compiled a list of economics departments in 89 German-speaking universities and identified all full professors of economics leading to a sample of 708 economists, which served as basis for our detailed analysis of the research interests, paradigmatic orientation and political involvement of German-speaking economics.

The basic analytical approach employed in this paper is based on the methodological framework of an indicator-based typology of academic research of German-speaking economists. Over the last years indicator-based analyses and typologies gained importance in research on the field of academic economics on several levels (Bühlmann *et al.*, 2016; Fourcade, 2009; Lebaron, 2001). In this paper, we follow a twofold approach in order to analyze the academic research profile of German-speaking economists in order to highlight their current paradigmatic structure. On the one hand, we use self-proclaimed research interests and research areas (e.g. labor market economics, industrial economics) as well as JEL codes of journal publications for the classification of research profiles. On the other hand, we develop two distinct indicators for the paradigmatic classification of economists (Mainstream-Heterodoxy-Classification; Colander's classification of plurality in the mainstream) based on their publication record in economic journals. Additionally, in our analysis of political involvement we focus on the impact of ordoliberalism in current German economic policies. Specifically, we analyze to what extent German economists can be

assigned to an ordoliberal research agenda, either due to their journal publications or due to personal links to ordoliberal institutions, actively engaging in policy advice and compare them to their Austrian and Swiss colleagues. We furthermore also examined the publication lists for the relevance of the GFC as a distinct research topic in order to analyze the alleged crisis-resistance of (mainstream) economics, put forward in the aftermath of the crisis by some critics.

For the classification of research interests, we first distinguished between the sub-disciplines microeconomics, macroeconomics, public economics (the German commonly used term "Finanzwissenschaft"), econometrics & statistics as well as "miscellaneous" (for those economists, who have a broad range of research interests covering more than one sub-discipline). The classification itself is primarily based on self-proclaimed research interests as well as JEL-codes of journal publications.

In course of the Mainstream-Heterodoxy-Classification, we first analyzed publications in economic journals, listed in the Social Science Citation Index (SSCI) as a proxy for paradigmatic orientation and thus used the list of heterodox economics journals in the Heterodox Economics Directory (HED) as signifier for heterodox research orientation. Therefore, we differentiated between mainstream economics, heterodox economics and plural mainstream according to the classification scheme presented in Table 1. Hence, economists are classified as heterodox if more than 50% of their publication outlets for refereed works are in journals listed in the HED. If economists do publish in heterodox outlets, but the majority of there is published in outlets devoted to mainstream contributions they are assigned a middle category dubbed as 'plural mainstream'[4]. In both cases we use a threshold value of three publications in heterodox outlets, before a researcher is assigned to a one of these two categories; consequently economists belong to the mainstream, if less than two publications are in heterodox journals.

The second indicator to classify the paradigmatic structure of German-speaking economics in this paper build upon Colander *et al.*'s (2004) emphasis on a plurality of the current economic mainstream. Thus, we use their suggested catch-words evolutionary game theory, ecological economics, behavioral economics, complexity theory, experimental economics, computer simulation und econometric work dealing with the limitations of classical statistics for the category Colander's edge (Lavoie, 2012)[5]. Hence, in the variable of plurality of the mainstream according to Colander we assigned economists to Colander' edge, if one of these catch-words is used either in their journal publications or in their self-proclaimed research

interests, or to standard economics in case if none of this catch-words apply. With this twofold approach of classification we aim to provide an empirical basis for a more thorough debate on the current paradigmatic state of German-speaking economics.

In order to detect the influence of German ordoliberalism to the academic research of German-speaking economists, we again analyzed journal publications. Regarding to this a number of specific journals with an ordoliberal tradition (e.g. ORDO, Zeitschrift für Wirtschaftspolitik) served as an indicator for an economist's proximity to German ordoliberalism. We designed a binary variable in order to conceptualize reference to ordoliberal conceptions: If at least three publications could be identified in this specific (ordoliberal) journals, we assumed an ordoliberal reference.

Finally, we try to investigate the relevance of GFC in the academic research area. For this, we inspected the publication titles of economics professors since 2008 to distinguish between three different categories of economists: those who do not make reference to the crisis (< 5% of publications), those who do so weakly (> 5% but less than 50% of publications) and those with strong research interest in the crisis (at least 50% of publications).

Table 1: Classification scheme for academic research profile

Variable	Indicator	Operationalization
Mainstream-Heterodoxy-Classification	Number of publications in journals listed in the Heterodox Economics Directory	**Mainstream**: < 2 publications **Plural mainstream**: min 3 but less than 50% of total journal publications **Heterodox economics**: min 50% of total journal publications
Colander's classification of plurality in the mainstream	Presence of catch words for research areas in Colander's "edge of economics" in research interests or journal publications	**Standard economics**: no catch words **Colander's edge**: catch words in research interests or journal publication
Reference to German ordoliberalism	Number of publications in specific ordoliberal journals	**No reference**: < 2 publications **Ordoliberal reference**: min 3 publications
Financial crisis-relevance in academic research	Presence of catch words referring to the global financial crisis in publications	**No reference to crisis:** less than 5% of publications **Weak reference to crisis**: min 5% but less than 50% of publications **Strong reference to crisis:** min 50% of publications

4 Empirical results of the research profile and political orientation of German-speaking economists

This section provides the main findings of our analysis in three steps. First we offer sociodemographic and descriptive statistical results of our sample of German-speaking economists (4.1). In the second part, the central outcomes of the academic research profile of German-speaking economics as illustrated in Table 1 will presented. We therefore also group the economics professors according to the age they obtain their Ph.D. (academic age) in order to show main trends in the economics profession (4.2). In the third part we show the results of our analysis of the political involvement of German-speaking economists (4.3).

4.1 Sociodemografic data

In sum our sample consisted of 708 economists in 89 universities. The largest universities in our sample according to their number of full professors are the University of Bonn with 26, the University of Frankfurt and the LMU Munich with 23, the University of Mannheim with 22 and the University of Hamburg and the University of Cologne with 18 full professors of economics. The percentage of female professors in our sample (Table 2) is 12,43%, which is quite similar to the gender ratio of economics professors in other studies (Ceci *et al.*, 2014; Ginther & Kahn, 2014).

Table 2 Percentage of female professors in German-speaking economics

Country	Universities	Full professors of economics [%]	Proportion of women [%]
Austria	7	45 (6.36%)	13.33%
Switzerland	10	95 (13.42%)	7.37%
Germany	72	569 (80.37%)	13.36%
total	89	708	12.43%

We furthermore examined the nationality of economists in our sample. About 90% of economics professors at German universities are also German citizens, whereas in Austria the proportion of “domestic” professors is 60.9% and in Switzerland only 34.8%. These results can be interpreted as a sign of a common German-speaking labor market as well as a sign of a higher degree of international orientation of Swiss universities.

4.2 Academic research profile

The analysis of the research interests (Table 3) shows the quantitative relevance of distinct sub-fields in the German-speaking economics profession. Specifically, we found that out of the 708 economists 357 (50.5%) have their research focus in microeconomic sub-fields such as industrial economics, behavioral economics, environmental economics or health

economics[6]. 133 (18.8%) of the economists in our sample can be assigned to macroeconomics with the sub-fields monetary economics. A rather high number of 126 (17.8%) economists, mainly coming from earlier cohorts, have a research focus covering at least two sub-disciplines (particularly microeconomics and econometrics, microeconomics and public finance as well as macroeconomics and public finance) and thus are assigned to the category miscellaneous. The dominant position of microeconomic research among economists in the German-speaking area is even more pronounced in Austria, where for nearly 58% microeconomics is their main area of research. In turn, the field of macroeconomics seems to have a minor priority in Austria compared to the two other German-speaking countries.

Table 3 Main research interests in German-speaking economics

Economists' main research interests[%]

Economics sub-discipline	in Austria	in Switzerland	in Germany	total
Microeconomics	57.78%	46.81%	50.53%	50.50%
Macroeconomics	13.33%	20.21%	19.01%	18.81%
Public economics	2.22%	6.38%	7.04%	6.65%
Econometrics and statistics	6.67%	5.32%	6.34%	6.22%
Miscellaneous	20.00%	21.28%	17.08%	17.82%

The Mainstream-Heterodoxy-Classification of German-speaking economics in this paper is based on publications in refereed economics journals. Thus excluded other forms of publications such as books and articles in edited volumes, to better mirror the fact that modern professional economics academic research is strongly organized by journals (Card & DellaVigna, 2013; Combes & Linnemer, 2010)[7].

Therefore we developed a categorization scheme for paradigmatic orientation comprising the categories 'mainstream' (<3 publication in heterodox journal listed in the HED), 'plural mainstream' (>2 and <50% of the journal publications in heterodox journals) and 'heterodox economics' (>2 and >50% of the journal publications in heterodox journals). The results are presented below in Table 4.

Table 4: Mainstream-Heterodoxy classification in German-speaking economics

Economists and their paradigmatic orientation [%]

Classification	in Austria	in Switzerland	in Germany	total
Mainstream	80.00%	94.68%	91.61%	91.27%
Plural mainstream	11.11%	4.26%	5.36%	5.58%
Heterodox economics	8.89%	1.06%	3.04%	3.15%

We found that in total only 22 (3.1%) out of 699 professors of economics at German-speaking universities can be assigned to the category heterodox economics and 39 (5.6%) to the category plural mainstream. In contrast, more than nine out of ten economists (91.3%) holding a chair at a German-speaking university are nearly exclusively publishing their research in mainstream oriented economic journals. Even if we expand the threshold for the category plural mainstream to at least two publications in one of the over 140 heterodox economic journals listed in the HED, the percentage of mainstream economists is only slightly reduced to still 88.1%[8], thereby indicating that our results quite robust to the choice of threshold. The empirical results indicate that heterodox economics is in a marginalized minority position in current German-speaking economics. If we again take a look at national differences we see that Austrian economics exhibits a slightly more plural orientation, compared to Switzerland and Germany, where the joined share of heterodox and plural economists is only about 5% respectively 8%.

In order to analyze the structure of German-speaking heterodox economics and to highlight centers of heterodoxy it seems promising to take a closer look on the institutional distribution of heterodox and plural mainstream economics departments. We found that the University of Bremen (3 out of 3 full professors of economics are assigned to the non-mainstream) is the only institution with a heterodox majority among its professors. With the Technical University of Darmstadt, the University of Oldenburg (each 3 out of 5), the University of Jena (3 out of 6) and the University of Lüneburg (2 out of 4), there are only four more universities with a majority of non-mainstream economists. This institutional distribution of German-speaking economics according to their paradigmatic orientation indicates that heterodox and plural mainstream centers are mainly located at relatively small universities. In contrast, the big, prestigious universities at the top of institutional economics rankings are overwhelmingly dominated by mainstream economists. For instance, the economics department at the University of Bonn (best-placed German university (World Rank No. 29) in the Shanghai Ranking 2017) employs only mainstream economists. Furthermore, the professors at the second and third best-placed German universities LMU Munich (No. 42) and the University of Mannheim (No. 76-100) were also exclusively assigned to the mainstream. The 22 heterodox economics professors according to our publication-based classification are mainly working in the fields of Post-Keynesian Economics (8) and Evolutionary Economics (7). Furthermore, the areas Ecological Economics and History of Economic Thought (each 3) seem to have little presence in German-speaking economics.

For the second indicator in order to analyze the current paradigmatic structure of German-speaking economics we took into account Colander's argument of a plurality of the economic mainstream at the "edge of economics", potentially bridging the border between mainstream and heterodox economics. We therefore searched for catch words in economists' research interests or journal publications indicating "Colanders' edge". We found that about 17% of all German-speaking economists can be assigned to this "edge of economics". Particularly the areas behavioral and experimental economics have become part of the mainstream. More than 85% of all professors in "Colanders edge" can be subordinated to those two sub-disciplines. In contrast, about 74% remain in the category of standard economics[9]. The percentage of economists in "Colanders edge" in Austria (22.22%) is higher than in Germany (16.79%) or in Switzerland (15.96%). This result together with the Mainstream-Heterodoxy-Classification (Table 4) provides further evidence that the dominance of neoclassical economics is even more pronounced in Germany and Switzerland compared to Austria.

The percentage of economists in the category "Colander's edge" is much higher than the percentage of plural economists according to the other paradigmatic classification. Whereas the latter is characterized by its openness to heterodox approaches, this does not seem to apply for the group of economists in "Colander's edge". Only 8.4% of these economists were classified to the plural mainstream, compared to 5.4% of standard economists. Particularly economists with publications or research interests in "behavioral economics" are hardly responsive for heterodox approaches as also put forward by Dobusch and Kapeller (2012) as well as Gloetzl and Aigner (2017). Only 1.3% of economists working and/or publishing in the field of behavioral economics can assigned to the plural mainstream, i.e. published at least 3 times in heterodox journals. Based on this empirical evidence, Colander's argument of a plurality of the mainstream and thus a higher responsiveness to heterodox economics does not seem to hold. In contrast, the "edge of economics" may expand the range of mainstream economics, but will obvious neither initiate a paradigm change, nor a change in the marginalization of heterodox economics.

In our analysis of the current paradigmatic structure of German-speaking economics, we furthermore focused on the relevance of the ordoliberal research program in Germany, Austria and Switzerland. The results show that in sum 48 (6.9%) out of 699 professors have references to ordoliberalism. Unsurprisingly, ordoliberalism is relatively more important for German economics: 8.04% of German economists have references to the ordoliberal research program.

Table 5 Influence of ordoliberal conception in German-speaking economics

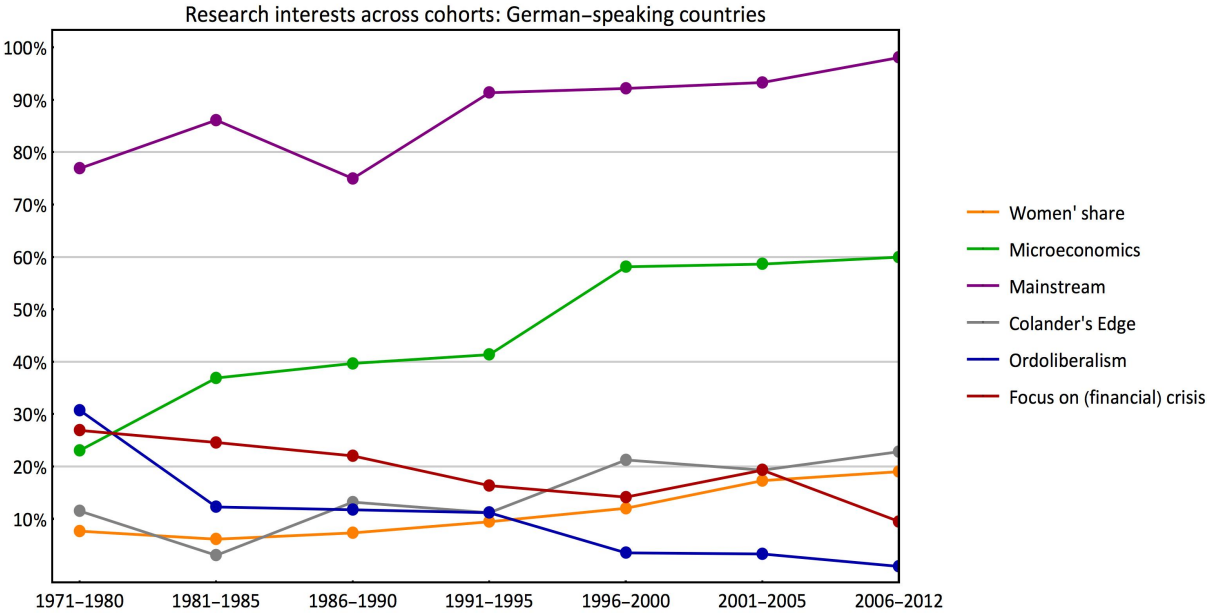
Ordoliberalism	Economists and their reference to ordoliberalism [%]			
	in Austria	in Switzerland	in Germany	total
Ordoliberal reference	2.22%	2.13%	8.04%	6.87%
No reference	97.78%	97.87%	91.96%	93.13%

We further analyzed, whether conducted research on the GFC, as it was sometimes interpreted as a potential "crisis of economics". In contrast to the Mainstream-Heterodoxy-Classification we expanded our basis of publications for this analysis. In addition to publications in refereed journals, we also considered books and articles in edited volumes to reach a broader audience than just academic economists. We found that only a minor proportion of economics professors (14.4%) ever published books or journal articles dealing with the GFC. Most of them (12.6%) have a weak reference to crisis. Consequently not even 2% of German-speaking economists focused on the GFC as their main research topic. Depending on the paradigmatic orientation of the authors the importance of the GFC varies. Thus the GFC is a much more important research issue for heterodox economists – approximately one third (31.8%) of all professors assigned to the category heterodox economics published articles or books dealing with the GFC. Hence, our results provide further empirical evidence for a crisis resistance of particularly mainstream economics (Acemoglu, 2009; Pühringer & Hirte, 2015).

So far, we focused our analysis on the current state of German-speaking economics. In a further step we moreover tried to point out some future development trends in German speaking economics. Hence, we divided our sample of economists according to their academic age (date of their doctorate) into seven different cohorts (Figure 1) and found six m main trends: First, the percentage of female economics professors in German-speaking economics increased steadily form 7.7% in the oldest to above 19% in the youngest cohort. Second, there is a growing focus on microeconomic research topics, especially by economics obtaining their Ph.D. since the 1990s, as recently also argued by Angrist *et al.* (2017). One reason for this trend may be the increased micro foundation of macroeconomic models e.g. in New classical macroeconomics. Third, the percentage of neoclassical mainstream economists is rising continually with one exception in the second half of the 1980s from 76.9% in the oldest to 98.1% in the youngest cohort. Consequently, the marginalization of heterodox economics is not only continuing but also perpetuating in German-speaking economics. Fourth, Colanders´s emphasis on a plurality of the current economic mainstream seems to have very limited validity. Although there was a moderate increase of economists in "Colanders edge", this increase was primarily caused by the two areas behavioral and

experimental economics. Fifth, mainly elder economists have references to ordoliberal thought. 30.8% of the oldest, but only about 1% of the youngest cohort is engaged in the ordoliberal research program and thus ordoliberalism is marginalized on an academic level as well. Sixth, the GFC as a research topic has a slightly higher relevance for older cohorts compared to younger economists.

Figure 1 Research Interests across cohorts



4.3 Political involvement of economists

In the final step of our analysis of German-speaking economists we tried to highlight the political involvement and political orientation of German-speaking economists. The perceived orthodox and conservative view of German economists was at the center of a rather harsh controversy between U.S. and German economists in the debate on crisis policies after the GFC. Stiglitz, for instance, pointed out, "What is very clearly true (…) is that German economics is different from economics everywhere else in the world. They still believe in austerity even though the IMF, which is not a left-wing organization, has said austerity doesn't work." (Phillips, 2016) By stressing the alleged extraordinary political orientation of German economists Stiglitz is implicitly referring to several studies on the ideological bias and voting behavior of economists (Hedengren *et al.*, 2010; Klein & Stern, 2009). Most of the authors argue that a majority of economists are voting for center-left political parties and are rather supporting liberal or as for instance Klein *et al.* (2012) is arguing "interventionist policies".

In order to examine the alleged "conservative" orientation of German economists, we researched connections of German economists[10] to think tanks, institutions and organizations with a clear politico-economic and/or ideological agenda. Furthermore we focused our analysis on members of the three main German scientific economic policy advice institutions, namely the German Council of Economic Experts ("Sachverständigenrat", GCEE) as well as the scientific advisory board of the German Ministry of Finance and Economics, respectively. In the overall sample of 569 German economists we found that there are substantially more and closer connections of economists to ordoliberal or neoliberal German think tanks, such as Initiative for New Social Market Economy (INSM), the Kronberger Kreis or the Friedrich von Hayek Society, than to think tanks with an "interventionist", Keynesian orientation or a link to the trade unions (e.g. "Keynes Society", "Böckler Foundation"). Furthermore at least 89 German economists signed the pronounced neoliberal petition "Hamburger Appell" (Funke *et al.*, 2005), announced in the run-up of the general election in 2005 an pushing for rigid labor market reforms. Nevertheless, although the number of German economists with links to the German "neoliberal thought collective"[11] (Mirowski & Plehwe, 2009) is much higher than the number of assumingly center-left, "interventionist" economists, they only represent a small fraction of the whole sample of German economists. Consequently, the great majority of German economists do not seem to be linked to pronounced politico-ideological networks. The focus on members of the main German economic policy advice institutions, however, changes this first impression. Out of the 87 current member of the two scientific advisory boards of the German Ministry of Finance and Economics and the GCEE members since 1990 40 (46%) can be assigned to the "German neoliberal thought collective" and only two (2.3%) to a Keynesian, alternative, union-linked network. Furthermore we found that 41.1% of these policy advisors in our sample had references to the ordoliberal research program in their research output. To sum up, on the one hand there is only a rather weak "conservative" and/or ordoliberal bias in the overall population of German economists. On the other hand, if we focus on those economists, who are actively engaged in economic policy advice and serve as members of policy advice institutions "German neoliberal" economists are in a very strong position, particularly compared to their assumingly economic center-left, "interventionist" colleagues. This dominance of "German neoliberal thought collective" in German economic policy advice institutions might offer an explanation for the relatively strong German claim for austerity measures after the crisis. Our results furthermore support the thesis of increased impact of ordoliberalism in recent European crisis polices (Biebricher, 2014; Blyth, 2013; Bonefeld, 2012; Lechevalier, 2015).

5 Conclusion

This paper provides an analysis of the institutional and paradigmatic structure of German-speaking economics as well as an analysis of the political orientation of German economists. We thus offer an empirical basis for the debate on the current status of heterodox and pluralist economic approaches in the German-speaking area. For this purpose we applied an indicator-based analysis of CVs and research profiles of more than 700 professors of economics at German, Austrian and Swiss universities and used publications in economic journals, enlisted in the Heterodox Economics Directory as a proxy for a heterodox paradigmatic orientation. Furthermore, we used Colander's thesis of a plurality of the current economic mainstream and identified a substantial share of economists working and/or publishing in the "edge of economics" according to Colander's classification.

To sum up, we found that the percentage of "heterodox" and "plural mainstream" economists is only about 3% and 5.5%, respectively. Conversely more than 91% of German-speaking professors of economics can be assigned to the economic mainstream, organized around a neoclassical paradigmatic core. We furthermore hardly found any empirical evidence for Colander's argument of a plurality of the mainstream particularly in the "edge of economics", or at least it does not manifest in regular publications of economists in the "edge of economics" in heterodox economic journals. Our empirical research showed that heterodox and plural mainstream economists are almost exclusively situated at small universities or small economic department (e.g. the universities of Bremen or Oldenburg), whereas large universities are dominated by mainstream economic approaches. Given the paradigmatic structure of economics at German-speaking universities it seems to be a promising strategy to establish "isles of heterodoxy" as recently argued by (Graupe & Schwaetzer, 2017) in order to overcome the continuing marginalization of heterodox and plural approaches. During the last years at least some steps in this direction have been taken. Furthermore, we found that a substantial share (8%) among German economists has references to the ordoliberal research program. Only few economists (14.45%) refer to the GFC in their publications. The percentage, however, is much higher for heterodox economists (31.82%). Concerning the political orientation of German economists we found that German economic policy advice institutions are still dominated by economists belonging to the "German neoliberal thought collective", organized around think tanks and institutions such as the Initiative for New Social Market Economy, the Kronberger Kreis, the Eucken Institute or the Friedrich von Hayek Society. This politico-ideological bias, however, does not apply for the overall population of

German economists. Nevertheless, the ideological bias of German economic policy advice might explain the rather conservative austerity-oriented crisis reaction of German economics.

References

Acemoglu, D. (2009). The Crisis of 2008: Lessons for and from Economics. *Critical Review*, 185–194.

Aistleitner, M., Kapeller, J. & Steinerberger, S. (2016). The Power of Scientometrics and the Development of Economics. *ICAE Working Paper Series*. (46).

Angrist, J., Azoulay, P., Ellison, G., Hill, R. & Lu, S. F. (2017). Economic Research Evolves: Fields and Styles. *American Economic Review*, *107*(5), 293–297.

Beker, V. (2010). On the economic crisis and the crisis of economics. *real-world economics review*. (56), 72–94.

Biebricher, T. (2014). The Return of Ordoliberalism in Europe: Notes on a Research Agenda: Notes on a Research Agenda. *Rivista quadrimestrale on-line: www. i-lex. it*. (21).

Blaug, M. (2001). No History of Ideas, Please, We're Economists. *Journal of Economic Perspectives*, *15*(1).

Blyth, M. (2013). *Austerity: The history of a dangerous idea*. Oxford: Oxford Univ. Press.

Bonefeld, W. (2012). Freedom and the strong state: on German ordoliberalism. *New Political Economy*, *17*(5), 633–656.

Boulding, K. E. (1971). After Samuelson, Who Needs Adam Smith? *History of political economy*, *3*(2), 225–237.

Bowles, S. & Gintis, H. (2000). Walrasian Economics in Retrospect. *Quarterly Journal of Economics*, *115*(4), 1411–1439.

Bühlmann, F., Rossier, T. & Benz, P. (2016). *The Elite Placement Power of Professors of Law and Economic Sciences*, unpublished manuscript.

Burda, M. (2015). Dispelling three myths on economics in Germany. *VOX, CEPR's Policy Portal*, *2015*.

Card, D. & DellaVigna, S. (2013). Nine Facts about Top Journals in Economics. *NBER Working Paper Series*. (18665).

Carrick-Hagenbarth, J. & Epstein, G. A. (2012). Dangerous interconnectedness: Economists' conflicts of interest, ideology and financial crisis. *Cambridge Journal of Economics*, *36*(1), 43–63.

Ceci, S. J., Ginther, D. K., Kahn, S. & Williams, W. M. (2014). Women in Academic Science: A Changing Landscape. *Psychological science in the public interest : a journal of the American Psychological Society*, *15*(3), 75–141.

Colander, D. (2005). What Economists Teach and What Economists Do. *The Journal of Economic Education*, *36*(3), 249–260.

Colander, D. (2010). Moving Beyond the Rhetoric of Pluralism: Suggestions for an 'Inside‐the‐Mainstream' Heterodoxy. In R. F. Garnett, E. K. Olsen, & M. Starr (Eds.), *Economic pluralism* (pp. 36–47). London: Routledge.

Colander, D., Goldberg, M., Haas, A., Juselius, K., Kirman, A., Lux, T. & Sloth, B. (2009). The Financial Crisis and the Systemic Failure of the Economics Profession. *Critical Review*, *21*(2-3), 249–267.

Colander, D., Holt, R. & Rosser, B. (2004). The changing face of mainstream economics. *Review of Political Economy*, *16*(4), 485–499.

Colander, D., Holt, R. P. F. & Rosser, J. B. (2010). How to win friends and (possibly) influence mainstream economists. *Journal of Post Keynesian Economics*, *32*(3), 397–408.

Combes, P.-P. & Linnemer, L. (2010). Inferring missing citations: A quantitative multi-criteria ranking of all journals in economics. *Groupement de Recherche en Economie Quantitative d'Aix Marseille (GREQAM) Document de Tracvail*. (2010-28).

Davis, J. (2006). The turn in economics: Neoclassical dominance to mainstream pluralism? *Journal of Institutional Economics*, *2*(01), 1.

Dequech, D. (2008). Neoclassical, mainstream, orthodox, and heterodox economics. *Journal of Post Keynesian Economics*, *30*(2), 279–302.

Dobusch, L. & Kapeller, J. (2009). "Why is Economics not an Evolutionary Science?: " New Answers to Veblen's Old Question. *Journal of Economic Issues*, *43*(4), 867–898.

Dobusch, L. & Kapeller, J. (2012). Heterodox United vs. Mainstream City?: Sketching a Framework for Interested Pluralism in Economics. *Journal of Economic Issues*, *46*(4), 1035–1058.

Dow, S. C. (2002). *Economic methodology: An inquiry*. Oxford: Oxford University Press.

Dullien, S. & Guérot, U. (2012). The long shadow of ordoliberalism: germany's approach to the euro crisis. *European Council on Foreign Relations Policy Brief.*

Earl, P. E. (2010). Economics fit for the Queen: A pessimistic assessment of its prospects. *Prometheus*, *28*(3), 209–225.

Elster, J. (2009). Excessive Ambitions. *Capitalism and Society*, *4*(2).

FAPE. (2014). *Evolution of Economics Professors' Recruitment since 2000 in France: The End of Pluralism*. Retrieved from http://www.heterodoxnews.com/HEN/attach/hen167/FAPE_pluralism_france.pdf

Feld, L. P., Köhler, E. A. & Nientiedt, D. (2015). Ordoliberalism, Pragmatism and the Eurozone Crisis: How the German Tradition Shaped Economic Policy in Europe. *CESifo Working Paper*. (5368).

Fine, B. (2002). "Economic imperialism": a view from the periphery. *Review of Radical Political Economics*, *34*(2), 187–201.

Fine, B. & Milonakis, D. (2009). *From economics imperialism to freakonomics: The shifting boundaries between economics and other social sciences* (1. publ). *Economics as social theory*. London: Routledge.

Fourcade, M. (2009). *Economists and societies: discipline and profession in the United States, Britain, and France, 1890s to 1990s*. *Princeton studies in cultural sociology*. Princeton: Princeton University Press.

Fourcade, M., Ollion, E. & Algan, Y. (2015). The Superiority of Economists. *Journal of Economic Perspectives*, *29*(1), 89–114.

Freeman, R. B. (1999). It's Better Being an Economist (But Don't Tell Anyone). *Journal of Economic Perspectives*, *13*(3), 139–146.

Frey, B. S., Humbert, S. & Schneider, F. (2007). Was denken deutsche Ökonomen?: Eine empirische Auswertung einer Internetbefragung unter den Mitgliedern des Vereins für Socialpolitik im Sommer 2006. *Perspektiven der Wirtschaftspolitik*, *8*(4), 359–377.

Funke, M., Lucke, B. & Straubhaar, T. (2005). Hamburger Appell. *URL: www. wiso. unihamburg. de/fileadmin/wiso_vwl_iwk/paper/appell. pdf (dl: 22.03. 2013)*.

Garnett, R. & Reardon, J. E. (2011). Pluralism in Economics Education. *Texas Christian University Working Paper Series*. (11-02).

Ginther, D. K. & Kahn, S. (2014). Women's Careers in Academic Social Science: Progress, Pitfalls, and Plateaus. In A. Lanteri & J. Vromen (Eds.), *The Economics of Economists: Institutional Setting, Individual Incentives, and Future Prospects* (pp. 285–314). Cambridge UK: Cambridge Univ. Press.

Gloetzl, F. & Aigner, E. (2017). *Six Dimensions of Concentration in Economics: Scientometric Evidence from a Large Scale Data Set* (Working Paper Series No. 15/2017). Retrieved from http://epub.wu.ac.at/5488/1/EcolEcon_WorkingPaper_2017_15.pdf

Graupe, S. & Schwaetzer, H. (2017). *Bildungsorte transformativ-reflexiver Ökonomie* (Working Paper).

Green, J. & Hay, C. (2014). Towards a New Political Economy of the Crisis: Getting What Went Wrong Right. *New Political Economy*, *20*(3), 331–341.

Gross, N. & Simmons, S. (2007). The social and poltical views of American professors. *Working Paper*.

Hedengren, D., Klein, D. B. & Milton, C. (2010). Economist Petitions: Ideology Revealed · Econ Journal Watch: petitions,economists,signatories. *Econ Journal Watch*, *7*(3), 288–319.

Heise, A. & Thieme, S. (2015). What happened to heterodox economics in Germany after the 1970s. *ZÖSS Discussion Papers*. (4/2015).

Heise, A. & Thieme, S. (2016). The Short Rise and Long Fall of Heterodox Economics in Germany After the 1970s: Explorations in a Scientific Field of Power and Struggle. *Journal of Economic Issues*, *50*(4), 1105–1130.

Hodgson, G., Mäki, U. & McCloskey, D. N. (1992). A plea for a rigorous and pluralistic economics. *American Economic Review*, *82*, xxv.

ISIPE. (2014). *An international student call for pluralism in economics*. Retrieved from http://www.isipe.net/open-letter/

Kapeller, J. (2010). Citation Metrics: Serious Drawbacks, Perverse Incentives, and Strategic Options for Heterodox Economics. *American Journal of Economics and Sociology*, *69*(5), 1376–1408.

Kapeller, J. & Springholz, F. (2016). *Heterodox Economic Directory*. Retrieved from http://www.heterodoxnews.com/hed/hed6.pdf

King, J. E. (2013). A case for pluralism in economics. *The Economic and Labour Relations Review*, *24*(1), 17–31.

Klein, D. B., Davis, W. L., Figgins, B. G. & Hedengren, D. (2012). Characteristics of the Members of Twelve Economic Associations: Voting, Policy Views, and Favorite Economists. *Econ Journal Watch*, *9*(2), 149–162.

Klein, D. B. & Stern, C. (2009). By the numbers: The ideological profile of professors. In Robert Mantano, Richard E. Redding, & Frederick M. Hess (Eds.), *The Politically Correct University: Problems, Scope, and Reform* (pp. 15–37). Washington: AEI Press.

Kotz, D. M. (2009). The Financial and Economic Crisis of 2008: A Systemic Crisis of Neoliberal Capitalism. *Review of Radical Political Economics*, *41*(3), 305–317.

Krugman, P. (2009, September 2). How Did Economists Get It So Wrong? *The New York Times*. Retrieved from http://www.nytimes.com/2009/09/06/magazine/06Economic-t.html

Krugman, P. (2012, July 9). Sinners, Repent! *The New York Times*. Retrieved from https://krugman.blogs.nytimes.com/2012/07/09/sinners-repent/

Krugman, P. (2013, June 6). How the Case for Austerity Has Crumbled. *The New York Review of Books*. Retrieved from http://www.nybooks.com/articles/2013/06/06/how-case-austerity-has-crumbled/

Kuhn, T. S. (1970). *The structure of scientific revolutions* (2d ed., enl). *International encyclopedia of unified science. Foundations of the unity of science, v. 2, no. 2*. Chicago: University of Chicago Press.

Kurz, H. D. (2006). Whither the history of economic thought?: Going nowhere rather slowly?∗. *The European Journal of the History of Economic Thought*, *13*(4), 463–488.

Lakatos, I. (1974). Falsifikation und die Methodologie wissenschaftlicher Forschungsprogramme. In I. Lakatos & A. Musgrave (Eds.), *Abhandlungen des Internationalen Kolloquiums ueber die Philosophie der Wissenschaft: Vol. 4. Kritik und Erkenntnisfortschritt* (pp. 89–189). Braunschweig: Vieweg.

Lavoie, M. (2012). Perspectives for Post-Keynesian Economics. *Review of Political Economy*, *24*(2), 321–335.

Lawson, T. (2005). The nature of heterodox economics. *Cambridge Journal of Economics*, *30*(4), 483–505.

Lazear, E. P. (2000). Economic Imperialism. *The Quarterly Journal of Economics*, *115*(1), 99–146.

Lebaron, F. (2001). Economists and the Economic Order.: The field of economists and the field of power in France. *European Societies*, *3*(1), 91–110.

Lechevalier, A. (2015). Eucken under the Pillow: The Ordoliberal Imprint on Social Europe. In A. Lechevalier (Ed.), *Social Europe - a dead end. What the Eurozone crisis is doing to Europe's social dimension* (Vol. 4, pp. 49–102). Copenhagen: DJØF-Publishing.

Lee, F. S. (2007). The Research Assessment Exercise, the state and the dominance of mainstream economics in British universities. *Cambridge Journal of Economics*, *31*(2), 309–325.

Lee, F. S. (2008). Heterodox economics. In S. N. Durlauf (Ed.), *The new Palgrave dictionary of economics* (2nd ed., pp. 2–6). Basingstoke: Palgrave Macmillan.

Lee, F. S. (2009). *A history of heterodox economics: Challenging the mainstream in the twentieth century*. *Routledge advances in heterodox economics: Vol. 4*. London, New York: Routledge.

Lee, F. S. (2011). The Pluralism Debate in Heterodox Economics. *Review of Radical Political Economics*, *43*(4), 540–551.

Lee, F. S., Cohn, S., Schneider, G. & Quick, P. (2005). *Informational Directory for Heterodox Economists: Journals, Book Series, Websites and Graduate and Undergraduate Programs*. Retrieved from http://cas2.umkc.edu/ECON/economics/faculty/Lee/docs/HeterodoxDirectory2nd.pdf

Lee, F. S. & Elsner, W. (Eds.). (2010). *Studies in economic reform and social justice: Evaluating economic research in a contested discipline; rankings, pluralism, and the future of heterodox economics*. Chichester: Wiley-Blackwell.

Mirowski, P. & Plehwe, D. (Eds.). (2009). *The road from Mont Pèlerin: the making of the neoliberal thought collective*. Cambridge, Mass.: Harvard University Press.

Münchau, W. (2014, November 16). The wacky economics of Germany's parallel universe. *Financial Times*. Retrieved from http://www.ft.com/intl/cms/s/0/e257ed96-6b2c-11e4-be68-00144feabdc0.html#axzz3zftCZwc2

OECD. (2014). *New approaches to economic challenges: Meeting of the OECD Council at Ministerial Level*. Retrieved from http://www.oecd.org/mcm/C-MIN(2014)2-ENG.pdf

Osterloh, M. & Frey, B. S. (2015). Ranking games. *Evaluation review*, *39*(1), 102–129.

Phillips, M. (2016, August 16). Joseph Stiglitz on Brexit, Europe's long cycle of crisis, and why German economics is different. *Quartz*. Retrieved from https://qz.com/1161496/which-republicans-voted-against-the-tax-bill/

Plehwe, D. & Walpen, B. (2006). Between network and complex organization: The making of neoliberal knowledge and hegemony. In D. Plehwe, B. Walpen, & G. Neunhöffer (Eds.), *Neoliberal hegemony : a global critique* (pp. 27–50). London: Routledge.

Pühringer, S. (2015). *The strange non-crisis of economics. Economic crisis and crisis policies in economic and political discourses* (Dissertation). Johannes Kepler University, Linz.

Pühringer, S. (2018). The success story of ordoliberalism as guiding principle of German economic policy. In J. Hien & C. Joerges (Eds.), *Ordoliberalism. Law and the rule of economics* (pp. 134–158). Oxford, Portland, Oregon: Hart Publishing, an imprint of Bloomsbury Publishing Plc.

Pühringer, S. & Hirte, K. (2015). The financial crisis as a heart attack: Discourse profiles of economists in the financial crisis. *Journal of Language and Politics*, *14*(4), 599–625.

Rothschild, K. W. (1999). To push and to be pushed. *The American Economist*, *43*(1), 1–8.

Rothschild, K. W. (2008a). Apropos Keynesianer. In H. Hagemann (Ed.), *Schriften der Keynes-Gesellschaft: Bd. 1. Aus gesamtwirtschaftlicher Sicht. Festschrift für Jürgen Kromphardt* (pp. 19–29). Marburg: Metropolis-Verl.

Rothschild, K. W. (2008b). Economic Imperialism. *Analyse & Kritik*, *30*(2), 723–733.

Sterman, J. D. & Wittenberg, J. (1999). Path Dependence, Competition, and Succession in the Dynamics of Scientific Revolution. *Organization Science*, *10*(3), 322–341.

Stichweh, R. (2010). *Universität nach Bologna: Zur sozialen Form der Massenuniversität ; [Vortrag anlässlich des Dies Academicus 2008, Bamberg]. Luzerner Universitätsreden: Vol. 19*. Luzern: Univ.

Stigler, G. & Becker, G. (1977). De Gustibus Non Est Disputandum. *American Economic Review*, *67*(2), 76–90.

Stilwell, F. J. B. (2006). *Political economy: The contest of economic ideas* (2. ed.). Oxford: Oxford Univ. Press.

Stilwell, F. J. B. (2016). Pluralism in economics: Challenges by and for heterodoxy. In *Reclaiming pluralism in economics : essays in honour of John E. King* (pp. 14–31). London: Routledge.

The Economist (2015, May 9). Of rules and order: German ordoliberalism has had a big influence on policy during the euro crisis. *The Economist*. Retrieved from http://www.economist.com/node/21650565/print

Thornton, T. B. (2017). *From economics to political economy: The problems, promises and solutions of pluralist economics*. *New political economy: Vol. 19*. London, New York: Routledge.

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[1] In their petition published in the American Economic Review Hodgson *et al*. (1992, xxv) for instance called for a "new spirit of pluralism in economics, involving critical conversation and tolerant communication between different approaches".

[2] (Heise & Thieme, 2016) for instance solely analyzed the marginalization of German heterodox economics since the 1960s. In 2006 the German Economic Association (GEA) conducted a survey of its members, where they found out that 80% of the respondents agreed with the statement, neoclassical economics is important for solving recent economic problems ((Frey *et al.*, 2007, p. 361). The paradigmatic orientation of economists in detail however is just a minor point in the surveys of the GEA.

[3] Kurz 2006, p. 466 referring to the marginalization of the field of history of economic thought argues that the strongest verdict "comes from those who think that economics is, or should be, shaped in the image of the 'hard' sciences, preferably physics. While opinions to this effect have been sounded from an early time onwards, they appear to have gained weight over the years." (Lazear, 2000, p. 99) starts his paper on "economic imperialism" with the statement that "by almost any market test, economics is the premier social sciences" and directly compares economics to the physical sciences.

[4] We moreover checked the robustness of our results and varied the threshold value for the classification of plural mainstream (see 4.2).

[5] Following the argument put forward in recent scientometric studies (e.g. (Dobusch & Kapeller, 2012) we further included economic geography to this list of catch words.

[6] In sum, seven out of the ten most frequently self-proclaimed research fields are related to the field of microeconomics.

[7] Due to the focus on publications in refereed journals our sample is slightly reduced from 708 to 699 economists, because 9 of them have not published in academic journals or there was no publication record available.

[8] If we, in contrast restrict the category plural mainstream to at least 4 publications in heterodox journals the percentage of mainstream economists increases to 94.28%.

[9] Economists assigned to heterodox economics in the paradigmatic classification remain in this category. We furthermore identified a group of about 4%, which assigned to the category "alternative and interdisciplinary approaches" (economic history, economic ethics or economic sociology)

[10] For the purpose of this analysis we focused only on German economists and hence excluded their Swiss and Austrian colleagues.

[11] We use the definition of a "German neoliberal thought collective" in accordance with, for instance (Plehwe & Walpen, 2006) or recently also (Pühringer, 2018), for think tanks or institutions, in which at least one of the founding or leading members is also member of the Mont Pélerin Society, the core neoliberal think tank.