

# Aalborg University Business School

*Macroeconomic Methodology, Theory and Economic Policy*  
(MaMTEP)

Working Paper Series

No. 1, 2025

## **Why economics ‘a moral science’**

Finn Olesen



**BUSINESS SCHOOL**  
AALBORG UNIVERSITY

# Why economics ‘a moral science’\*

January 29, 2025

**Abstract:** As a social science, economics has to do with goal oriented human behaviour. As such, human activity is conducted within given institutional settings that changes over time. And these settings are in many important ways influenced by value judgments, that is, to some degree they are normative determined as the settings are the result of human decisions/actions. In ancient times, as well as advocated by the founding father of economics Adam Smith this was an acknowledged fact. However, later on, neoclassicists downgraded the explicit moral dimension in economics probably due to inspiration from a positivistic methodology gradually making mathematics to become the prime engine of analytic inquiry. However, even in our modern time, economics cannot escape the fact that is it a genuine moral science and to some point also a political science as discussed in the present paper.

**Keywords:** Adam Smith, John Maynard Keynes, macroeconomics, value judgments, normative and positive aspects.

**JEL codes:** A13, B11, B12, B22 & B41

\*Thanks to Mogens Ove Madsen for comments on an earlier version of this article. The usual caveats apply.

## Introduction

From the very beginning of economics as a scientific discipline there has always been a kind of inherent dimension of value judgments in economics, see e.g., Olesen (2023). As such, it must be remembered that the founding father of economics Adam Smith started out his career as a professor in Glasgow teaching moral philosophy. Before his publication of *The Wealth of Nations* in 1776 he had published *The Theory of Moral Sentiments* in 1759. In general, the classical thinkers all bore traces of moral statements in their economic understanding.

But it was not for classical economists alone to highlight the importance of value judgments. Later on, others did that as well.

Perhaps most prominent among these is John Maynard Keynes who again and again in his economic writings stated that economics is a moral science. It has to be so, because economics deals with "... introspection and with values. I might have added that it deals with motives, expectations, psychological uncertainties. One has to be constantly on guard against treating the material as constant and homogeneous", CW (XIV, p. 300). Furthermore, to Keynes, economics was a discipline that had to include ethical considerations, that he understood early on as a young student in Cambridge. As Mitchell (2017, p. 29) writes: "... a concern for ethics permeated Keynes's thinking throughout his life".

Keynes, *the mathematician*, knew that society undergoes changes over time as does the institutional framework of the economic system. They are both somehow in a process of constant transformation with outcomes that might have been more or less unforeseeable ex ante for most (all) people. This crucial methodological *Weltanschauung* made Keynes, *the economist*, throughout all his life to be inspired by Keynes, *the philosopher*, see e.g., Olesen (2025).<sup>1</sup>

With Keynes, we know, that human beings act economically in an environment coloured by many kinds of imperfections and uncertainties, and although they most often (primarily) act economically on economic motives and data they sometimes also include different kinds of information (for instance aspects that have to do with ethical and moral considerations). As such, in real life, economic units at least to some degree also include value judgments when conducting their economic behaviour. That is, we all often act in a normative manner.

Even today, modern economists need to acknowledge that economics cannot do without a value-based kind of anchoring. Although for instance ethics and moral aspects have always been troublesome concerns for human beings to dwell over, we continue to do so because we

---

<sup>1</sup> Such a *Weltanschauung* or worldview "... shapes the interests of the scientist and determines the questions asked, the problems considered important, the answers deemed acceptable, the axioms of the theory, the choice of "relevant facts," the hypotheses proposed to account for such facts, the criteria used to assess the fruitfulness of competing theories, the language in which results are to be formulated, and so on", Wilber (1999, p. 1221-1222).

fell the urgent need for this kind of reflection (just to mention one example, in our time trying to take care of the livelihood of future generations, the concern for environmental sustainability is for obvious reasons high on the public agenda). As such, normative aspects are and has always been an inherent component of economic reasoning. Aiming to highlight the importance of this statement this short article presents some arguments of why this must be so. That is, as a genuine social science economics is a moral science and to some point also a political science.

### **From the very beginning economics was a moral science**

To include ethical and moral considerations in economics has a long track record as it has been present from the very beginning of economic reasoning. In ancient times when focusing on economic aspects the Greeks, Romans, and early Christian contributions always aimed to include some elements concerning the quality and justice of life. Seen from their perspective, to mention an important issue, prices should be set in such a way as they were seen as both just and fair. More generally, when acting economically, these acts had to include the aspect of doing good thereby applying the ethics of love to economic behaviour. As such, the economic conduct was somehow always contextualized within a given ethical framework.

Later, it must be remembered that Adam Smith the founding father of economics started out by addressing ethical aspects when he wrote *The Theory of Moral Sentiments* which was published in 1759. As such, most Smith scholars see Smith as one who understood that society must have an ethical foundation. And they often argue that the economic universe that Smith unfolded in his *Wealth of Nations* is built on the philosophical understanding that he laid out in his *Moral Sentiments*. As such, as argued by Hühn (2019, p. 1), most Smith scholars “... assert that his economics was applied moral philosophy”.

As society develops over time, Smith argued that such processes of transformation are hinged on more than just pure economic aspects. Smith taught us, that we need to include both some political, historical, and cultural aspects to understand the true nature of such processes. That is, basically, Adam Smith understood economics as a discipline as a moral science, see e.g., Robinson (1978), Malek et al. (2016) and Montes (2019, p. 3) who states: “Smith considers

ethics to be a social phenomenon simply because a man [sic] without society cannot have a sense of good or bad". As we are all human beings contextualised in some activity defining given social institutional framework, with Smith, we must acknowledge that "The judgements of conscience, moral judgements about one's own actions, are in the first instance a reflection of the judgements of society" as pointed out by Raphael (1985, p. 34). Therefore, to Adam Smith, *the philosophical economist*, the economic agent should be understood as "... a vessel that he fills with a multitude of sentiments and values", Hühn (2019, p. 2).<sup>2</sup> That is, the individuals that Smith inhabited his *Wealth of Nations* with are human beings that act economically quite different than what could be expected by how we generally understand the concept of *homo economicus*.

Furthermore, Adam Smith was not the only classical economist to touch on value judgments, although he together with John Stuart Mill were perhaps the most outspoken ones. In general, the classical theory contains various traces of ethical statements as did early neoclassical theory and later the neoclassical paradigm with its focus on welfare (e.g., Pareto as well as other welfare criteria).

## **Modern times - normative versus positive economics**

As argue by Hodgson (2014), from the first half of the 20th century, neoclassicists downgraded the explicit moral dimension in economics probably due to inspiration from a positivistic methodology gradually making mathematics to become the prime engine of analytic inquiry. As pointed out by Hodgson (2012, p. 271), the neoclassical approach, in general, focuses on

---

<sup>2</sup> As Hühn (2019, p. 7) more thoroughly explains: "Smith always stressed the social embeddedness of the individual ... [more so] ... he was influenced by the Stoic understanding of prudence: it is proper self-care and not selfishness ... [as such] ... he is able to connect the individual smoothly with the societal level: individual decisions create society, but at the same time, the surrounding society influences these decisions ... [therefore, to Smith] ... all economics is a kind of psychological microeconomics, since all microeconomics is based on the conscience guiding human decisions. That is ... he connects the individual with society and does not erase the individuality by defining him as a genus".

“... the utilitarian calculus of satisfaction-seeking individuals ... Money value is used as the principal incentive. It is assumed that everything — including moral and aesthetic values — can be given a price”.

Perhaps this was a tendency which most dominantly coloured the development of macroeconomics after the era of old Keynesianism.<sup>3</sup> As such, this research strategy narrowed down the scope of economics with its focus on inhabiting the economic system with *homo economicus* putting aside the role played by *homo empathicus*. Although it has to be remembered that to adopt such a strategy is in itself a normative choice. Mainstream economics be it the old neoclassical paradigm or the modern macroeconomic understanding has its own built-in normative values that reflects a basic neoliberal ideology<sup>4</sup> (with an almost unlimited faith in the beneficent power of unbridled market mechanism fetishism to bring about outcomes of optimality – the cure medicine for seemingly all economic illnesses). As Hühn (2019, p. 13 & p. 11) characterises modern mainstream economics, it operates almost exclusively “... within a formal science framework, with “reality” represented, not observed, by statistical concepts ... moral philosophy no longer plays any role because values have been discarded from all levels of analysis ... Today’s economics is clearly a formal science – although many mistake it for a natural science”.

The general rule thus became: do positive economics and minimise (get rid of) all elements of normativity.<sup>5</sup> This is the golden rule of getting progressive scientific success at least seen from

---

<sup>3</sup> As argued by Olesen (2024) this trend took its inspiration in the economics of Milton Friedman which later developed into new classical thinking and new Keynesianism which in combination paved the road to the modern macroeconomic mainstream of our time with their DSGE models.

<sup>4</sup> Although perhaps hidden rather well, even positive inspired economic theories is of course not value free theories. As Hill (1968, p. 265) years ago argued: “Since the positive economist does not admit that he implies value judgments, he is not responsible for the value judgments implied by his theory ... To deny the existence of implied value judgments is questionable intellectual honesty ... Both intellectual honesty and professional responsibility demand explicit recognition of the normative preconceptions of every theory”.

<sup>5</sup> As explained by Blaug (1982, p. 129), this distinction has to do with statements between ‘is’ and ‘ought’, that is, “... between facts and values, between supposedly objective, declarative statements about the world and prescriptive evaluations of states of the world”. That is, positive economics is about facts whereas normative

a mainstream perspective. They claim scientific status as they see their work as being value neutral. Although Boulding (1969) – a seminal contribution on methodological aspects on positive versus normative economics – is rather accepting at least in principle of such a view, he points, however, also to the fact that severe limitations are imposed on this idealistic strategy of gaining scientific success. As such, he stated: “... as science develops it no longer merely investigates the world; it creates the world which it is investigating ... what it creates becomes a problem of ethical choice, and will depend upon the common values of the societies in which the scientific subculture is embedded ... [and when] ... knowledge changes the world the question of the content of the common values, both of the subculture which is producing knowledge and of the total society in which that subculture is embedded, becomes of acute importance. Under these circumstances the concept of a value-free science is absurd”, (ibid. pp.3–4).

Furthermore, however convincing the view of gaining scientific success doing only positive economics might seem to many economists, scholars familiar with a thoroughly understanding of philosophy of science and economic methodology have been rather sceptical of such a strategy. Economics, as science in general, they argue, cannot escape all elements of normativity as science cannot avoid some kind of value assessments as there does not exist a sharp dividing line between positive and normative economics, see e.g., Davis (1999). More so, philosophers of science have for years pointed to the fact that subjective factors also have a role to play in science as such factors are “... inevitably involved in the development of scientific ideas, and that facts are theory-laden because they are identified from the perspective of paradigms”, (ibid. p. 805).<sup>6</sup> So how we as scientists choose among

---

economics is about values. Furthermore, as clarified by Hill (1968, p. 259): “Positivism holds that sense experiences and their logical and mathematical treatment are the exclusive source of all worthwhile information. Positivism rejects introspection and intuition as sources of knowledge ... Positivism limits validity to positive facts, which are facts of immediate perception, and to the relations and uniformities among them”.

<sup>6</sup> Furthermore, as Wilber (1999, p. 1222) points out: “The paradigm or research program of any scientific community is circumscribed by boundaries laid out in a world view which, while not perhaps individually subjective, is nevertheless empirically untestable or meta physical”.

various theories is not solely determined objectively based on "... non-controversial criteria ... [these choices are also value-laden as] ... each theory serves specific ends. The scientists' search for "valuable truth" is directed by what they think society (and science) ought to do. Since no amount of evidence ever completely confirms or rejects any empirical hypothesis, but only renders it more or less probable, the scientist's values inevitably play a role in theory construction", Wilber (1999, p. 1220).

More so, we cannot do science without some kind of criteria that guide us to separate good science from bad science. That is, when we for instance in economics address various methodologically questions, we often look for some guidance relying on evidence from philosophy of science. Often, we aim at evaluating scientific theories and/or statements by use of specific theories on philosophy of science. Traditionally within economics, we have historically drawn on the theories advocated by Karl Popper, Thomas Kuhn, and Imre Lakatos. And how we choose between these theories or perhaps try to mix some of them in certain studies is of course in itself based on some kind of value assessments.

As Boumans & Davis (2016, pp. 175 & 190) sums up the discussion:

"Scientists and economists live in a world of values. Though values and value judgments are not the only determinants of how they understand and practice science ... they certainly exert a considerable influence ... value judgments enter into economics in a number of distinct ways: in the way in which the economy is investigated, in the often value-laden character of the concepts employed in economics, in the ethical views implied by the fundamental propositions of standard economics, and in how explanations in economics incorporate ethical values and moral norms".

Therefore, as pointed out by Tarascio (1971, p. 98) it is impossible to escape value assessments in economics as: "The problem of values and its implication for economic science has been a source of methodological controversy ever since logical positivists distinguished between positive and normative economics".

Despite the arguments laid out in Milton Friedmans famous essay on the methodology of positive economics from 1953, to put emphasis on positive economic aspects and neglect



normative statements does not fix all that is problematic in economics. There exists a kind of fundamental inherent unsolvable methodological problem.

As methodological assessments are superior (should be ranged higher) to those of a normative character<sup>7</sup>, Tarascio claims, even to a positivist as Friedman some value judgments might be okay while others can and should be dispensed with: “Yet Friedman admits that value judgments are involved in the choice of criteria for judging the validity of a theory, the selection and interpretation of data, the adherence to the canons of formal logic, and so forth”, (ibid. p. 99).

In general, the methodology of positive economics narrows down the scope of doing economic analysis as it does not allow some important aspects and problems to be analysed. Instead, Tarascio goes on arguing, proper scientific progress should be gained by “... widening the scope of economics to include other social phenomena”, (ibid. p. 100) acknowledging a need of going back to a broad and more holistic perspective somewhat like the one that among others Adam Smith was a proponent of.

In general economics must include the normative dimension simply because economics is all about goal oriented human behavioural. And normative aspects colour human behaviour as our decision-making is “... well grounded in beneficial values and value systems ... values are encoded in culture ... [and] ... habits influence actions that in turn reinforce habits”, Stevenson (2002, pp. 263 & 265). That is, when we act, economically as well as in other respects of life, we are to some extent motivated also by ethical and moral considerations. Often, it must be remembered that we act as humans because we have an immanent desire “... to improve the well being of others”, (ibid. p.268).

Furthermore, as stated by Rokeach (1960), as human beings we all have many kinds of belief and disbelief systems: “The *belief system* is conceived to represent all beliefs, sets, expectancies, or hypotheses, conscious and unconscious, that a person at a given time

---

<sup>7</sup> As pointed out by Boumans & Davis (2016, pp. 190 & 191): “Methodological value judgments in economics are evaluative judgments which economists make with respect to the methods and approaches they choose to employ in their investigation of the economy ... [they are] ... normative in that they involve prescriptions or recommendations about how one ought to carry out economics”.

accepts as true of the world he lives in. The *disbelief system* is composed of a series of subsystems rather than merely a single one, and contains all the disbeliefs, sets, expectancies, conscious and unconscious, that, to one degree or another, a person at a given time rejects as false ... We mean it to include each and every belief and disbelief of every sort the person may have built up about the physical and social universe he lives in. We mean it to represent each man's *total* framework for understanding his universe as best he can", (ibid. p. 33 & p. 35) – some of these systems are explicit (known/conscious) some are more implicit (unknown/unconsciously) that to some degree is psychological dependent. Some individuals adhere to a belief system that can be characterized as closed in nature, others to systems that are much more open in nature – a choice that to some extent is determined by ideology. And of course, individuals' behaviour – economically as well as otherwise – is also dependent on the nature of their belief system (content wise, psychologically as well as ideologically).

It might pose serious problems to economists acknowledging the fact that economics can never be pure positive in the strict sense of the term. A way of trying to cope with this sometimes perhaps troublesome terrain of normative morass is to be explicit and open concerning every value judgment or statement you make when you do economics. This may give a most needed room for conducting an open and critical academic discussion among colleges somewhat in alignment with the guidelines given by Karl Popper and his views on how science best could (and should) be practised within a scientific community of truly openness respectfully adhering to the principles of critical rationalism.

### **Is economics a political science?**

As stated in the above sections, economics can never free itself fully from value judgments. As a social science, economics has to do with the goal-oriented behaviour of human beings when acting economically. And when they act, they act within a given contextual setting. Furthermore, the way they act undergoes changes as society develops over time. That is evident given historical facts. As such, economics is a dynamic game. And the rules of the game are not changed stochastically nor in a certain deterministic manner. Societies develop due to the political will of the people (in a modern democratic political system) and/or due to the will of

those in power (autocracy): nobility and monarchy (as in the old days or ruled by dictators (totalitarian regimes)).

That is, in a modern context, societal changes are politically determined. And politics is basically all about value judgments or normative statements.

Even within a methodological framework of positivism, economic theories are somehow always of course based on given values (or ideologies). Suffice it to mention how economists rely on the strength of the market mechanism to achieve first best solutions. Some, especially mainstreamers, argue that more market is better than less market as is less regulation in calling forward a macroeconomic output of optimality, others, often more heterodox minded economists, question the powers of such a kind of market understanding.<sup>8</sup> So, seeing economics essentially as a moral science with an omnipresent political anchoring should hardly come as a surprise for anyone doing economics. You cannot escape this fact even if you try to transform economics to become a formal science (natural science-like) where the only acceptable language is that of mathematical statements.

In this sense, given the inherent ideological anchoring of economic theories, economics could be characterized as a political science.

Finally, even economists as citizens have of course political views on how they prefer society to change and develop. As such, they are themselves not free of making value judgments of a political ideological nature. And at least to some extent, this colour how economists favour particular economic policy proposals as some of these seem more attractive than others. And economists differ in how they prioritise given policy proposals. Often perhaps this is due to their economic understanding – their theoretical worldview – but sometimes it is mostly determined by the political ideology they advocate.<sup>9</sup>

---

<sup>8</sup> Basically, seen from a mainstream perspective, the strength of the market mechanism works through relative price changes given perfect price flexibility. As Paul Davidson used to argue, mainstreamers in general view this mechanism as “... the cure-all 'snake-oil' medicine usually recommended by many neoclassical doctors for the unfortunate economic maladies that are occurring in the real world”, Davidson (1984, pp. 568-69).

<sup>9</sup> As a case study on the importance of this kind of political dimension with Keynes being the case, see Fitzgibbons (1988, chapter 9) titled 'The Political Ideals'.

## A sum up

Human activity is in general goal oriented. It is conducted within given institutional settings given by for instance by the family, the place of work, the municipality, the cultural and the religious sphere, the political and the economic system and so on. And these settings are in many important aspects influenced by value judgments, that is, to some degree they are normative determined as the settings are the result of human decisions/actions.

Sometimes this normativity has to do with ethics and moral reflections. As such, the institutional settings that surround economic activity of individuals, organisations, governments and others – the environment which govern how economic actions unfold themselves – is also at least to some degree sometimes in important ways determined by ethical and moral considerations as pointed out by Wight (2015, pp. 8 & 7) as “ ... Ethical beliefs and practices make up the formal and informal rules that generate trust, promote interdependencies, and spur work productivity in a myriad of ways”.

This is so, as discussed by Rowthorn (1996), because moral behaviour has to do with humans’ concern for considering the interests of others when acting goal oriented. As such, moral behaviour may be determined by many varying factors differing among groups of individuals, but this kind of behaviour is somehow always coloured by elements of “... sympathy, benevolence, fairness, duty and commitment ... [therefore] ... Morality can be seen as a form of social capital”, (ibid. pp. 16 & 22).

Often ethical and moral reflections, as in general might be the case for most normative considerations, are grounded in some way or another on theologically contemplations and/or commitments. As argued by the late Pope Benedict XVI this has consequences for how one should understand and analyse economic behaviour. In the real world, human economic activity is in general not governed by mechanical determinism – there are severe limitations on what the textbook-like stipulated behaviour of *homo economicus* actually can graph of real-life human conduct. As such, the late Pope advises us to accept that: “A morality that believes itself able to dispense with the technical knowledge of economic laws is not morality but moralism. As such it is the antithesis of morality. A scientific approach that believes itself capable of managing without an ethos misunderstands the reality of man. Therefore it is not

scientific", Ratzinger (1986, p. 204). More so, it should be obvious for all, even economists, that: "Today we need a maximum of specialized economic understanding, but also a maximum of ethos so that specialized economic understanding may enter the service of the right goals. Only in this way will its knowledge be both politically practicable and socially tolerable", (ibid. p. 204).

So, the old-timers got it right from the very beginning. Economics is not just about doing and studying positive economics. There have always been important inherent normative aspects present guiding economic reasoning. It must be acknowledged that in many respects such a kind of normativity is at the very core of how individuals' economic behaviour is formed and unfolded. As for instance Davis (1999, p.807) points out: "... economics is highly value-laden and, thus, understanding the role of values in economics is necessary to doing good economics".

Economics *is* a moral science as argued by Adam Smit and John Maynard Keynes, two of the most prominent figures in the history of economics. So, modern economics must undergo changes. If it aims at gaining more relevance in coping with facts of real life, it must once again become a true social science.<sup>10</sup> That is, we have to figure out how we as economists can reach out to other disciplines to broaden up the scope of economics to include other relevant social phenomena than pure economics ones. Likewise, we must try to be more explicit when we concern ourselves with value statements when working as economists. Then we might be more able to discuss respectfully how and why we sometimes favour particular policy proposals more than others. So there is still a lot of work to be done aiming at having economics to gain more relevance concerning how to deal with phenomena of real life the right way.

---

<sup>10</sup> As pointed out by Hühn (2019, p. 13) for that to happen "... values, the ethical not the mathematical kind, must be put at the start, middle, and end of all economic theorising. To Smith, there was no science without values, there was no business theory without ethics, and there was no economic science without moral philosophy providing the language". As argued by Olesen (2025), such a view on economics would most certainly also be in good accordance with how Keynes understood economics.

## References

- Blaug, Mark (1982), *The methodology of economics or how economists explain*, Cambridge University Press.
- Boulding, Kenneth (1969), 'Economics as a moral science', *The American Economic Review*, 59(1), pp.1–12.
- Boumans, Marcel & Davis, John (2016), *Economic Methodology – Understanding economics as a science*, Macmillan International, Red Globe Press.
- CW (XIV), *The Collected Writings of John Maynard Keynes, Vol. XIV, The General Theory and After, Part II: Defence and Development*, Macmillan Cambridge University Press 1973.
- Davidson, Paul (1984), 'Reviving Keynes's revolution', *Journal of Post Keynesian Economics*, 6(4), pp. 561-75.
- Davis, John B. (1999), 'Normative and positive economics', *Encyclopedia of Political Economy*, edited by Phillip Anthony O'Hara, Taylor & Francis Ltd., 1999, pp. 804-807.
- Fitzgibbons, A. (1988), *Keynes's Vision – A New Political Economy*, Oxford: Clarendon Press.
- Hill, Lewis E. (1968), 'A Critique of Positive Economics', *The American Journal of Economics and Sociology*, 27(3), pp. 259-266.
- Hodgson, Geoffrey (2014), 'The evolution of morality and the end of economic man', *Journal of Evolutionary Economics*, 24(1), pp.83–106.
- Hodgson, Geoffrey (2012), 'Toward an Evolutionary and Moral Science. Remarks upon Receipt of the Veblen-Commons Award', *Journal of Economic Issues*, 46(2), pp. 265-275.
- Hühn, Matthias P. (2019), 'Adam Smith's Philosophy of Science: Economics as Moral Imagination', *Journal of Business Ethics*, 155, pp. 1–15.
- Malek, Ninos et al. (2016), 'The relationship between economics and ethics and the effectiveness of normative economics on students' attitudes and learning', *Journal of Economics and Economic Education Research*, 17(1), pp.16–24.
- Mitchell, Hadley T. (2017), 'The Ethics of Keynes', *Journal of Markets & Morality*, 20(1), pp. 23-37.
- Montes, Leonidas (2019), 'Adam Smith's foundational idea of sympathetic persuasion', *Cambridge Journal of Economics*, 43(1), pp.1–15.
- Olesen, Finn (2025), 'Keynes – the ethical inspired economist', *Brazilian Keynesian Review*, 11 (forthcoming).
- Olesen, Finn (2024), *Makroøkonomi og Virkelighed – En teoriehistorisk rejse mod den moderne makroteori*, Djøf Forlag.
- Olesen, Finn (2023), 'Macroeconomics and Ethics', *Routledge Handbook of Macroeconomic Methodology*, Jesper Jespersen, Victoria Chick & Bert Tieben (eds.), Routledge 2023, pp. 64-71.
- Raphel, D.D. (1985), *Adam Smith*, Oxford University Press.
- Ratzinger, Joseph (1986), 'Church and Economy: responsibility for the Future of the World Economy', *Communio*, 13(3), pp. 199-204.

- Robinson, Joan (1978): 'Morality and Economics', *Challenge*, March-April, 21(1), pp.62–64.
- Rokeach, Milton (1960), *The Open and Closed Mind – Investigations into the nature of belief systems and personality systems*, Basic Books, Inc., Publishers, New York.
- Rowthorn, Robert (1996), 'Ethics and Economics – An Economist's View', *Economics and Ethics?*, Groenewegen, Peter (editor), Routledge, pp. 15-33.
- Stevenson, Rodney (2002), 'An Ethical Basis for Institutional Economics', *Journal of Economic Issues*, 36(2), pp. 263-277.
- Tarascio, Vincent (1971): 'Value Judgments and Economic Science', *Journal of Economic Issues*, 5(1), pp. 98-102.
- Wight, Jonathan B. (2015), *Ethics in Economics: An Introduction to Moral Frameworks*, Stanford University Press.
- Wilber, Charles K. (1999), 'Value judgments and worldviews', *Encyclopedia of Political Economy*, edited by Phillip Anthony O'Hara, Taylor & Francis Ltd., 1999, pp. 1219-1222.