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Ideology, education, and financial literacy
Uncovering neoliberal ideology in assessment studies of economics education – the case of Austria

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- Curricula serve to make neoliberalism 'palatable' to a wide majority
- Neoclassical economic theory and neoliberal economics education are closely intertwined
- Neoliberals exclude the social and political spheres from economics education
- Current assessment studies are deeply rooted in neoliberal thought
- Assessment studies of economic and/or financial literacy of Austrian students serve mainly political interests

Purpose: This contribution contextualizes the current debate on financial literacy within the discourses on ideology in curriculum design. The critical review questions the concept of financial literacy as used in assessment studies in Austria, revealing the studies' ideological assumptions and their embeddedness within neoliberal ideology.

Methodology: A critical conception of ideology and of curriculum developed by Thompson (1990) and Apple (2004) serves as the basis for analysis. Categories of analysis are derived from neoclassical economics and neoliberal thought. The research is based on a qualitative content analysis of nine recent studies that all argue for enhanced economics education.

Findings: The authors of the studies analysed write in support of an individualistic, naturalized and "apolitical" understanding of economic and financial literacy. This means that they conceive the economy as a closed system, separate from society and politics. The suggested education programs, consequently, are linked mainly to the neoliberal political project, with a lack of emancipatory or transformative ideas.

Keywords: Ideology, neoliberalism, neoclassical economics, economic and financial literacy, secondary education

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1 Introduction

Financial literacy is a concept discussed widely within economics education (Aprea et al., 2016; Arthur, 2012; Geiger, Meretz, & Liening, 2016, p. 73; Marron, 2014; Retzmann, 2011; Willis, 2017). Thus, its measurement in the form of assessment studies is considered increasingly important (Kaiser & Menkhoff, 2017, pp. 7; 30). In 2012, the OECD extended its Program for International Student Assessment (PISA) with an optional test in financial literacy, and 18 out of 65 countries participated (OECD, 2014, p. 24). Whether a cross-country comparison like PISA or a national study, regardless of reference group and year of investigation, the results of the studies are similar: students' knowledge of economics is unsatisfactory. The lack of economic and financial literacy seems to be ubiquitous (Greimel-Fuhrmann, Bonomo, & Rosner, 2015, p. V; Kaiser & Menkhoff, 2017, p. 2). Results of these empircal studies have informed numerous public relation efforts by the authors that aim for a change of the setup of economics education in Austria (Stieger & Jekel 2018).

However, the significance that the concept of financial literacy has within economics education is just as unclear as the concept itself (Nelson & Sheffrin, 1991, Willis, 2017). Analysis of different publications shows that there are a number of terms (financial literacy, financial competence, financial ability, financial capability, financial knowledge, financial education) that are used interchangeably in the literature and the media (Huston, 2010, p. 296). As Huston (2010) concludes, it is problematic that over three-quarters of 71 studies analysed do not define the measured construct and use the terms 'financial literacy' and 'financial knowledge' as synonyms (p. 303). Accordingly, the dominant way to assess financial literacy is to test participants' financial factual knowledge and numerical skills. Such studies try to predict how participants will behave in financial situations, based on the percentage of correct answers (Fernandes, Lynch Jr., & Netemeyer, 2014, p. 1862). In the view of these publications, financial literacy is the ability of individuals to understand basic financial vocabulary like inflation, interest rate and compound interest, and to manage money by making cost-benefit calculations (Willis, 2017, p. 16). Regarding the latter, it is questionable to what extent financial literacy understood in this way is different from numeracy (Bay, Catasús, & Johed, 2014, p. 40). Other conceptions add non-cognitive criteria and highlight the relevance of motivations and attitudes. Consequently, financial literacy interventions should increase the confidence of individuals in their financial ability and their trust in the financial system. In this view, soft skills such as a propensity for planning, or confidence and willingness to take risk, are rated higher than content knowledge and are addressed in educational programs (Fernandes et al., 2014, p. 1873; Willis, 2017, p. 17). 'Acting responsibly' in these contexts is understood as taking the right level of risk relative to one's means, age, income etc. (Arthur, 2012, p. 81). Despite the methodological issues that arise when it is not clear what exactly should be measured, it is debatable whether these constructs can be measured by assessment studies at all (Huston, 2010, p. 303). Nevertheless, the data acquired in these assessment studies serve as a basis for educational policy claims that aim to foster and enlarge economic and financial education (Stieger & Jekel, 2018).

Most of the literature on financial literacy is based on the belief that there is a causal link between financial knowledge, sound financial behaviour and the financial well-being of individuals. Thus every individual is seen as having the potential to become a capable investor (Bay et al., 2014, p. 37), regardless of financial resources (Willis, 2017, p. 18). As the ability of the individual to take responsibility for their own financial well-being, financial literacy is seen as an "essential life skill" (OECD, 2014, p. 118) which increases not only individual but also societal welfare. In this view, educational programs should enable individuals to handle the

growing complexity of financial products, economic crises, and the dynamics of financial markets (Council for Economic Education, 2013, p. v). The secret recipe of this conception of financial literacy: individuals have only to read market signals correctly, so that they can react accordingly (Arthur, 2012, p. 5). Education is reduced to a training of 'desired behaviour', especially in the field of personal finance (i.e. money management, risk planning, wealth creation, retirement planning, taking out loans and credit) that is deemed necessary and beneficial (Geiger et al., 2016, p. 73; Kaiser & Menkhoff, 2017, p. 2; Lusardi & Mitchell, 2014, p. 6; OECD, 2014, p. 118). This conception ignores the inherent tendency of capitalism to create crises, as it presents markets as controllable if they function properly and proper functioning depends only on the right behaviour of market participants (Arthur, 2012, p. 5).

Critical analyses of financial literacy educational programs shows that economic risks are not presented as being mainly socially constructed, but as created by single individuals who are therefore responsible for economic risk management (Arthur, 2012, pp. 10; 14). Accordingly, as responsibility lies only with individual citizens, this belief also trivializes opportunities to shape the economic circumstances of life politically (Willis, 2008, p. 418; 2017, p. 25). Collective risk management is of relatively minor importance, as financial literacy seems to offer individualized solutions (Arthur, 2012, p. xi) and citizens are becoming "entrepreneurs" of their own risk (Marron, 2014, p. 495). This ongoing individualisation of socially-caused economic risk brings new tasks for the state, which should ensure (i.e. by educational programs) that citizens are capable of managing economic risk on their own. Financial education is characterized by "a particular kind of governmentality". It aims to educate people towards an idealized picture of consumerism – namely towards becoming a lifelong, self-confident, self-interested, rational and responsible consumer of financial products and services (Marron, 2014, pp. 494-498). Such a consumer fits perfectly with the neoliberal belief system, as we will show later on. As many critics rightly note, financial literacy, like economic literacy, is a powerful ideological concept within education debates that has to be questioned (Arthur, 2012; Bay et al., 2014, p. 38; Hedtke, 2015; Marron, 2014; Weber, 2010; Willis, 2017, p. 16).

So far, the intention and political interests behind assessment studies have scarcely been analysed in detail. For this reason, our research reflects critically on the ideological assumptions held by study authors regarding both economics and financial education. We question the purpose of different economic and financial literacy assessment studies in Austria, using a methodological tool that allows us to analyse the inherent ideological tenets. By examining nine recent assessment studies in Austria, we show how the current discourses arguing for economic and financial literacy are embedded in neoliberal ideology. We suspect that case studies in different countries would show similar results.

In the following section (Section 2), we discuss the concept of ideology and demonstrate its usefulness as a tool for critical analysis. To examine the ideological underpinnings in the Austrian studies, we develop an analytical framework that systematizes the key assumptions of neoliberalism and neoclassical economics that are the main influencing factors in current educational policy debates (Apple, 2004, p. 2). We also highlight the relationship between ideology and education. In the third section, we explain our research design and study approach in detail before discussing our research findings in Section 4. Finally, we argue for a broader multi-paradigmatic understanding of economics education, namely a conception of socioeconomic education that is able to foster critique, solidarity and sustainability – a conception that is not rooted exclusively at the level of the individual, but one that grounds education in a broader political, social, historical and environmental context, and which by

doing so aims at a deep understanding of how a socially-embedded economy works and how it can be shaped collectively and ethically.

2 Ideology, Neoliberalism and Education

> "The flowering of human society depends on two factors: the intellectual power of outstanding men to conceive sound social and economic theories, and the ability of these or other men to make these ideologies palatable to the majority" [1] (von Mises, 1949, p. 860)

Ideology is a useful concept for revealing study authors' understanding of an economics education that fosters neoliberal educational policies and that tries, intentionally or otherwise, to influence thinking in favour of the neoliberal project. Central for our discussion is the ideology of neoliberalism, which has strongly influenced, and continues to influence, discourses on education (Apple, 2004, p. 2). Therefore, we outline the key assumptions of neoliberalism, the relationship between neoliberalism and neoclassical economics, and how, in general, neoliberal policies influence education on different levels. The basic assumptions of neoliberalism and neoclassical economics, together with a critical conception of ideology, form our analytical framework.

2.1 Ideology

Ideologies can be defined as sets of beliefs that represent a societal phenomenon, a social process or a social structure in a distorted, one-sided, naturalizing, depersonalizing or essentializing way. Whether intentionally or not, they represent dominant interests (Apple, 2004, p. 18; Thompson, 1990, p. 32). Domination (e.g. in terms of class, gender or ethnicity) is central for the study of ideology. As Thompson (building on the works of Marx) stresses, ideologies serve to maintain relations of domination. The power exercised by ideology is asymmetrical, excluding, and inaccessible to others (Thompson, 1990, p. 59). Ideologies aim to conceal those dominant interests that serve only a part of society (Apple, 2004, p. 18; Thompson, 1990, p. 32) as they have to be shared by the majority to become hegemonic. Hegemonic ideologies are the "central, effective and dominant system of meanings, values and action" that influence our consciousness and form "the only world" (Apple, 2004, p. 4). As ideologies serve to produce and reproduce beliefs and values that are shared collectively, they foster the adherence of individuals to the existing social order. The hegemonic ideology ensures that, even if there are notable inequalities, exploitation and other social woes, the existing social relations are accepted and reproduced. So the crucial feature of ideology is to aim to win people over and to create a unity under asymmetrical power relations. This can be ensured in two ways: the dominant group exercises hegemony either throughout society or by direct domination through the state (Gramsci, 1971, p. 145; Thompson, 1990, pp. 86-87). The school is one of those highly relevant sites where ideological struggles take place. Schools as 'ideological state apparatuses' enforce ideologies by rituals and habits (Althusser, 2014: 186). As social practices, ideologies depend on people legitimating and representing the belief systems as common sense. Even if scientific authority has a crucial role in this context, findings have to be disseminated. This highlights the importance of educators, who are in a position to construct and reconstruct (or, of course, deconstruct) ideologies (Apple, 1981, p. 77).

The aim of this study of ideology is therefore to show how ideology works to establish and sustain structured social relations that benefit some people and/or groups more than others

(Thompson, 1990; Apple, 2004). Consequently, ideology can be defined as "meaning in the service of power" (Thompson, 1990: 7). As ideologies give meaning, they have a "material existence" in the conduct of individuals (Althusser, 2014: 185): they are lived practices. Based on these considerations, we define ideology as *a social practice that constructs and reconstructs relations of domination*. Our focus is on the function of ideology – that is, how ideology works, within curriculum discourses on financial and economics education, in order to establish or sustain relations of domination represented by the ideology of neoliberalism.

2.2 Neoliberalism and neoclassical economics: two sides of the same coin

Neoliberalism is a buzzword and lacks a precise definition; it is not a single concept; it is neither a unified tradition (Thorsen, 2010, p. 202), nor a coherent and consistent system of beliefs (Weiner, 2003, p. 22). However, neoliberal ideology is comprised by a set of key assumptions regarding the organization of society and individuals that underpin and influence policy-making around the world (Thorsen, 2010, p. 206) and in society as a whole (Dardot & Laval, 2013, p. 111).

Our research relates in two ways to the ideology of neoliberalism and the scientific paradigm of neoclassical economics. First, as already mentioned, neoliberal ideologies have had a considerable influence on education and continue to influence it (Apple, 2004, p. 2; McGregor, 2009, p. 345). Second, neoclassical economics currently is the dominant theory. On the one hand, it has a hegemonic role in economics, especially in economics education (the term 'mainstream economics' is therefore synonymous with 'neoclassical economics'), and on the other it relates to neoliberalism (Agboola, 2015, p. 417). Below, we explain the relationship between neoclassical economics and neoliberalism, and give a brief history of neoliberal theory and an overview of its fundamental assumptions. The synthesis of that discussion results in a categorical framework for our analysis.

Neoliberalism

The term 'neoliberalism' is most commonly used in critiques of economic liberalization (Boas & Gans-Morse, 2009, p. 138), and is thus associated with three typical sets of economic reform policies: (1) pushing ahead the liberalization of the economy; (2) reducing the role of the state by privatization, and (3) contributing to fiscal austerity and macroeconomic stabilization by controlling money supply, avoiding budget deficits, and curtailing government subsidies (Boas & Gans-Morse, 2009, p. 143). Accordingly, David Harvey defines neoliberalism as "a theory of political economic practices that proposes that human well-being can best be advanced by liberating individual entrepreneurial freedoms and skills within an institutional framework characterized by strong private property rights, free markets, and free trade" (Harvey, 2005, p. 2).

Even if concrete economic reform policies are the aspect of economic liberalism that is most mentioned in the literature (Boas & Gans-Morse, 2009, p. 143; Thorsen, 2010, p. 189), there are other conceptions of neoliberalism. Neoliberalism defined as an academic paradigm goes beyond the domain of political economy: it is a theoretical paradigm that is closely related to neoclassical economics. Furthermore, understood as a development model, neoliberalism describes a means to modernization. In this sense, it analyses how a society should be organised to ensure well-being and prosperity, and thus assumes more the form of an ideology composed of a specific set of normative ideas. Finally, neoliberalism understood as an ideology consists of assumptions that affect greatly our economic, political and cultural

understanding, or more precisely our societal self-image. In sum, the term neoliberalism is used in overlapping ways to characterize different economic, social and political phenomena (Boas & Gans-Morse, 2009, pp. 143-144; Dardot & Laval, 2013, p. 7). As for our study the conception of neoliberalism as an ideology is especially important, we focus in the following historical review on how and why these ideological transformations took place, and what effects they had and still do have on our conceptions of how society and its members should be.

Neoclassical economics and neoliberal ideology: history and key assumptions

Neoliberalism and neoclassical economics not only share the prefix "neo", but also have a close reciprocal relationship. The theory of neoclassical economics has always been an important reference point for policymaking and influenced the development of neoliberal ideology even there are also notable differences between the two. "Neoclassical economics played the role of an meta-ideology as it legitimized, mathematically and 'scientifically' neoliberal ideology" (Bresser-Pereira, 2010, p. 2). As Krätke (1999) observes, neoclassical economics is the dominating economic theory behind neoliberal practices as it provides the theoretical justification and underpinning for neoliberal ideology (i.e. the neoclassical assumption that the free market is the best for everyone, not just for a select few).

Neoclassical economics emerged in the 1870s and attempted to address the challenges created by the rise and spread of capitalism (i.e. social tensions regarding questions of wealth distribution between capitalists and workers) with the aim to explain the "allocation of scarce resources amongst unlimited wants" (Reardon, 2017, p. 321). During the 1870s to 1930s, the key elements of neoclassical theory were developed. The new perspective focused on the economic behaviour of individuals and entrepreneurs (i.e. workers, consumers, businesses), based on the theoretical concepts of wants of individuals and productive abilities (e.g. technologies and resources), choice, self-interest, utility maximization, competition and value, or price. By focusing on marginal utility, neoclassicals developed a subjective value and price theory. The behaviour and interaction of individual economic agents explains price (i.e. the neoclassical hypothesis is to explain every price by the interaction of wants and productive abilities) (Reardon, 2017, p. 321; Strober, 2003, p. 135; Wolff & Resnick, 2012). In sum, the aim of neoclassical economics is to explain all economic phenomena in terms of an optimal situation for fulfilling human needs given scarce resources. According to neoclassical theory, there are two pillars of capitalist society: private property rights, and free, competitive markets. The freedom of individuals is to sell and buy in free and competitive markets. Markets are the focus point of neoclassical economics. Other forms of economic activity that do not take place in the market context are ignored. This should lead to the situation of maximum wealth creation, called 'general market equilibrium' – that is, a situation without unused production abilities or unfulfilled needs (Krätke, 1999, pp. 108-109; Wolff & Resnick, 2012, pp. 37-38).

Even if a free market theoretically leads to prosperity, in reality a perfectly competitive market has never existed. Rather, large monopolistic, oligopolistic and cartelized companies emerged in the second half of the nineteenth century (1860-1900), accompanied by rising nationalism. Government policies that tended towards the principle of laissez-faire which is implicit in neoclassical theory did not lead to the ideal situation of market equilibrium. The Great Depression in the 1930s put neoclassical theory under further pressure, and it became very clear that understandings that stemmed from neoclassical economic theory failed to inform developments of existing economic systems (Dardot & Laval, 2013).

An alternative framework provided by Keynes in his *General Theory of Employment, Interest, and Money* created a new macroeconomic foundation for economics. Keynes's theory is "concerned with the behaviour of the economic system as a whole,—with aggregate incomes, aggregate profits, aggregate output, aggregate employment, aggregate investment, aggregate saving rather than with the incomes, profits, output, employment, investment and saving of particular industries, firms or individuals" (Keynes, 1939, p. xxxii). The paradigm shift from the microeconomic perspective to Keynesianism as the most influential economic theory on policymaking lasted until the late 1970s. The central problem of declining rates of profit, the two oil shocks of 1973 and 1979 and the associated phenomenon of stagflation brought Keynesian-informed policies into disrepute (Dardot & Laval, 2013, p. 152; Zeller, 2011, p. 66). The so-called "neoliberal turn" of political practices in the 1980s, of which the Thatcher and Reagan governments are among the best-known representatives, had been set in motion long before and was accompanied by an already long-running ideological struggle (Dardot & Laval, 2013).

Neoliberalism was "an ideology out of time" (Bresser-Pereira, 2010, p. 16) as it sought to offer a feasible counter-position to state interventionism (i.e. Keynesianism) and collectivism (i.e. socialism) (Boas & Gans-Morse, 2009, p. 145; Bresser-Pereira, 2010, p. 16; Dardot & Laval, 2013, p. 46). The foundations of neoliberalism were laid as long ago as 1938, when the Walter Lippmann Colloquium aimed to create the International Study centre for the Renovation of Liberalism. This was followed in 1947 with the founding of the Mont Perelin Society by Hayek and Röpke. These neoliberal think tanks engineered the ideological shift with the support of a number of well-known economists, namely Hayek, von Mises, Stigler and Friedman. In the 1980s in particular, there followed a systematic critique of the welfare state and the praising of the free market through propaganda and education. As Friedman mentions, a free economy "gives people what they want instead of what a particular group thinks they ought to want. Underlying most arguments against the free market is a lack of belief in freedom itself" (Friedman & Friedman, 1962, p. 15). For Friedman and his followers, the market is a component of freedom, and the best way to ensure freedom while other organizations of the economy function through coercion. However, while neoliberals do not question the concept of the free market, the ability of individuals and institutions to adapt themselves to the changing economic order is seen as problematic. As Hayek claims, "[W]e can agree that the economic problem of society is mainly one of rapid adaptation to changes in the particular circumstances of time and place" (Hayek, 1945, p. 524). Therefore, it is necessary to equip individuals and institutions with the ability to adapt rapidly. A normative set of neoliberal ideas, what Dardot & Laval call "a global normative framework" (Dardot & Laval, 2013, p. 7), should allow this.

The neoliberal normative framework: conception of the market, the state, and individuals

The main conceptual pillars of neoliberalism regard the interaction of individuals and the state within the organization of the market. The neoliberal normative framework limits market-based relations not to the economic sphere, but concerns all areas of life. It is a framework within which "[t]he enterprise is promoted to rank of model of subjectivation: everyone is an enterprise to be managed and a capital to be made to bear fruit" (Dardot & Laval, 2013, p. 302).

Table 1 summarizes the basic assumptions of neoliberalism regarding the state, the individual and the market, which are analysed in greater detail below.

Table 1: Key assumptions of neoliberal ideology regarding markets, the state and individuals

Markets (Bresser-Pereira, 2010; Dardot & Laval, 2013; Krätke, 1999)	**State** (Bessner & Sparke, 2017; Dardot & Laval, 2013; Harvey, 2005; Thorsen, 2010)	**Individuals** (Bay-Cheng, Fitz, Alizaga, & Zucker, 2015; Bröckling, 2007; Dardot & Laval, 2013)
social mechanism and best means of (economic) organization	entrepreneurial government	self-motivating individuals, entrepreneurs
principle of competition	competitive – follow market principle	competitive – follow market principle
constructed	construction and reconstruction of markets by legal framework measuring performance and controlling state apparatuses of rewards and sanctions	self-governed, self-responsible, self-interested, and autonomous responding to normative and legal frameworks

In contrast to neoclassical economics, neoliberal ideology is not limited to the economic dimension. Instead, all dimensions of human life adhere to market principles (Bay-Cheng et al., 2015, p. 72) and affect society as a whole (Dardot & Laval, 2013, p. 18). Neoclassical economics and neoliberalism share the conception that the free market is the best way to organize societies (Harvey, 2005, p. 5), but unlike neoclassical economics the market is seen by neoliberals as a "constructivist project" (Dardot & Laval, 2013, p. 301) that requires the intervention of the state and is based on a specific system of law. In the neoliberal view, social reality follows an "implacable and irreversible logic" (Giroux, 2002, p. 428) and the focus, as in neoclassical economics, is on individuals following methodological individualism. However, the concept of the neoliberal individual is slightly different. The principle of competitiveness is of paramount importance. Driven by self-interest, individuals are competitive and try to maximize their benefits. The necessity to respond to market signals functions as a disciplining mechanism. The never-ending practice of self-improvement leads to self-optimization and maximization of human capital. Individuals become increasingly entrepreneurs of the self (Dardot & Laval, 2013; Gryl & Naumann, 2016, pp. 21-23; McGregor, 2009, p. 345).

Therefore, misfortune or fortune are not traceable to structural injustices; they are outcomes of personal effort and decisions. Consequently, social and political interventions and regulations are not necessary (Bay-Cheng et al., 2015, p. 83; Thorsen, 2010, p. 204), and can even be harmful as they run counter to the principle of competition (Bay-Cheng et al., 2015, p. 74). Nonetheless, the state is of the highest importance. Using a set of disciplinary techniques, the state has to structure the field of action of individuals. To give the market participants stability, the state must fix a stable framework and market order. Further, it must construct the maximum number of market situations. The form of the market, with its inherent principle of competition, has to be accepted by individuals as the natural order (Dardot & Laval, 2013). Neoliberal policy practices therefore focus on strengthening the market by deregulation, liberalization and privatization (Ptak, 2017, p. 47). The behaviour of individuals is further influenced by mechanisms of reward and sanction, which are accompanied by monitoring and evaluation systems. However, the state has not only to construct the market actively by a regulative and normative framework, but must itself also respond to the central market norm

of competition and conform to the rules of efficiency in relation to other actors (i.e. between states, or agents within the public sector such as schools). The neoliberal state itself becomes an entrepreneurial actor (Dardot & Laval, 2013).

In sum, neoliberalism is better understood as "a system of norms now profoundly inscribed in government practices, institutional policies and managerial styles" (Dardot & Laval, 2013, p. 14). The neo-liberal project is a project to create the ideal market, in which market participants behave according to the rules through internalized norms of competition. Market participants must learn to adapt to the theory or to believe it so that it works in reality. The ideology of neoliberalism constructs and reconstructs relations of domination by individualizing problems and challenges (e.g. inequality or success). Individuals have to act according to the principle of competition and internalize the neoliberal normative framework. This fosters an unquestioned acceptance of inequalities inherent in the existing economic system as the individualistic conception conceals power structures of the political and social system.

2.3 Ideology and (secondary) education

It is within education that the state is best able to control economic and cultural production and reproduction. This is clear from the intense struggle over curricula, the control the state exercises over textbook content, and the respective weights given to specific subjects and disciplines. The state and within, the specific dominant discourses "[takes] control of the cultural apparatus of a society, of both the knowledge preserving and producing institutions and the actors who work in them, [which] is essential in the struggle over ideological hegemony" (Apple, 1981, p. 78). The state therefore becomes the gatekeeper of societal reproduction through education (McGregor, 2009, p. 348). This is embedded in a wider debate over the general aims of the education system, namely the acquisition of a limited set of technical skills for the labour market, or of a wider set of qualifications that allow students to participate fully in society (Giroux, 2002, p. 433; Gryl & Naumann, 2016; Hedtke, 2018; Stieger & Jekel, 2018). This debate is also seen in the discussion on skills and competences vs. capabilities and citizenship approaches (Stieger & Jekel, 2018).

Neoliberal ideology and school

Looking at the neoliberal conception of education in general, we find that quite a few assumptions are constantly used without really being questioned. These include:

- a direct usability of knowledge and skills in terms of workforce orientation, although this is seldom made explicit (Apple, 2004; Weiner, 2003, p. 43)
- considering schools as corporations (McGregor, 2009, p. 347)
- an emphasis on measurability and standardization, both to measure students' output and to control teaching staff (Donert, 2010, p. 70; Strober, 2003, p. 145), leading to a teaching-to-the-test mentality among teachers, and to students becoming alienated from learning (Strober, 2003, p. 146)
- a pervasive tendency to reconstruct students as their 'competitive economic selves' across subjects (Gryl & Naumann, 2016).
- A concentration on so-called 'single truths', usually rooted in statistics more than qualitative interpretation, shown in mono-paradigmatic approaches, often excluding the political and the social (Hedtke, 2018; Weiner, 2003, p. 42).

All these tendencies can quite clearly be termed ideological. As recent research by Hedtke (2018) and Stieger & Jekel (2018) shows, they are prevalent at the very heart of ideas about neoliberal education: in the discussion of new ways to organize economic and financial education.

In Austria, since 1962, the school subject that covers economics education is "Geography and Economics". Traditionally, the economics element was very much informed by socio-economic approaches and a multidisciplinary background (social sciences, citizenship education). As such, it has been at the centre of attention of scholars supporting mainstream neoclassical/neoliberal economics who now need 'scientific' arguments to overturn the current curricula. What follows may therefore be interpreted as an analysis of neoliberal discourses used in the struggle over curricula in economics education. Using von Mises' (1949) words again, we will discuss how neoliberal norms are promoted in such a way as to make them palatable to the majority (p. 860).

3 Analysing economic and financial literacy studies in Austria: research design

The aim of our analysis is to reflect critically on the ideological background of financial and economic literacy assessment studies in Austria. Therefore, our study is based on the following research question:

> Are the discourses in scientific assessment studies of pupils' economic and/or financial literacy in Austria embedded in neoliberal ideology?

To answer our question, we distinguished three levels of argumentation in the studies, and for each level we formulated focus questions:

- Level 1: How do the authors justify the need for their study? What is the purpose of economic education in their opinion?
- Level 2: How do the authors test economic and/or financial literacy? Which content-related questions and/or tasks do they use for the assessment?
- Level 3: How do the authors evaluate the test results? What educational policy recommendations do they derive from their findings?

3.1 Sampling

The data includes all nine studies that assess the economic and/or financial literacy of Austrian students. Although, as shown in Table 2, the studies differ regarding target group, sample size and survey area, they all share the aim of evaluating the level of financial and/or economic literacy. Five of the nine studies were conducted by researchers on business and vocational education in Austria; the other four were carried out by the Institute for Business Education in Vienna, under the leadership of one person. Three of the studies were financed by the Austrian Federal Economic Chamber (WKÖ=Wirtschaftskammer), and two by the research institution for vocational training (IBW = Institut für Bildungsforschung der Wirtschaft) founded by WKÖ and the Federation of Austrian Industries (IV=Industriellenvereinigung). Only the latest study has been published in a peer-reviewed journal. All other studies were internal publications, conference proceedings, or contributions in journals without any apparent peer-review procedure.

Table 2 Overview of the studies reviewed

#		title	author(s)	sponsor(s)	target group	sample size	survey area	publication medium
1	1992	Level of economic knowledge of secondary school graduates[2]	Alfred Freundlinger	IBW	Secondary school graduates	754	Austria: Vienna, Graz and Linz	IBW's own journal
2	2006	Economic knowledge of high school graduates – an international comparison	Tamara Katschnig Günter Hanisch	Institute for School Development and International Comparative School Research WK Vienna (initiator)	University students	2,179	Austria (Vienna only), Germany, Czech Republic, Hungary	internal publication: project report
3	2006	Economics education of students of higher secondary schools	Elke Brandlmaier Herman Frank Christian Korunka Alexandra Plessnig Christiane Schopf Konrad Tamegger	University of Vienna University of economics Vienna WK Vienna	Secondary school students	462	Austria (Vienna and Lower Austria)	internal publication: project report
4	2006	Knowledge regarding international economics	Kurt Schmid	IBW	Students in higher secondary schools	3,300	Austria	journal of the IBW
5	2009	Economic understanding and risk: an empirical study about the relationship between economic understanding and risk	Thomas Köppel Peter Slepcevic-Zach Anna Winkelbauer Elisabeth Friedrich Hemma Till	Karl-Franzens-University Graz Department of Business Education and Development Graz	Students in higher secondary schools	649	Austria (Graz)	conference proceeding
6	2013	„Don't know much about economics and business"	Bettina Greimel-Fuhrmann	Institute for Business Education Vienna	Students in higher secondary schools	400	Austria (Vienna, Lower Austria, Burgenland)	wissenplus
7	2014	Financial literacy – not sufficient	Bettina Greimel-Fuhrmann	Institute for Business Education Vienna	Students in higher secondary schools or at university	423	Austria (Vienna)	wissenplus

8	2015	What students of vocational schools know about economics	Bettina Greimel-Fuhrmann Andrea Bonomo Eva Rosner	Institute for Business Education Vienna	Students in higher secondary schools	213	Austria (Vienna and Lower Austria)	wissenplus
9	2016	"When I think of economics ..." - What students in lower secondary education think and know about economics	Bettina Greimel-Fuhrmann	Institute for Business Education Vienna	Primary school pupils	432	Austria (Vienna, Burgenland, Lower Austria, Upper Austria, Styria, Carinthia, Tyrol and Vorarlberg)	wissenplus
	2016	Findings and desiderata for the economics education of Austrian middle school students	Bettina Greimel-Fuhrmann Ralf Kronberger Herwig Rumpold					Wirtschafts-politische Blätter
	2016	Economic knowledge in the lower secondary school level	Herwig Rumpold Bettina Greimel-Fuhrmann					Journal for economics education

Source: own compilation

3.2 Methodological considerations

For our textual analysis, we chose qualitative content analysis, as it is a suitable technique to systematize and interpret manifest and latent textual content by using a category system (Stamann, Janssen, & Schreier, 2016). To operationalize our focus questions, we developed an analytical framework with reference to the previous conceptualizations of ideology and neoliberalism (Section 2). Our textual analysis comprised the following steps:

- First, we assigned a specific colour to each of the three levels of analysis to classify and identify the relevant text sections. We then transferred the findings to a digital coding sheet.
- For the analysis of levels 1 and 3, we used the analytical framework developed by Thompson (1990). This enabled us to analyse the argumentation used by the studies' authors regarding the modes of ideological operations and strategies of symbolic construction used by them (see Table 3).
- To analyse the test items used in the assessment studies (level 2), we addressed the key assumptions of neoliberal ideology (see Table 1). We added *pure factual knowledge* as a further category to that framework.

The following limitations became apparent during analysis. Not all studies provide all test items (Greimel-Fuhrmann 2016; Greimel-Fuhrmann, Kronberger & Rumpold, 2016; Rumpold & Greimel-Fuhrmann, 2016). In order to review the test items of Rumpold & Greimel-Fuhrmann (2016), we issued a request to the first author. However, we were not granted access to this

data. Therefore, we partly reconstructed the literacy tests by means of the available publications. However, the study by Köppel et al. (2009) did not give any viable indications regarding the questionnaire used, so we could not analyse their diagnostic instrument. Three studies (Greimel-Fuhrmann, 2013, 2014; Greimel-Fuhrmann et al., 2015) referred to data taken from student dissertations at Master's level. In those cases we compared the data with the materials presented in published journals.

4 Serious scientific work or ideological position paper?

Our focus is on the function of ideology, and we want to show how ideology works in financial and economic literacy assessment studies to win people over under asymmetrical relations of power. We are not claiming that there is such a thing as ideology-free work. Remember that we defined ideology *as a social practice that constructs and reconstructs relations of domination*, and we highlighted that the neoliberal belief system is the dominant ideology influencing education. Now our aim is to show whether and how the studies are embedded in neoliberal ideology, and to make the functions of ideology explicit.

For this purpose, a distinction between different modes of ideological operations and strategies of symbolic construction is useful. Table 3 gives an overview of how ideologies work in symbolic forms such as texts. The modes and strategies are not ideological as such. Only if they serve to sustain or establish relations of domination do we speak of modes and strategies of ideology. Although we can distinguish general modes of ideological operations, to which concrete aims have been assigned, these do not work in isolation, as modes of ideological operations typically overlap and reinforce one another (Thompson, 1990, p. 61).

4.1 Economic and financial literacy – a question of survival?

Two reasons are put forward in all of the studies analysed to argue the need for the assessment of economic and financial literacy in particular and economics education in general: employability and (financial) well-being. While before the financial crisis of 2008 employability was of greater relevance, in the post-crisis era risk taking and risk management serve as the main basis for argumentation.

Sound economic knowledge is considered a requirement for employment. This unquestioned truth legitimizes the evaluation of economic knowledge. Using the strategy of rationalization[3], the first study (Freundlinger, 1992) claims the need for a form of economics education that corresponds to the labour market, so that graduates find jobs. In the early 1990s, problems were emerging due to declining demand for employees. The needs of the labour market were a given (p. 2), while other needs, such as those of students, teachers and society in general, were absent (strategy of passivization). In sum, students have to be equipped with appropriate knowledge (pp. 1-2) to compete in the labour market.

Table 3: Modes of ideological operations and strategies of symbolic construction

General modes of operation	Aim of operation	Typical strategies of symbolic construction	Characterization of strategy
Legitimation	Persuading that a claim is just and worthy of support.	Rationalization	Justifying or defending social relations and institutions by a chain of reasoning.
		Universalization	Illustrating that action, institutional arrangements and/or social relations serve the interests of all and are open to everyone.
		Narrativization	Embedding argumentation in stories.
Dissimulation	Concealing, denying or obscuring relations of domination.	Displacement	Transferring positive or negative connotations of objects or individuals.
		Euphemization	Eliciting a positive valuation of actions, social relations and institutions (e.g. rehabilitation center vs. prison).
		Trope	Dissimulating relations of domination by a figurative use of language (e.g. synecdoche, metonymy, metaphor)
Fragmentation	Dispersing individuals or opposition groups.	Differentiation	Emphasizing distinctions, differences and divisions between individuals or/and groups.
		Expurgation of the other	Constructing an enemy. Calling for expurgation of, or resistance to, the enemy.
Reification	Representing processes as permanent, natural and timeless.	Naturalization	Presenting social-historical phenomena as natural or as effects of natural characteristics.
		Eternalization	Presenting social-historical phenomena as permanent, unchanging and ever-recurring.
		Nominalization and passivization	Influencing the focus by hiding or ignoring actors and agency.

Source: adapted from Thompson, 1990, pp. 60-67.

Similar arguments are found in the study by Brandlmaier et al. (2006): the increasing complexity of the economic framework, globalization and the dynamics of labour markets make economic knowledge indispensable for everyone (p. 1). By using the strategy of eternalization, the process of economization in societies is not questioned but presented as unchanging. Consequently, every individual needs economic knowledge to be capable of taking decisions and of taking responsibility for themselves in society (p. 18): “economics education seems to be a survival issue for every single individual” (p. 320). In the study conducted by Schmid (2006), “Education for a Globalized world – Are Austrian schools keeping up with the internationalization of the Austrian economy?”, the very title highlights the ideological setting in the form of a plea for competitiveness. Again, the employability of single students is

questioned, but within the context of global competition. In all of these studies, there is a clear overemphasis on the vocational mission of the school. Although this is indisputably one purpose of education, it is not the sole or primary one, as it would appear to be from the arguments of the authors in question. As Strober (2003) observes, "neoclassical analysis permeates the public's thinking, [and] the benefits of education are increasingly viewed as merely preparation for work" (p. 143). This thinking is misleading, as the educational mission of Austrian schools is to foster "open-mindedness that is based on understanding the existential problems of humanity and on *shared responsibility* [emphasis added]. Teaching has to actively contribute to a democracy committed to human rights as well as to promote the capacity for judgment and criticism, decision-making and capacities to act" (BMB, 2012, pg. 9). Therefore, the value of education in general and of economics education as part of general education is more than as an investment in human capital (e.g. employability); instead of an allocation of responsibility to the individual, the educational mission fosters shared responsibility.

In 2008 the focus of studies changed, as the financial crisis provided a new argumentation base for assessment studies. There is even an increased need for economic knowledge, as attested by the following quotation.

> "The financial market crises, the economic crises, sovereign debt crisis, and its management suggest that a minimum level of economic knowledge is even more necessary than before. At a time when market uncertainty and instability are increasing, basic economics knowledge is even more important to enable economic agents to deal with it properly, and also to avoid aggravating insecurity and instability through wrong practices." (Greimel-Fuhrmann et al., 2016, p. 260)

This strategy of eternalization presents uncertainty and instability as facts that require adaption by individuals. Two studies even attest that the lack of economic knowledge led to the bursting of the real-estate bubble in 2008, as people had invested in financial products they didn't understand (Greimel-Fuhrmann, 2013, p. I; Köppel et al., 2009, p. 65). This strategy of passivization ignores the complexity of the causes of the crisis and attributes them to unwise individual decisions. Based on methodological individualism, neoclassical economic analysis investigates only individual causes. Therefore, only individual actions can be the causes, not structural factors inherent in capitalism (Arthur, 2012, pp. 56, 75).

In general, the authors evaluate the effects of economics education positively by sharing the following causal assumptions: sound financial and economic decisions lead to (financial) well-being (Greimel-Fuhrmann, 2013, 2014, 2015; Köppel et al., 2009; Greimel-Fuhrmann et al. 2016), and/or economic and financial literacy improves employability (Brandlmaier et al., 2006; Freundlinger, 1992; Schmid, 2006a, 2006b). Such strategies of universalization are questionable. Financial and economic successes are presented as if they could be achieved by all, regardless of financial possibilities, the only obstacles being insufficient or wrong knowledge. As economic and financial knowledge is the causal variable in this consideration, we have to take Arthur's question seriously: was there a different answer, if the causal variable was wealth? (p. 49). Reversing this equation would mean that financial success depends on wealth rather than knowledge of financial concerns, which in turn, would have far-reaching consequences for those who are in favour of financial education.

In sum, in all studies the role of economics education in general, and of economic or financial literacy in particular, is defined by its concrete "use value" (i.e. better navigation through times of crisis, financial well-being, better employability), in contrast to its negative

"sign value" (i.e. insecurity and instability, debt, unemployment) (Arthur, 2012). The concept of well-being, whether at the level of the individual or of society, is limited to economic well-being, namely the accumulation of goods and services, or (in the case of financial literacy) to the accumulation of money (Strober, 2003, p. 135). Views of well-being in a context other than the market are totally absent. The principle of competition is highlighted repeatedly. Students must adapt to economic challenges; economic knowledge creates the basis to do this (i.e. react properly to market signals). The importance of knowledge is anchored in the neoliberal framework. It is a specific kind of knowledge, which is utilizable in the market and allows individuals to coordinate their actions (Dardot & Laval, 2013, pp. 109-110).

4.2 "Facts", definitions and calculations = economic and financial literacy?

Efficiency thinking and output orientation are complements of the neoliberal education project. As outlined above (see Section 2.3), standardized testing reflects these phenomena (Strober, 2003, p. 145). Thus, generating diagnostic instruments that allow the evaluation of economic or financial literacy is a necessity. It is not surprising that some of the authors criticize Austria for not taking part in the PISA testing on financial literacy (Greimel-Fuhrmann, 2013, pg. II), as evaluating knowledge is a focus of economics education research (Greimel-Fuhrmann et al., 2015, pg. VIII).

For test-item generation, the Test of Economic Literacy (TEL) is the main reference point. For instance, Katschnig and Hanisch (2004) used ten out of twelve test items from the TEL (p. 333). The TEL was developed by the CEE [4] (Council of Economics Education), which is quite clear about the aims of economics education. Their thinking is based exclusively on neoclassical economics, as other economic approaches "would have confused and frustrated teachers and students who would then be left with the responsibility of sorting the qualifications and alternatives without a sufficient foundation to do so" (CEE, 2010, vi) (strategies of rationalization and differentiation). To focus solely on neoclassical economics denies students an insight into economic thinking beyond individual actions, optimization and equilibrium (Fischer et al., 2018, p. 3). However, this statement clearly shows which dominant and at the same time exclusionary role is attributed to neoclassical economics within economics education.

Analysis shows that the TEL is a thematically restricted test with limited validity (Bank & Krahl, 2015, p. 27). In addition, our analysis of studies shows that most of the items test factual knowledge or basic arithmetical tasks (e.g. computation of interest rate). We categorized as questions of factual knowledge (i) all those that required definitions (e.g. defining abbreviations like OPEC); (ii) pure knowledge questions (e.g. number of EU member states); and (iii) questions requiring the identification of simple and direct correlations of cause and effect, without judging the effects (e.g. consequences for the balance of trade if exports increase).

With a few exceptions, all questions that do not fall into the 'factual knowledge' category are ideologically charged by neoliberal beliefs. These particular questions include the following types:

- Questions of simple and direct correlations of cause and effect with a positive judging of effects.
  *Example: "Does an increase of exports lead to higher or lower prosperity?" (*Only the answer higher prosperity is evaluated as correct)
  (Freundlinger, 1992, p. 13)

- Questions of simple and direct correlations of cause and effect with a negative judging of effects
  Example: "Imagine, the youth organization 'Tiger Clan' proposes to increase the minimum wage. What would be the consequences?" (Only the answer "wages would rise and youth employment would decline" is evaluated as correct)
  (Brandlmaier et al., 2006, p. 315)
- Statements of opinion that are ideologically charged
  Examples: "Exports are […] the engine of our economy"
  (Schmid, 2006a, p. 158)
  "It is fair that in our economy some earn more and some earn less." (The Likert-Scale excluded disagreement as possible answer)
  (Greimel-Fuhrmann et al. 2016, p. 255)

We note therefore that all tests are mainly based on neoclassical economics and are embedded in neoliberal thinking. Their authors not only give positive judgements of neoliberal policies, but only evaluate as economically and financially literate those students who share the underlying neoliberal and neoclassical assumptions. We are not denying the utility of neoclassical thought in economics education (it is indisputably a necessary part of such education), but we do criticize its hegemonic and excluding role. Like every theory, neoclassical economics has its blind spots, and an understanding of economic processes requires more than a single, limited perspective.

It seems that the reference to so-called experts is enough to justify the content of a question (Rumpold & Greimel-Fuhrmann, 2016, p. 135). The context of the questions is unclear, and some questions are even unanswerable. For example, the question regarding the increase of exports depends on the perspective as the question about minimum wage that assumes a universal relationship that is not correct. Further political action for higher wages is presented as a disruptive factor with negative consequences for young workers. In addition, it is unclear to what extent these items are compatible with the authors' conceptions of economics education, as the items test primarily reproducible knowledge. This type of knowledge is not significant when evaluating the stated aims of economics education, such as better employability or better risk management. In this context, we may doubt to what extent these assessment studies are more than a means to an end, to embed the required educational policies in a (questionable) scientific setting.

4.3 Satisfactory = insufficient?

The evaluations of all studies show insufficient knowledge. This deficit orientation in the evaluation remains, even if the results are positive (Freundlinger, 1992; Katschnig & Hanisch, 2004; Schmid, 2006a). In the case study of Rumpold & Greimel-Fuhrmann (2016), the deficit orientation is implemented in the concept of the diagnostic instrument (p. 128f.). Regardless of the test results, some authors call publicly for economics education to be increased by extra lessons, or to be treated as an additional (separate) subject on the school curriculum. Both these demands must be questioned for three reasons.

Firstly, the results show that students at vocational schools in Austria, who have close to nine times more timetabled economics education than students at non-vocational schools, do not fare much better in tests (Greimel-Fuhrmann et al., 2015; Köppel et al., 2009), or even score less well regarding their understanding of economic processes (Greimel-Fuhrmann,

2013). Accordingly, the shortcomings of economics education are not due to the number of lessons.

Secondly, there are reasons to believe that the results are reinterpreted to support educational policies. Better-than-expected test results that are inconsistent with political argumentation are explained by authors in various ways:

- Freundlinger (1992) argues that "questions were too easy" (p. 45).
- Students had other competences, such as good levels of general literacy (Greimel-Fuhrmann, 2013, p. VI), that allowed them to answer questions correctly.
- Authors present only specific sections of dissertations by Master's students (Greimel-Fuhrmann, 2013; Greimel-Fuhrmann et al., 2015) and draw different conclusions.
- Authors focus on deficits only, even if the overall results of tests are positive (Schmid, 2006b).

While these strategies of course pose serious questions of scientific ethics and consistency, in terms of modes of ideological operations and strategies of symbolic construction, we can identify both displacement and passivization. This becomes evident in cases where authors focus on deficits and are concealing positive results. In this way, satisfactory or sufficient results are reinterpreted as an argument for a completely different form of economics education.

Thirdly, the authors assume without any foundation that the teachers of the current subject (i.e. Geography and Economics) focus on geographic content at the expense of economics education (Katschnig & Hanisch, 2004, p. 19) or are themselves poorly educated in economic theory (Greimel-Fuhrmann, 2013, p. VIII). Although a qualitative development of teacher training is worth striving for, it would need concrete objectives and not vague demands in the sense of an ill-defined national strategy, because it is not clear at present to what extent a separate subject or a national strategy could contribute to the improvement of economics education.

4.4 Uniting themes and shared beliefs

Although the studies analysed are characterized by a range of interests and different research methods, there are uniting themes and shared beliefs that are present in every study. The argumentation in all studies is clearly a neoliberal one:

- The authors highlight the importance of economic knowledge for individuals to successfully participate in society. If that is the case (and we agree), the selection of knowledge is particularly important. As Apple (2004) highlights, it is crucial to question how the general validity of selected knowledge is linked to ideological configurations of dominant interests (p. 13). Study authors, however, do not explain in any way how the selected content, and therefore the questions or tasks, fulfil this claim. Questions taken by authors from earlier studies seem thereby to be self-legitimized (Greimel-Fuhrmann, 2014; Greimel-Fuhrmann et al., 2015; Köppel et al., 2009), while questions or tasks developed by the authors themselves lack any explanation (Freundlinger, 1992; Katschnig & Hanisch, 2004; Köppel et al., 2009; Schmid, 2006a) or are presented as the consensus about economics education (Brandlmaier et al., 2006; Greimel-Fuhrmann, 2013; Rumpold & Greimel-Fuhrmann, 2016).

- On closer inspection, mainly all test items can be traced back to neoclassical economics – i.e. belief systems of natural laws in economic processes, and the possibility, therefore, of modelling economic processes mathematically. At the same time, the authors perceive the economy as a closed system which allows the exclusion of psychological, historical, social and political components both from the models used and, consequently, from curricula.
- The authors collectively believe that quantitatively-tested factual knowledge is a sufficient indicator to legitimate educational policies.
- All studies share the assumption that the economic knowledge of Austrian students is insufficient, and that therefore there is a need for change. If their test results do not correspond to this assumption, the authors use strategies to conceal or obscure this.
- As we showed in our analysis, authors present their belief system as 'common sense' about social and political matters. Scientific authority plays a crucial rule in argumentations because it serves to legitimate ideological symbolic forms. Hedtke (2018) defines this phenomenon as a "reframing" of study results for political and ideological purposes. As ideologies serve to sustain and construct relations of domination and at the same time conceal these relations, authors describe themselves as representatives of society as a whole (Brantlinger, 1997, p. 438).

5 Conclusion

Making the neoliberal world view palatable to the majority has been the aim of neoliberals right from the start. The discussion in this paper hints at the current ideological strategies of specific interest groups in that regard, and in a single country. The narrow view of economics and financial education presented in empirical studies of Austrian students' financial and economic literacy is rooted in neoliberal axioms: individuals as self-enterprising actors orientate themselves on the principle of competition; 'scientific' laws govern economics if markets are 'set free'; free markets are the optimum. All these assumptions take place in the existing (or even further de-regulated) economic order, with resource distribution and structure of the marketplace as givens (Dardot & Laval, 2013). Absent from this model of economic and financial education are society, nature, power and politics. The studies analysed are clearly embedded in the neoliberal project and its ideological strategies.

The neoliberal line of thought produces respect for the current economic order, not criticism or reform. While this order allows choice on the level of individual economic actions, the same freedom of choice is not available where economic paradigms are concerned. We are not questioning the need for neoclassical thought in economics education, but its hegemonic and exclusionary role, which leads to a distorted representation of economies and implies the need for students to take individual responsibility. Like any other theory, neoclassical economics has its blind spots; to understand economics, more is needed than a single view of the world. Had the studies discussed in this paper succeeded in measuring economics education, they would have documented that more is not better. This is true both for continuous testing of students' cognitive knowledge, as well as for increasing the place of economics education within the curriculum. Both miss the more important question, of *what sort* of economic education is important for students today to successfully understand both their own and their collective positions in an economically framed world, and to be competent in participating in and potentially changing that world. For them to be successful in such ways,

reference only to a closed system and to a single theory adhering to unchangeable laws is clearly insufficient.

Rather, multi-paradigmatic approaches to economics education, including the social and political spheres, are absolutely essential. The principles of socioeconomic education foster critical thinking, empower students, liberate thinking through criticism of the status quo and ideology, and through plurality and controversy. Socioeconomic education presents economic phenomena and problems in their socio-political and historical contexts (Fridrich & Hofmann-Schneller, 2017; Hedtke, 2018). This would seem to be an approach that neoliberal educationalists fear.

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Endnotes

[1] The quotation emphasizes the importance of public opinion regarding economics. Von Mises affirms that people can choose between the ideologies developed by intellectual leaders. He sees a great danger in that freedom of choice, because people can also choose an "unsound" ideology. Therefore strategies of persuasion are highly important.
[2] As all studies were published in German, all translations, with a few exceptions, are our own.
[3]To convince readers of the relevance of their research, study authors apply different modes of ideological operations and strategies of symbolic construction that overlap and reinforce one another. As Table 1 shows how the modes and strategies work, only a short reference is given here (Thompson, 1990, p. 61).
[4] The CEE (Council for Economics Education) is an NGO in the US funded by banks, large enterprises and (political) foundations. Their mission is to educate every child in the US in economics and personal finance mainly through the education of teachers. Annually they train about 55,000 teachers and reach 5 million K-12 students (from kindergarten to high school level). The educational training is based exclusively on a neoclassical model, because as the funders argue it reflects "the best scholarship in the discipline" (CEE, 2010, vi). Further, they proclaim that a pluralistic economics "[…] would have confused and frustrated teachers and students who would then be left with the responsibility of sorting the qualifications and alternatives without a sufficient foundation to do so" (CEE, 2010, vi). The CEE is known for their K-12 standards in economics and financial literacy and accompanied by a mass of instructional resources. Those standards and their benchmarks are "always true principles" (CEE, 2010, vi). How these neoclassical assumptions are linked to neoliberal ideologies, is shown in chapter 2.

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