A critical analysis of the 'neoclassical tradition' and economics education in Turkey

Sema Yılmaz*

Department of Economics,
Faculty of Economics and Administration Sciences,
Yildiz Technical University,
Istanbul, Turkey
and
Advanced Research Centre,
European University of Lefke,
Lefke, Northern Cyprus, TR-10 Mersin, Turkey
Email: sygenc@yildiz.edu.tr
*Corresponding author

Rahmi Deniz Özbay

Department of Economics,
Faculty of Business,
İstanbul Commerce University,
Istanbul, Turkey
Email: rahmideniz@gmail.com

Rui Alexandre Castanho

Faculty of Applied Sciences,
WSB University,
Dąbrowa Górnicza, Poland
and
College of Business and Economics,
University of Johannesburg,
Johannesburg, South Africa
and
Advanced Research Centre,
European University of Lefke,
Lefke, Northern Cyprus,
TR-10 Mersin, Turkey
Email: acastanho@wsb.edu.pl

Abstract: In the field of economics education, neoclassical economics serves as the foundation for Orthodox thought, drawing upon a theoretical and methodological framework that centres around the concept of a 'sovereign power' relationship. This framework informs the traditions and frequently held practices within the field. The term 'dismal science', originally used by Scottish historian Thomas Carlyle in 1849, can be employed as a critique of the intricate, paradoxical, inscrutable, and detached nature of neoclassical

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economics. Several criticisms have been raised regarding the utilisation of mathematical techniques primarily as an objective rather than a means of elucidating economic phenomena. This study highlights the significant issue arising from an economics education that lacks methodology and disregards interdisciplinary engagement with other social sciences, particularly under the dominance of neoclassical economics. It demonstrates that the detachment from reality is not only prevalent in Turkey but also observed in many other parts of the world.

Keywords: neoclassical economics; economics education; orthodox thought; sovereign power relationship; dismal science; criticisms; mathematical techniques; social and historical dimensions; perfect competition; interdisciplinary engagement; Turkey.

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Biographical notes: Sema Yılmaz completed the requirements for the PhD program in Economic History at Marmara University's Institute of Social Sciences. She started her academic career as an Assistant Professor at Kocaeli University in 2009. From 2010 to 2020, she worked as the Head of the Department at Kocaeli University, Ali Riza Veziroğlu Vocational School, Marketing and Advertising Department. In 2018, she was awarded the title of the Associate Professorship in the field of Economic Thought. In 2023, she started as a Professor at Yıldız Technical University. Her academic fields of study are economic methodology, economic thought, economic sociology, institutional economics, and economic history.

Rahmi Deniz Özbay completed the requirements for the PhD program in Economic History at Marmara University's Institute of Social Sciences by writing a thesis titled 'State labour employment in the Ottoman Empire in the 19th century' in 2003. In 2011, he was promoted to the position of associate professor in the Department of Economic History, and in 2016, he was awarded the title of Professor. He was an employee of Marmara University from 1992 until 2021. His most recent position was at Istanbul Commerce University. His academic specialisations include Caucasian history, Ottoman economic history, technology history, and labour history.

Rui Alexandre Castanho holds an International PhD in Sustainable Planning in Borderlands. Nowadays, he is a Vice-Dean for Sustainable Development at WSB University, Poland, and Visitor Professor at the University of Johannesburg, South Africa. He is a European Climate Pact Ambassador. Besides, he completed a post-doc research. Furthermore, he collaborates with several research centres and groups all over the globe. Moreover, he has graduated in Green Spaces Engineering and Agricultural Engineering and holds a Master's in Planning, Audit, and Control in Urban Green Spaces.

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1 Introduction

> "The social process is really an inseparable whole. A fact is never purely economic; other aspects – often more important – are always present."
>
> Joseph Alois Schumpeter

The historical progression highlights the significant scale of economic crises and their resulting impacts, spanning from the Great Depression of 1929 to the present day. This progression sheds light on the inherent vulnerabilities within Neoclassical Economic Theory. The entity in question demonstrates a lack of comprehension of crises that extend beyond rudimentary concepts, such as mere market disturbances. The predominance of neoclassical economic theory remains intact despite the insufficiency of provided remedies to the crisis. This is seen in the efforts of Keynesian Economic Thought, which seeks to address and rectify the shortcomings of the neoclassical theory in resolving various problems and crises. While these processes do not lead to a catastrophic crisis within the field of economics, they do generate a temporary and limited crisis of confidence about the comprehensive and swift transformation or even reinforcement of traditional teaching and research practices. Several difficulties arise in relation to this topic, including the disregard and marginalisation of methodology, the historical development of economic thought, and the absence of a theoretical framework for heterodox alternatives. This study examines the persistent challenges associated with Neoclassical Economics Education.

2 The prevalence of neoclassical economics in the field of economics education

> "The difficulty lies, not in the new ideas, but in escaping the old ones, which ramify, for those brought up as most of us have been, into every corner of our minds."
>
> John Maynard Keynes

According to Alfred Marshall, economics encompasses the examination of individuals' behaviour in their everyday existence. The concept of addressing unlimited human needs with restricted resources is a focal point for analysing the actions and patterns of both individuals and communities. Within this particular framework, the economist acquires empirical data regarding tangible occurrences and subsequently arranges, analyses, and deduces insights from that information. According to Bocutoğlu (2016), economics serves as a means to pursue the attainment of 'absolute truth'. The primary objective of economics education is to equip students with the capacity to adopt a comprehensive viewpoint while analysing real-world economic phenomena and challenges, while utilising a solid theoretical foundation and employing contemporary analytical methods to effectively address these issues (Şimşek and Cicioğlu, 2006). Nevertheless, the field of economics education has undergone a transformation over time. Initially influenced by Marshall's approach, which aimed to address economic problems while acknowledging social laws and seeking a 'absolute truth' through cause-effect relationships, contemporary economics education has shifted towards a more abstract and mathematical approach, often detached from real-world contexts.

A prominent issue within the realm of economics education pertains to the lack of alignment between the subject matter taught and its practical application in real-world scenarios. In the realm of economics education, the student's inability to establish a link between the theoretical instruction provided and practical applications leads to a state of passivity as an audience member. One rationale behind this perspective is the belief that economics, as a discipline, shares fundamental characteristics with the natural sciences, rendering it difficult to differentiate between the two. This fallacy arises from the inability to provide comprehensive explanations on the distinctions and parallels between the interplay of natural sciences and social sciences, particularly when educating students in the field of economics. The overlooked aspects encompass the comparative complexity associated with conducting experiments in the realm of social sciences, the expeditious pace of change within this field, and the arduous task of maintaining impartiality from ideological influences. Another factor to consider is that the proposed solutions for addressing issues in economics education frequently rely on assumptions that are distant from reality and disconnected from the social principles governing human behaviour. The foundation of economic theories rests on underlying assumptions. However, when the outcomes are presented as the definitive truth through rigorous mathematical techniques, it signifies a departure from these assumptions. Paradoxically, the field of economics undergoes a transformation, shifting its focus from being the study of political economy to being a subfield inside the realm of mathematics. Another issue pertains to the insufficient effort invested in elucidating the practical implications of some economic concepts or outcomes derived from complex mathematical formulas (Ruben, 2001).

The Neoclassical economic theory, widely prevalent in the field of economics education in Turkey and many other parts of the world, use mathematical techniques to ascertain the necessary circumstances for optimising or minimising specific objectives. Nevertheless, irrespective of the applicability of mathematical methods to human behaviour, such an approach tends to categorise individuals and detach them from the complexities of real-world contexts (Savaş, 2007). Within the realm of economics education, the prevailing focus lies on the transmission of neoclassical economic theory. However, it is imperative to acknowledge that economic theory should not be regarded as synonymous with neoclassical economic theory, and it is essential to incorporate the teaching of other theories. The inclusion and evaluation of many theories in inquiry should be incorporated into economics education (Bulutay, 2012).

In both Turkey and globally, it is observed that a prevalent pattern in economics education emerges during eras when the prevailing economic perspective experiences a decline in efficacy and fails to address prevailing challenges. This circumstance prompts endeavours to transform economics into a discipline akin to various natural sciences. One illustrative discipline is physics... The basic method employed to establish a scientific framework for economics, analogous to the principles of physics, is attributed to the work of Leon Walras and subsequent economists hailing from the fields of mathematics, physics, and engineering. The underlying principles of economics are rooted in the mechanical physics of the 19th century. Walras can be seen as a prominent manifestation of physics, as it is grounded in deterministic analytical solutions and an equilibrium-based methodology. Abstract mathematical economics, which originated from the work of Walras, has evolved into a fundamental aspect of the field of economics, thanks to the significant contributions made by Samuelson. The studies conducted in the 1950s that aimed to establish the presence of general equilibrium marked a pinnacle in the field of mathematical economics (Eren, 2018a). In addition,

biology can be included as another scientific discipline to augment the aforementioned list. According to Eren (2018a), it is asserted that economics can be considered a historical science. In the field of economics, it is commonly understood that there exist trends rather than laws. In this regard, the subject matter bears greater resemblance to biology and the biological sciences as opposed to physics and chemistry. Biology can be classified as a discipline within the realm of historical sciences, as it seeks to elucidate past events and phenomena. Its primary objective is to provide explanations for the occurrences that have taken place, thereby addressing the issue of 'what happened'. Furthermore, the dimension of time plays a crucial role in the study of biology, as it allows for the examination and understanding of processes and changes that have transpired over various temporal scales. In contrast, it should be noted that physics and chemistry are not temporally bound and do not fall under the purview of historical sciences. From this standpoint, economics can be regarded as a discipline that shares similarities with biological sciences, namely in terms of its historical and empirical nature. The central contention posits that while economic issues have a tendency to develop like to a living organism over the course of history, the field of economics remains detached from social sciences such as philosophy and psychology, lacking the guidance provided by these disciplines in understanding and influencing economic behaviour.

The discipline of economics, influenced by the subjective nature of human behaviour, often overlooks its social science dimensions, including its methodology, history, and philosophy. According to Schumpeter (1934), the social process is a unified entity that cannot be separated. This viewpoint is supported by Eren (2018b). A truth is never solely confined to economic considerations; it is invariably accompanied by other dimensions, which are frequently of more significance. The utilisation of mathematical tools to elucidate an economic theory, which disregards its social dimension and relies on assumptions, evidently fails to yield practical solutions for real-world challenges. In this particular setting, the process of educating individuals in the field of economics presents some challenges.

Within the realm of economics education, the field emerged as the first social science to separate itself from philosophy. Following the conclusion of the Second World War, there was a notable surge in the application of mathematical formalism, which subsequently facilitated the dissemination of the rational choice theory developed within economics to other social sciences. Nevertheless, this circumstance leads to a decline in intellectual activity inside the economy (Levent, 2019). The narrowing of perspectives in the field of economics can be attributed to the dominance of neoclassical economics as the primary teaching framework. This narrowing is primarily a result of several factors: the disjunction between theoretical concepts and real-world applications, the inherent contradiction between the purpose and means of incorporating mathematics into economics, the limited integration of economics with other social sciences, and the absence of a comprehensive economic philosophy (Ruben, 2012).

Paul Romer articulates the improper utilisation of mathematical techniques within the field of economics through the notion of 'mathiness'. According to Romer (2015); the methodology referred to as 'mathiness' enables the manipulation of academic politics by presenting it as a scientific endeavour. This strategy employs a combination of linguistic expressions and mathematical symbols, while intentionally allowing for the potential alteration of meanings. One issue that arises in academic discourse on politics and methodology in economics is the persistence of economists who adhere to their

ideological stances through the use of mathematical techniques, often disregarding technical inaccuracies within this framework. The acceptance of an economist's ideological stance as a basis for interpreting mathematical technique outcomes is deemed undesirable within the realm of scientific inquiry. In contrast to certain instances that exhibit unfavourable characteristics, the appropriate use of mathematical approaches in economics can enhance the elucidation, generalisation, and scientific nature of economic concerns (Uygur, 2014).

The endeavour to apply the theories stemming from the Neoclassical Economics tradition, as presented in Western literature, to the economic circumstances of various countries is the foundation of economics education. During the time span from 1776 to 1929, the prevailing perspective in economics education was the Classical tradition. However, the occurrence of the Great Depression in 1929 posed a challenge as the existing theoretical framework failed to provide an adequate explanation for this economic crisis. The conventional measures rooted in classical economics proved ineffective, leading to the emergence of what Ersan Bocutoğlu refers to as the 'mercantilist subconscious'. The mercantilist subconscious hypothesis suggests that in exceptional circumstances, public involvement becomes an inescapable necessity, regardless of the underlying principles upon which mainstream economic theories and policies are founded. Despite its ability to persist as a prominent field of study following the Keynesian restoration in 1936, the global Financial Crisis of 2007–2009 prompted a renewed scrutiny of mainstream economics (Bocutoğlu, 2012).

The utilisation of mathematical methods to articulate economic theories is a fundamental aspect of endeavours aimed at rendering economics more scientifically rigorous. This endeavour aims to address the economic challenges encountered at both the micro and macro levels, extending beyond the mere pursuit of scientific knowledge. The comprehension and subsequent resolution of economic issues constitute the primary catalyst for the emergence of econometrics. One of the most tangible pieces of evidence is that the field of econometrics came into existence alongside Keynesian economics in the aftermath of the Great Depression in 1929. During the 1930s, there was a significant level of enthusiasm surrounding the field of econometrics, driven by the aspiration to discover a solution for the economic crisis known as the Great Depression (Uygur, 2006). The utilisation of mathematical and econometric modelling in the field of economics is widely regarded as a measure of the scientific rigor within the discipline. The primary critiques levied against these models are to their disregard for the inherent subjectivity and unpredictability associated with the human element in the field of economics. Another issue arises from its lack of consideration for historical and institutional variables (Eren, 2018a).

3 Exclusion of heterodox economics from education in economics

> "However unwillingly a person who has a strong opinion may admit the possibility that his opinion may be false, he ought to be moved by the consideration that however true it may be, if it is not fully, frequently, and fearlessly discussed, it will be held as a dead dogma, not a living truth."
>
> John Stuart Mill

The correlation between economics and mathematics has emerged as a prominent subject of discourse within the realm of economics education in recent times. Critics of the imbalanced relationship between economics and mathematics do not, in fact, critique the utilisation of mathematical methodologies within the field of economics. One critique posits that mathematics has transitioned from serving as a means to enhance the understanding of economic phenomena to becoming an autonomous pursuit. The criticism stems from the observation that economics, once regarded as a sub-discipline of mathematics, has gradually lost its presence within the realm of mathematics. As stated by Görün (1986), the primary objective of mathematics education is to foster a deeper understanding of mathematical concepts and facilitate the comprehension of intricate phenomena that may initially appear challenging, through the application of coherent logical reasoning. The current state of economics education is characterised by the prevalence of the concept that "quantifiable factors take precedence over non-quantifiable ones". According to Özaktaş (2002/2003), the narrative of economics diverging from reality through the utilisation of abstract mathematics can be succinctly summarised as follows: When confronted with a subject that proves too intricate to be quantified, the approach taken is to simplify it to the point where it can be measured, hence diminishing its inherent complexity. Impoverishment frequently manifests as abstraction, resulting in a reduction of dimensions, sometimes even to a solitary dimension... The validity of measuring or digitising is currently undisputed. One limitation of the prevailing economic ideology is in its emphasis on quantifiable human wants, while disregarding and neglecting unquantifiable needs. However, attempting to comprehend the intricate and multifaceted nature of economics solely through the use of mathematical tools is inherently unattainable. The inclusion of other social sciences within the field of economics is indicative of the recognition that effective scientific development is best achieved through communication, discussion, and occasionally, conflicting perspectives (Ruben, 2012).

Can econometrics be used to assess the validity or accuracy of economic theory? If not, what is the prescribed curriculum to be pursued? In the event of a rise in economic knowledge, it is vital to examine the role of econometrics and its contribution. The inference of the overall validity of a theory cannot be derived solely from the outcome of a single test. This fundamental phenomena serves as evidence that testing in the field of economics (Keuzenkamp and Magnus, 1995) is unable to produce conclusive outcomes. The issue of over reliance on econometric measuring techniques in economics education in Turkey is becoming increasingly problematic. However, there seems to be a lack of attention given to the question of why there exist significant disparities and occasionally contradictory outcomes on the same economic topic. There are several factors that contribute to the differences in the qualities of periods, countries, fields, models, definitions of terminology, and variables. In conjunction with the employed testing methodologies, the divergences in belief systems, ideologies, and desired objectives serve as the factors that invalidate the assertion that "economic theory yields unequivocal outcomes through mathematical approaches". Is the possibility of discontinuing the use of econometrics a viable option? Certainly not. Econometrics serves as a valuable instrument for enhancing comprehension of events, actions, and future occurrences (Bulutay, 2012). The erosion of the social aspect inside the economic system, as well as the integration of econometric methods, has transformed the neoclassical theory and testing process into a framework that perpetuates initial assumptions and value judgments. The aforementioned procedure transitions the assessability of economic

relationships from deductive reasoning to empirical approaches. According to Candan and Hanedar (2005), the utilisation of mathematical tools and conceptual transformation in economics obscures the presence of value judgment and subjectivism in economic activity.

4 The hegemony of neoclaxic economics in economics education in Turkey

The emergence of the notion regarding the imperative nature of economics education in the Ottoman Empire, subsequent to its adoption of Western practices, may be traced back to the mid-19th century. This development was accompanied by the translation and dissemination of economics literature originating from Western sources. In the context of the Ottoman Empire, two notable phrases emerged in the field of economics. The first term, 'Tedbir-i Menzil', originated from English and referred to the concept of 'primitive propaganda and advice'. The second term, 'İlm-i Tedbir-i Menzil', derived from French and embraced liberalism as a doctrine (Görün, 2012). According to Minister of Finance Cavit Bey (Mehmet Cavit), the book named 'Ilm-i Tedbir-i Menzil', authored by Sehak Efendi and translated from Jean Baptiste Say's "An Examination on Political Economy", is asserted to be the inaugural piece of literature on the field of economics in Turkey (Tütengil, 1966). In addition, the work titled 'd'Economie Politique' authored by Pellegrino Ross, of Italian provenance, was utilised despite its non-publication. This work, 'Tasarrufat-ı Mülkiye', follows the path of Say, who systematised the concepts of Adam Smith into a cohesive instructional text (Görün, 2012).

Emin Efendi introduced the initial economics education in Turkey, which was referred to as 'political economy', with the foundation of the Civil Service School in 1859. The lecture notes authored by Mehmet Şerif Efendi and Ohannes Efendi, which date back to the late 19th century, represent the earliest published works on economics in Turkey. These texts, particularly Ohannes Efendi's 'Mebadili İlmi Serveti Milel', predominantly delve into the principles of 'liberal economics'. In contrast, the perspectives put out by Ahmet Mithat Efendi in his work 'Political Economics' and Akyiğitoğlu Musa, one of the early graduates of the Civil Service, in his publication titled 'Economics or Scientific Wealth' and referred to as 'National Economy', hold a prevailing stance that opposes liberalism. Numerous publications and proposals pertaining to economic liberalism were prevalent until the onset of the First World War in 1914. Following the commencement of the conflict, there was a decline in the application of the liberal approach, but the national economy exhibited a more robust trajectory (Uygur and Erdoğdu, 2012).

The Institute of Social Sciences, renowned for its rigorous economics education, was founded in 1916. Subsequently, in 1933, the institution underwent a name change and became known as the Institute of Economics and Social Sciences. Following the implementation of the University Reform in 1934, a number of academics who had fled from Nazi persecution in Germany made significant contributions to the field of economics education. As a result of their impact, the Faculty of Economics was created inside Istanbul University in 1936. The initiation of economics education in Turkey may be traced back to 1937, when the faculty commenced its educational activities, marking the formal establishment of this field of study inside the country. According to Çakır (2004), the field of economics education is currently being pursued extensively in many departments within economic and administrative sciences universities.

According to Hüsrev (1931), the objective of economics education is to impart to students the skills of inquiry, discovery, and synthesis, as well as to provide them with the tools of analysis. Rather than relying on rote learning, it is imperative for students to independently discover and comprehend the underlying principles governing economics. According to Akkuzu and Alada (2014), Hüsrev argues that the precise definition of economics should be postponed until the conclusion of the year. This approach is believed to enable students to overcome whatever dogmatic knowledge they may possess.

One of the primary concerns arising from an economics education that lacks a comprehensive methodology and disregards interdisciplinary engagement with other social sciences is the resultant separation from reality when attempting to elucidate economic phenomena. The sentiment expressed by Hüsrev in his statement aligns with this perspective. Numerous theoretical concepts, such as the rules of necessity, the idea of value, and utility (…) (Hüsrev, 1931). The kids are inundated with abstract concepts. The dissemination of this knowledge to students within the field of economics is characterised by a lack of coherence. The pupil is unable to verify the knowledge he has acquired. The individual experiences a state of astonishment and bewilderment in response to the circumstances pertaining to the nation's economy. For instance, even establishments such as a blacksmith shop or a small factory situated within the city or its vicinity, or even in close proximity to the individual's educational institution, struggle to integrate into the economic framework of the city, as well as its linkages with the national economy and global markets.

The concept of "government intervention in the economy during periods of war" holds significant influence, but Neoclassical Economic Thought remains the prevailing paradigm in economics education in Turkey throughout history and up to the present. It is evident that the methodology, theories, and extensive mathematical tools employed in Neoclassical economics, which serve as the foundation of economics education, are inadequate for generating effective solutions to economic challenges in Turkey. These approaches have transformed into a goal in itself rather than serving as a means to address the aforementioned difficulties. In his scholarly publication entitled "How Should Economics Be Taught?", Bilkay Kurç asserts. According to Kuruç (1970), the focus of economics education in Turkey has predominantly revolved around the replication and emulation of the teaching methods employed in economically advanced capitalist nations, without a clear objective beyond this endeavour. The majority of introductory economics textbooks used in Turkey lack any discernible presence of political economy. Introductory economics courses of a traditional nature are primarily grounded in the principles of neoclassical economic theory. One notable and influential instance of this phenomenon may be observed in the seminal work titled "Economics: An Introductory Analysis" authored by Paul Anthony Samuelson. This book holds the remarkable distinction of serving as a source of inspiration for contemporary textbooks in the field and is widely recognised as a pioneering contribution to the establishment of modern economics. Samuelson maintains that economics is a distinct discipline, distinct from other social sciences, and its primary objective in contemporary times is to elucidate patterns of behaviour pertaining to phenomena such as consumption, unemployment, and prices. From this perspective, Samuelson's assertion that economic issues are inherent to every civilisation restricts the study of economics to a conceptual level. The study is centred around a singular comprehension of economics. In conclusion, it is evident that introductory economics textbooks, particularly in recent times, have approached the

subject of economics in a dogmatic and singular fashion, predominantly relying on the principles of neoclassical economics.

Mathematics, regarded as a very potent cognitive instrument, holds immense potential for analysing phenomena, investigating causal connections, and comprehending the workings of the natural world. The utilisation of mathematical equations in both the realm of social sciences and natural sciences yields significant outcomes. According to Bulutay (2012), these equations are widely utilised in both economic theory and neoclassical economic theory. The inclusion of economic theory and education is vital and should not be disregarded under any circumstances. In light of my previous statements, I am elucidating the indispensability of employing mathematical principles inside the field of economics. The notion in question has gained validation, particularly following the integration of econometrics into the field of economics education in Turkey. However, a fundamental concern arises from the fact that the neoclassical economic theory has shifted the role of mathematics from a mere instrument to a primary objective that underpins the theory.

According to Bulutay (2012), within this particular framework, it is contended that economic theory, as well as neoclassical economic theory, heavily rely on the utilisation of these equations. The exclusion of economic theory and education in any manner is deemed unacceptable. In light of my previous statements, I assert that I perceive the utilisation of mathematics in the field of economics as obligatory. The notion, which has gained validation, particularly with the incorporation of econometrics into the field of economics education in Turkey, is confronted with a significant challenge. Specifically, the neoclassical economic theory has shifted the role of mathematics from being a mere instrument to being an end in itself, serving as the foundation of the theory.

5 The process of dissociating economics education from philosophy and real-life contexts in Turkey

Alada (2007) says the following about Turkey's philosophically disjointed economics education: "The general evolutionary line of economics in Turkey seems to work in reverse… When comparing economics schools, their assumptions and philosophies are not discussed. This determination also reflects a point of view that does not consider formalism as a problem in economics, which started to rise after 1946. However, this important break is not noticed in Turkey. The logical-mathematical abstract theory of the dominant economy was adopted without discussion and tried to be taught". Against the formal approach of neoclassical economics, which continues to dominate in economics education, a method that adopts the balance of deduction-induction highlights the predictable but unpredictable character of the future and embraces the early achievements of the history of economic thought should be determined. It is necessary to return to the understanding of evaluating the balance, uncertainty, rationality, and decision-making processes, which are the black holes of economics, within the "problem of seeking the truth" instead of the 'problem of precision', and in this context, it is necessary to contribute to the interaction of economics with other social sciences (Alada, 2004).

In the early 1960s, econometrics began to settle as a discipline in Turkey. Bulutay, who took part in the first econometric studies in Turkey, says [Bulutay and Uygur, (2004), p.2]: "In the early 1960s, planning, programming and, above all, econometrics were fashionable subjects in Turkey. However, these were also mysterious matters that

we did not know, that seemed difficult to understand. During this period, we had the following thought: If we could understand and know mathematical programming and especially econometrics, we would be able to solve all the economic problems of the country. In contrast, we were skeptical of our understanding and assimilation of programming and econometrics methods. One of the reasons we had a hard time seeing econometrics was that it was not well understood in the western countries where we got it, and it was a mystery". According to Bulutay, besides the Cowles Commission books describing econometric methods in the 1950s, econometrics books written by Tinbergen (1951), Tintner (1952), Klein (1956), and Valavanis (1959) are not understandable publications. Moreover, Bulutay keeps Jack Johnston's 'Econometric Methods' book, written in 1963, in a very different place from the others (Bulutay and Uygur, 2004): "This book was almost sent by God, and it was the source that I benefited most in understanding and applying econometrics". Besides, Bulutay adds that the extensive use of mathematics in economics, centuries later, could have erased the 'disadvantages' revealed by the difference between economics, which is a social science, and natural sciences (Bulutay, 1965).

The book review authored by Selim İlkin and İlhan Uğurel, published in the prestigious Econometrica magazine in 1972, presents a significant study on the 'econometric transformation' within the realm of economics education in Turkey during the 1960s. This brief analysis focuses on the examination of econometrics literature that has been published in Turkey. The introduction of econometrics as an academic discipline in Turkey may be traced back to the 1960s, after which its prevalence grew significantly. The study provides a concise evaluation of five econometrics books. In the academic year of 1958-1959, the inaugural econometrics course at the Middle East Technical University was conducted by a visiting professor from the Netherlands, as stated by Fikret Görün. The econometrics course was introduced at Ankara University, namely within the Faculty of Political Sciences, during the academic year of 1966–1967. Initially, the course was taught by Tuncer Bulutay, followed by Uğur Korum. The econometrics course was initially introduced in the Istanbul Faculty of Economics during the mid-1960s, under the instruction of Ahmet Kılıçbay, who is recognised as the author of Turkey's inaugural econometrics textbook. The book authored by Kılıçbay in 1965 mostly focuses on quantitative economics, with limited emphasis on econometrics. The subsequent publication, authored by Akalın in 1967, contains a limited amount of econometric content. The third publication, authored by Dirimtekin in 1968, presents a critical assessment of the econometrics content, highlighting its incompleteness, weakness, and outdated nature. Furthermore, it is worth noting that the bibliography lacks any references from English sources. The final two literary works consist of the publications authored by Bulutay in 1967 and Korum in 1969. The aforementioned items pertain to the outcomes derived from macroeconomic modeling investigations conducted in Turkey. Bulutay's publication provides a succinct exposition of econometric methods, drawing upon contemporary and reputable sources, including Johnston's seminal work titled 'Econometric Methods'. The estimation and interpretation of macroeconomic relationships pertaining to the Turkish economy are conducted. Korum's publication provides a comprehensive elucidation of econometric principles and methodologies. The estimation of macroeconomic concerns for Turkey in the book is limited to the utilisation of a macro-econometric model employing single-equation approaches. Forecast results are utilised for the purposes of both forecasting and simulating economic policy. During the time frame from 1960 to 1986, a comprehensive analysis of the Turkish economy was

conducted through the implementation of ten macro-econometric model studies. A decline in the number of econometric studies conducted in Turkey throughout the 1970s is observed. There is a scarcity of econometric studies pertaining to the Turkish economy during this time period, with only a limited number of doctoral theses available on the subject. Following the 1980s, there was a progressive growth in endeavours to develop an econometric model for the Turkish economy, observed in both commercial institutions and several public sector organisations (Uygur, 2006).

6 Conclusions

"Now is the time to say new things."

Jalāl al-Dīn Muḥammad Rūmī.

To effectively critique the one-sided nature of economics education in Turkey, it is imperative to first delve into the scientific and socio-cultural transformations that occurred in the Western world during the 19th century. This examination will shed light on the various factors that contributed to the formation of the prevailing economic ideology. The decline in the validity of Classical Economics, the prevailing theory at the time, and its inability to address social issues can be attributed to the advent of the 'Marginalist Revolution'. This transformative movement laid the groundwork for the subsequent rise of Neoclassical Economic Theory, which gained prominence after 1870. The basic issue is in the divergence between the prevailing Economic Theory and the implementation of economic policy, as well as the exclusive focus on a singular technique of economic thought and a singular conceptualisation of the economy within economics education.

The impact of arguments and controversies within the realm of economic thought on the subject of economics education is considered to be of considerable importance. The use of economic solutions originating from the Western world in non-Western countries can lead to confusion, particularly due to the differing contexts and circumstances. The exclusive prevalence of Neoclassical economics as the primary pedagogical approach, the divergence between theoretical constructs and real-world phenomena, the instrumental role of mathematics in the intersection of economics and mathematics evolving into the primary objective of economic theory, the lack of integration between economics and other social sciences, and the absence of a comprehensive economic philosophy are the challenges that necessitate resolution within the realm of economics education in Turkey. In pursuit of this objective, the field of economics ought to actively contribute to the interdisciplinary discourse with other social sciences, so enhancing the pursuit of knowledge and understanding within the realm of economic education.

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