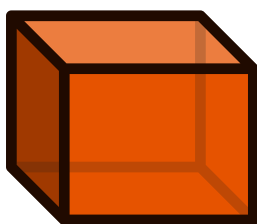


Economy Studies for Game Theory

New Ideas & Materials for Educators & Students



**Economy
Studies**

Sam de Muijnck & Joris Tieleman

Rethinking
Economics

one
OUR NEW ECONOMY



Amsterdam
University
Press

The book Economy Studies

This booklet is part of a series based on Economy Studies, a project for re-envisioning and redesigning economics courses and programs. The project emerged from the worldwide movement to modernise economics education, spurred on by the global financial crisis of 2008, the climate crisis, and the COVID-19 pandemic. It envisions a wide variety of economics graduates and specialists, equipped with a broad toolkit, enabling them to collectively understand and help tackle the issues the world faces today.

This is a practical guide for (re-)designing economics courses and programs. Based on a clear conceptual framework and ten flexible building blocks, this handbook offers refreshing ideas and practical suggestions to stimulate student engagement and critical thinking across a wide range of courses.

Key features

- 1 Adapting Existing Courses: Plug-and-play suggestions to improve existing economics courses with attention to institutions, history, values and practical skills.
- 2 Teaching materials: A guide through the rapidly growing range of innovative textbooks and other teaching materials.
- 3 Example Courses and Curricula: How to design pluralist, real-world economics education within the practical limits of time and resources.

What others say about Economy Studies

“A tremendous resource for both teachers and students of economics.”

Prof. **Wendy Carlin** (UCL), director of the CORE Economics Education Project

“Based on a thorough analysis, the authors argue for a radical rethink of how economics is taught. Whether you agree or disagree with some of the specific suggestions, this book is definitely worth reading.”

Claudio Borio, Head of Monetary and Economic Department at the BIS.

“This book is a tour de force. The mastery of the subject that the authors and their team display is astonishing. It was a source of inspiration for the development of the new program at the Vrije Universiteit of Amsterdam.”

Prof. **Arjo Klamer** (EUR & VU)

Why this booklet

In this booklet, we provide suggestions, content and teaching material for how to modernise and enrich game theory courses. In doing so we hope to assist educators in improving and adapting the courses they teach, as well as helping students make suggestions for how this could be done. It is important to note that we pose all these suggestions as potential sources of inspiration, not a checklist of all the things that necessarily should be included. After all, there is a practical limit to what can be taught within a single course.

Other booklets in this series available via www.economystudies.com:

- 1 Economy Studies for Students
- 2 Economy Studies for Program Directors and Deans
- 3 Economy Studies for Secondary Education
- 4 Economy Studies for Business Schools
- 5 Economy Studies for Public Administration & Law Programs
- 6 Economy Studies for Economics 101
- 7 Economy Studies for Microeconomics
- 8 Economy Studies for Macroeconomics
- 9 Economy Studies for Econometrics
- 10 Economy Studies for Labour Economics
- 11 Economy Studies for Public Economics
- 12 Economy Studies for Environmental Economics
- 13 Economy Studies for Development Economics
- 14 Economy Studies for Industrial Organisation
- 15 Economy Studies for Finance
- 16 Economy Studies for Monetary Economics
- 17 Economy Studies for International Economics
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Reading Guide

To get an overview of the Economy Studies project as a whole, start with the Summary.

For concrete suggestions on topics and material to enrich your own course, go directly to Adapting Game Theory Courses.

For a brief explanation of key economic approaches, see the Background Material chapter.

For ideas and materials on teaching students about allocation and coordination mechanisms, take a look at the Building Block chapters.

To see what you can do to help modernize economics education at your own university, see the Conclusion.

Summary

“I don’t care who writes a nation’s laws, if I can write its economics textbooks.”

Paul Samuelson

1 Rethinking Economics Education

Humanity is wealthier, more connected and more technologically advanced than ever. Access to healthcare is rapidly expanding and poverty levels keep dropping in most parts of the world. At the same time, societies around the globe are facing a multitude of challenges. To name a few: climate change, biodiversity loss and resource depletion, growing inequalities and power concentrations, economic instability and soaring levels of private and public debt, ageing and migration, social polarisation and rising authoritarian nationalist populism. And, back on the table since 2020: pandemics.

Tackling such challenges requires a deep comprehension of the economy, which the current system of economics education does not sufficiently provide. Economists need a real-world understanding of how various industries work, how they are intertwined with each other, how economic power works, what roles states play and how these are embedded in our society at large. It also requires open minds which can look at issues from a variety of perspectives. A single theoretical framework cannot provide the answers to every question. A range of approaches which prioritise different methodologies, assumptions, units of analysis and outcomes, is necessary for gaining a good understanding of the economy and its issues. Economists need to be able to think critically, select the tools which are most relevant for the context and problem at hand, and understand the limitations and uncertainties of the conclusions that they draw from them. Finally, it requires an awareness and an explicit discussion of the moral dilemmas and normative trade-offs involved in economic decisions. In short, economists have a lot on their plate.

Economists also have a lot of influence, for good and for bad. Firstly, as key policy experts and advisors, economists largely run many of the most powerful public-sector organisations in the world: central banks, ministries of finance, social and economic affairs, the IMF and the World Bank. In the private sector, economists co-direct the behaviour of banks and other large companies. Secondly, the economic ideas that float around most prominently in our society exert an influence far beyond the formal advisory reports of professional economists, guiding decision-making of citizens everywhere. Economic thinking influences even those who do not become economists, as economists have a central role in the public debate and many citizens are taught basic economics in secondary or tertiary education.

The growing societal importance of economists and economic ideas has sparked a lively debate around the content and structure of economics education. A worldwide movement of students and academics calls for more pluralist, real-world focused and socially relevant programmes that would enable economics graduates to better understand and tackle the economic issues that the world faces today. This movement has accelerated over the last decade, spurred on by the global financial crisis of 2008, the climate crisis and the COVID-19 pandemic.

Under names such as Rethinking Economics, Netzwerk für Plurale Ökonomik, Institute for New Economic Thinking (INET), International Student Initiative for Pluralist Economics (ISIPE), International Confederation of Associations for Pluralism in Economics (ICAPE), Diversifying and Decolonising Economics, Economists for Future, Reteaching Economics, and Oikos International, these groups come together for dissent, discussion, self-education, action, campaigning, disseminating ideas and engaging with wider audiences.

Research by these groups indicates that many current programmes are not sufficient to prepare students for their future roles in society. They are often organised around the notion of ‘thinking like an economist’: training students to think exclusively from the neoclassical perspective and having skills in econometrics, while neglecting other valuable theoretical approaches and research methods. Furthermore, these analytical tools are taught in an overly abstract way and are presented as being value-free.

These groups and others have also produced a growing amount of innovative teaching material, beyond how economics programmes are traditionally structured. From online educational resources such as the open access CORE project and the bottom-up e-learning platform Exploring Economics, to multiple new pluralist and real-world focused textbooks. Many departments have introduced a wealth of new courses, or even started entirely new programmes.

2 This Book: Purpose and Overview

What has been missing so far in this field is an integral approach for constructing economics curricula and courses. This book aims to fill that gap. We bundle the ideas and materials of renewal and reform into a coherent multi-level vision for economics education: its overarching structure, its goals and its principles. We also provide the concrete building blocks for this in terms of academic content, including detailed overviews of teaching materials and practical suggestions. Finally, we translate these to the level of actual programmes and courses, providing a wide range of practical tools for implementation.

This entire book carries a CC-BY Creative Commons licence, which means that any part of the book may be freely copied, redistributed, remixed, transformed or built upon, without restrictions. As such, our proposal for a new integral approach to economics education can also be adopted and used partially, rather than being accepted as a whole. Each idea and suggestion can be judged and incorporated independently. You can totally disagree with principle 1 yet support principle 3. Or you might find little value in building block 5 and yet fall in love with building block 9. That’s the idea: it’s modular. Thus, the book as a whole can be used as a source of inspiration and overview of options for improving and renewing economics education.

Part I: Foundations

The first part of the book, Foundations, sets out our philosophy and the three guiding principles that should underpin any economist’s education. In contrast to the currently common approach of teaching students to ‘think like an economist’, the Economy Studies approach is this: We envision an education where economics is not centred on a specific method of analysis or thought, but rather centred on a study matter, the economy. Economies can broadly be described as open systems of resource extraction, production, distribution, consumption and waste disposal through which societies provision themselves to sustain life and enhance its quality.

Based on this philosophy, we formulate three principles: Pluralism, Real-World and Values.

First, a discipline centred around a single subject matter requires a plurality of theoretical frameworks: one

single set of basic assumptions is not enough to understand such a multifaceted subject matter. Here it is important that students learn which ideas are compatible with each other and which are in conflict with each other. Some of these theories fall within the current economic mainstream, others exist on its fringes, and yet others are currently at home in other disciplines. It also implies a plurality of research methods, from basic statistics and regression analysis to interviews, network analysis and survey analysis. Such pluralism means that there is no single dominant framework, which might be more difficult for those receiving economic advice, but is ultimately beneficial for the quality of analysis and the resulting decisions.

Second, the notion of a programme centred on the subject matter of the economy implies a continuous and conscious orientation towards the economy as it exists in the real world. Students benefit from studying practical questions and gaining concrete knowledge, not just abstract analytical tools. For instance: How is the German car industry structured? What hurdles does the global energy transition face? What happens at a central bank? The Real-World principle ranges from studies of economic sectors and key institutions in the local or (inter-)national economy, to the histories of economies and case studies of specific economic challenges.

Third, we draw attention to the wide variety of normative principles and visions that can guide economic decisions and action, and which are often subtly embedded in economic theories. There is little sense in trying to 'solve economics problems' without considering what things exactly are worthwhile or problematic, and what values are at stake. Profits, sustainability, power, equal chances, equal outcomes, job creation, labour conditions, ownership, accountability, GDP growth, wellbeing – what should we focus on?

Economics has historically been, and is still, dominated by upper- and middle-class white men based in the Global North. This has consequences for each of the three principles. In terms of Real-World, it is important to pay attention to the lived economic realities of working-class citizens, women, minorities, and those living in the Global South. For Pluralism, we need to incorporate often ignored but valuable ideas and contributions of lower class, female, and non-western scholars. For Values, it is key to realise that people from different backgrounds have different priorities and values, and work to ensure that these are reflected in the questions we focus on and the theories and methods we use. In sum, we need to diversify and decolonise economics education.

The Foundations part ends with a chapter on didactics. Improving economics education is not simply a matter of changing what is taught, but also how it is taught. Various surveys among employers of economists show that more attention for communication and collaboration skills is needed. There are also worrying indications that economics classes often fail to facilitate open, critical, but also respectful, discussions. Finally, to make economics education more lively, interesting for students and connected to the real world, a greater variety of teaching and examination methods could be used. On all these fronts we provide practical suggestions.

The second part of the book is devoted to the Building Blocks. Where the Foundations part discusses the purpose and principles of economics education in general, the building blocks are more applied: ten thematic areas of knowledge and skills, which form the meat and bones of the Economy Studies course design method. Each of the ten building blocks covers an area of knowledge and set of skills that we see as essential for the education of future economists.

Part II: Building Blocks

The second part of the book is devoted to the *Building Blocks*. Where the *Foundations* part discusses the purpose and principles of economics education in general, the building blocks are more applied: ten thematic areas of

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We start out with two building blocks that focus on acquiring basic economic knowledge, one conceptual and one focused on the real world. Introducing the Economy is about getting a feeling for economic matters, discussing what the economy is in the first place, why it is relevant, how it is related to other aspects of the social and natural world, and what societal roles economists have. Know Your Own Economy, on the other hand, has a more concrete focus as it is about knowledge of the actual (national and local) economy and its structures, institutions, and sectors.

The third and fourth building blocks deal with history: History of the Economy and History of Economic Thought & Methods. The fifth and sixth building blocks are more conceptually oriented, dealing with how economies can and have been organised, at micro and meso levels – Economic Organisations & Mechanisms – and at the macro level – Political-Economic Systems.

The seventh and eighth building blocks provide a broad and diverse analytic toolkit: Research Methods & Philosophy of Science and Economic Theories. These two, especially the latter, are relatively large. In most programmes, they will require more space than the other building blocks. Finally, building blocks nine and ten deal with practically contributing as an economist: Problems & Proposals is about analysing concrete economic challenges and formulating or evaluating proposed policies and actions, and Economics for a Better World asks how normative principles and visions can guide action to address the major challenges of our times, and helps students to be reflective of their own role as an economist

These building blocks can be used as templates to create stand-alone courses or modules, or they can be combined in courses. They can be re-ordered, combined or integrated in many ways to suit the specific needs of each programme. For instance, Building Block 3: Economic History could be taught as a stand-alone subject, or integrated with the fourth building block into a course History of Economic Thought and Reality, or integrated as a minor component in an existing Labour Economics course. In our ideal world, these building blocks would be combined to form a wide range of economics programmes. Different contexts and challenges require differently trained economists.

Part III: Tools

The third part of the book, titled Tools, provides material that is directly actionable. It starts with Pragmatic Pluralism, a suggested format (including references) for teaching theory in a pluralist manner without drowning students in the enormous diversity of ideas out there. We list thirteen core economic topics and set out for each topic the two main opposing perspectives, a key complementary perspective and additional insights coming from other approaches.

Often there is no space in programmes for completely new courses but there is room for adjustment in some existing courses. In *Adapting Existing Courses*, we offer ready-to-use sets of suggestions and material to do so, for courses like Micro, Macro, Public Economics and Finance. The Curriculum Review Tool offers a clear starting point for applying our building blocks to an existing programme. This tool helps identify possible blind spots of a programme and suggests ways to strengthen it. The Example Courses that follow illustrate how the building blocks can be used to create completely new courses. The next chapter maps out several complete Example Curricula, demonstrating how the building blocks might be combined to form a complete bachelor or master programme in Economics.

While this book is primarily oriented towards full economics programmes in academic education, in the chapter Courses for Non-Economists we suggest limited packages of core economic ideas that may be useful for business schools, secondary school economics programmes, in an academic minor or for self-study. Finally, Learning Objectives offers tools for designing the learning objectives behind economics courses, starting not from the question ‘what does the teacher know best?’ but from ‘what do the students need to know, to be prepared for their future societal roles?’.

Part IV: Online Materials

Economy Studies is more than a book. On the website, we offer an extended version of the Pragmatic Pluralism chapter, a broader range of Adapting Existing Courses topics, additional Example Courses and Example Curricula. We also provide background material on each of the Economic Approaches described in this book, as well as neighbouring sub-disciplines such as economic sociology and economic geography. In addition, we provide a more complete overview and discussion of research methods, coordination and allocation mechanisms, and the history of economic thought and methods. Finally, we offer much more extensive lists of teaching materials for each of the building blocks.

Online, we also work together with the INET Education Program, at the Institute for New Economic Thinking. This platform will host free educational resources online, accessible to students, teachers and the general public. This includes video lecture series, syllabi, teaching modules, lecture notes, readings, sample quizzes and exams. The platform will also serve as a center to build up an online community of teachers and learners, working together to improve the way economics is taught and learned. Each of the chapters in this book has a discussion page on that platform.

What kind of graduates would a programme based on these ideas and materials produce? It is important to acknowledge that they would not have all the skills that current-day graduates have. Less mathematical sophistication, less expertise in econometric analysis, less knowledge of neoclassical theory. In exchange for these losses, students gain: a deeper understanding and more concrete knowledge of the economy in which they live and will work. An awareness and understanding of the various ways in which economic processes are organised at the micro, meso and macro levels. Practical skills for investigating and tackling questions of economic policy: understanding the context and choosing the right tools, from a variety of theoretical and methodological approaches. And the ability to argue morally as well as analytically, and to clearly distinguish the two.

With this *creative commons* work, we hope to inspire economists and all students of the economy to rethink how we learn economics. The economic challenges we face as societies are enormous, so we desperately need well-prepared economic experts and a citizenry able to participate in economic discussions. Economics education has the vital task of preparing these people as best as possible.

This booklet provides a preview of the *Economy Studies* project. The full book also includes the complete set of building blocks, additional teaching materials, a curriculum review tool, example courses and curricula and suggestions for learning objectives. If you are interested to learn more, visit our website and buy or download the whole book, open access, or contact us.
economy.st

Adapting Game Theory Courses

General Approach to Adapting Existing Courses

Change often happens incrementally and slowly. In the economics textbook market, for example, there is an unwritten rule that new textbooks cannot differ more than roughly 15% from the standard textbook in order to be 'acceptable' (Colander, 2003).

While our book clearly breaks this rule and proposes more far-reaching and fundamental changes in most chapters, in this chapter we focus instead on how existing courses could be adjusted incrementally. By doing so, we hope to assist educators in improving and adapting the courses they teach without needing to rip them up and start again, as well as helping students make suggestions for how this could be done.

First, we set out the typical contents of current public economics courses. Second, we provide our suggested additions and changes. It is important to note that we pose all these suggestions as potential sources of inspiration, not a checklist of all the things that necessarily should be included. After all, there is a practical limit to what can be taught within a single course.

Typical contents of current courses

Game theory courses, sometimes also called strategy or decision theory courses, are about the formal modelling of conflict and cooperation. The teaching focuses on making students work with mathematical models of 'strategic interaction' between rational actors that calculate what their best option is, often meaning the one that maximizes their individual utility. A wide variety of such models have been developed which are intended to be applied in different situations. These range from static to dynamic games, games with complete to imperfect information, single to repeated games, cooperative to non-cooperative games, and zero-sum to non-zero-sum games. Sometimes evolutionary game theory and market design, with auction and matching theory, are also included. Insights from behavioral economics are increasingly included in game theory courses and sometimes the two are integrated in one course. For the sake of clarity we discuss the two separately, here game theory and below behavioral economics.

Frequently used textbooks::

- Game Theory: An Introduction by Steven Tadelis
- Game Theory: A Multi-Leveled Approach by Hans Peters
- Strategy: An Introduction to Game Theory by Joel Watson
- Introduction to Game Theory by Osborne Martin
- Game Theory by Michael Maschler, Eilon Solan, and Shmuel Zamir
- Game Theory 101: The Complete Textbook by William Spaniel
- Strategy and Game Theory by Felix Munoz-Garcia and Daniel Toro-Gonzalez

Suggested additions and changes

Practical skills and real-world knowledge

Our main advice for game theory courses is to pay more attention to their real world application and

relevance, and devote less time to mathematical sophistication and techniques. As with other courses, this is important because only a very small minority of students will go on to do academic research, and even fewer will work to produce mathematical proofs. The vast majority of students will become professional economists and in doing so need skills in proper practical application.

What would this mean for the course? It would mean spending less time on teaching and examining mathematical skills, and devote more attention to practical application with real world examples, case studies, and assignments in which students themselves have to analyse an actual societal problem. Here it is important that the goal of explanations and assignments also change. The goal of analysing a case is not (just) to demonstrate the theory or technique, but (also) to understand the real world case itself better with the help of the theory and technique. The two are always related to each other, but currently the emphasis is on the former and therefore we propose to put more attention on the latter. By learning more about actual cases students can learn better how to apply techniques in a proper manner, taking into account the context. Furthermore, it is a better way of making them realize and get to know the limitations of the approach, seeing what parts of reality it is able to capture and which not.

For more detail, see Building Block 2: Know Your Own Economy and Building Block 9: Problems & Proposals.

A range of analytical tools and approaches

Game theory focuses on how rational actors behave in strategic situations. Insights from behavioral economics, which emphasizes the cognitive limitations of human beings, are increasingly incorporated in game theory courses. We applaud this development and encourage teachers to actively collaborate with psychologists in their courses to help students get a better understanding of how the human mind and human behavior work. To understand economic behavior and decision making, social aspects are however also crucial. Game theory could thus benefit from bringing in insights from perspectives that focus on these social aspects of the economy, such as institutional, social network, field and cultural economics.

For more details, see the background materials Interdisciplinary Economics and Economic Approaches.

Teaching Materials

- Game theory: A critical introduction by Shaun Hargreaves-Heap and Yanis Varoufakis, from 2004. This useful book introduces students to game theory and its various aspects from dynamic, bargaining, repeated and evolutionary games, while also drawing attention to its core assumptions and the societal implications.
- The handbook of economic sociology by Neil J. Smelser & Richard Swedberg, most recent edition from 2010. This extensive and yet accessible book for non-sociologists, provides an impressive and useful overview of the field of economic sociology.
- Principles of Economic Sociology by Richard Swedberg, from 2003. An insightful introduction into economic sociology, with chapters devoted to different theories and topics, such as firms, markets, consumption, law and gender.
- Economic Anthropology: History, Ethnography, Critique by Chris Hann and Keith Hart, from 2011. This useful introduction into economic anthropology helps students understand how the field emerged and evolved, and what its different strands and key insights on different world regions are.
- A handbook of economic anthropology by James G. Carrier, from 2012. This impressive collection of essays covers the many strands of economic anthropology, from literature on different regions and economic mechanisms to different topics, such as agriculture, industry, consumption, culture, and the financial crisis of 2008.

- *The architecture of markets: An economic sociology of twenty-first-century capitalist societies* by Neil Fligstein, from 2001. This book introduces students to the field theoretic approach to markets, paying particular attention to institutions, employment systems, corporate governance and globalization.
- *The Social Structures of the Economy* by Pierre Bourdieu, from 2000. This book presents an extensive and detailed analysis of the French housing market followed by a short introduction into the field theoretic approach to studying markets.
- *The Impact of Social Structure on Economic Outcomes* by Mark Granovetter, from 2005. This influential article spells out key insights into how social networks shape economic behavior and market dynamics.
- *Economic Lives: How Culture Shapes the Economy* by Viviana Zelizer, from 2010. This book brings together the literature using a cultural approach to understand the economy and markets, discussing issues related to pricing, money, intimacy, care and commerce.
- *Anthropology and Economy* by Stephen Gudeman, from 2016. This book introduces students to looking at the economy through an anthropological lens, taking insights from different cultures and paying attention to different ways of organizing.
- *Institutions in Economics: The Old and the New Institutionalism* by Malcolm Rutherford, from 1999. A useful introduction into the different ideas and assumptions of institutional economics.
- *The Evolution of Institutional Economics: Agency, Structure and Darwinism in American Institutionalism* by Geoffrey Hodgson, from 2004. An influential book on the history and theoretical foundations of institutional economics.

Institutions and different ways of organising the economy

A key insight from game theory is that the rules of the game can drastically change its outcomes. The ways economic processes are organized in the real world are thus crucial for students to learn about, if they are to understand how economic outcomes come about. Therefore we propose to spend substantial attention to the institutional frameworks that determine the rules of the games. So instead of (only) giving students assignments to calculate optimal strategies for given games, let students compare, and possibly even design, different ‘games’ and institutional arrangements.

As above, the goal here should be to tackle a real world problem and use game theory to analyse which institutional solution would be best. An example could be to investigate what a competition authority could do when companies are colluding with each other. Or if a natural resource is being overused, how can the community stop this and move towards a sustainable situation? These solutions can require rather small institutional changes that later pay off for actors and in doing so will change their strategies and the outcome. But it can also amount to more systemic change in the institutional set-up, thereby changing the logic of the ‘game’ more fundamentally. Here research oriented on institutional varieties, such as that of Elinor Ostrom, is particularly relevant, as well as auction and matching theory, focused on optimal allocation through market design.

For more detail, see Building Block 5: Economic Organizations & Mechanisms and Building Block 6: Political-Economic Systems, as well as the sections Markets and Governments in the background material Pragmatic Pluralism.

Teaching Materials

- *Governing the Commons: The Evolution of Institutions for Collective Action* by Elinor Ostrom, most recent edition from 2015. A sharp and rigorous discussion of commons, how they are different from markets and hierarchies, how we should theorize them and real-world examples that help us better understand how they can be successful.

- *Understanding Institutional Diversity* by Elinor Ostrom, from 2005. An impressive book that brings together research on different ways economies are organized, helping students understand and identify institutional rules, structures and diversity.
- *Market Design: Auctions and Matching* By Guillaume Haeringer, from 2018. A useful introduction into the economics of auctions and matching, with chapters on ecommerce, finance, and healthcare.
- *Designing economic mechanisms* by Leonid Hurwicz and Stanley Reiter, from 2006. A theoretical entree into market design, building on game theory and neoclassical models with the aim of achieving optimal allocative efficiency.
- *The Handbook of Market Design* by Nir Vulkan, Alvin E. Roth, and Zvika Neeman, from 2013. A thorough collection of essays on the different aspects of market design, from stress testing for misbehavior and internet auctions to kidney exchange and school choice.

Societal relevance and normative aspects

The moral beliefs of people do influence behavior and as stated above in particular institutional and cultural economists have paid attention to this. We thus advise to teach students about how differences in moral beliefs can impact outcomes, even when the rules of the game are the same. But the point here is something else. When using game theory to tackle real world issues, differing ethical goals and assumptions result in different solutions or suggestions for action and policy. Therefore it is important that students learn about different normative approaches and see how these can lead to other conclusions.

In ethics itself, game theory is often applied to help explain, or justify, the existence of moral norms and practices. While this is a hugely interesting literature, we advise to focus on how different ethical assumptions can lead to different conclusions, making use of game theory. If the goal of the course would be to explain why there are certain moral norms, the game theoretical explanations, alongside other theories, should be included, but this is not the aim of game theory courses. The aim of game theory courses is to teach economists how they tackle real world issues with the help of game theory and learning about the role of the ethical aspects in this should thus be the focus.

For more detail, see Building Block 10: Economics for a Better World.

Teaching Materials

- *Game theory: A critical introduction* by Shaun Hargreaves-Heap and Yanis Varoufakis, from 2004, chapter 1. This useful book provides an introduction and overview of game theory, helping students better understand its core assumptions and relation to normative ideas.

History

Finally, game theory courses could be enriched by discussing and introducing students to its fascinating history. By learning more about how the ideas developed and have been applied students will better understand their intended purpose and (potential) role. Furthermore, it can help make the analytical material come alive for students. By putting students in a historical context, such as the Cold War, or a more recent real world situation, the abstract game theoretical tools become more concrete in their implications and usage.

For more detail, see Building Block 3: Economic History and Building Block 4: History of Economic Thought & Methods.

Teaching Materials

- Toward a history of game theory by E. Roy Weintraub, from 1992. This useful collection of essays focuses on the development of game theory, mainly since 1945 with the contributions from von Neumann and Morgenstern as well as applications into operations research and experimental economics.
- The history of game theory, volume 1: From the beginnings to 1945 by Mary Ann. Dimand and Robert Dimand, from 1996. An insightful introduction into the older history of game theory, with attention to early voting and conflict theorists as well as probabilists and 19th century economists.
- A Companion to the History of Economic Thought by Warren J. Samuels, Jeff E. Biddle, and John B. Davis, from 2003, chapter 24 & 25. An extensive and detailed collection of contributions covering many periods and developments in the history of economic thought, with two chapters specifically devoted to the history of post-war neoclassical microeconomics, game theory, and formalist revolution in economics.

What to take out

To create space for the above suggested additions, we advise to focus more on the key ideas and intuitions behind the taught models and devote less teaching time to their technicalities and mathematics. As teaching students to reproduce and work through mathematical models often takes up a large part of the teaching time, this would give the teachers the opportunity to devote more time to practical knowledge, the relevance, institutions, and history. Furthermore, simply teaching a smaller amount of game-theoretical models and instead teaching more of the other aspects mentioned above could enhance students' understanding and mastery of game theory.

Economic Approaches

Companion to Building Block 8: Economic Theories

Introduction

Most teaching time is currently devoted to economic theory. Little time is, however, devoted to letting students understand what economic theory is and what its basic foundations are. Therefore, we propose to always introduce perspectives before teaching the topic specific theory (which are the focus of Pragmatic Pluralism). This will help students become familiar with the core assumptions on which theories are based and prevent them from misunderstanding theories as direct representations of reality. Furthermore, this basic knowledge about the different perspectives helps students make sense of and situate the specific theories that are taught later in the program. Rather than seeing theory courses as an endless stream of seemingly random insights, it allows students to see the bigger picture and connect the dots.

Introducing all the approaches listed below is probably too ambitious for an introductory level course. We therefore advise to select the most important perspectives for the program as a whole. This can be determined by looking at the main topics that are being taught and what the most important perspectives for these are (in Pragmatic Pluralism we give suggestions for this). In a program focusing mainly on financial economics, for example, post-Keynesian, neoclassical, complexity, Austrian, cultural and behavioural economics seem to be the most relevant perspectives and could be selected for the introductory theory course.

The different economic approaches can be introduced by explaining to students, preferably with the help of examples, what their core assumptions are as well as a brief discussion of how the approach emerged and developed. Who were their key thinkers, what were their main concerns, in what intellectual and societal context did they operate, on which ideas did they build and which did they oppose, and what was their impact on economic thinking and society? In this chapter, we provide a brief description of the core foundations and history of the different individual approaches, accompanied by an overview of materials which delve deeper into them.

For every approach, we have listed the following key assumptions and practices: (1) its main motivation and goal; (2) what it considers to be the basic elements of economies; (3) what it considers to be the fundamental characteristics of human beings; (4) how it considers economies to change; (5) the research methods it generally uses; and (6) the policy recommendations it typically prescribes.

For the interdisciplinary approaches, coming mainly from sociology, the more normative aspects (1 and 6 in particular) are less clear. One could say that most economic sociological approaches try to emphasize and shed light on the social foundation of the economy and wealth creation, countering individualistic accounts of economic processes. But while normative discussions are more often made explicit in sociology, it is less policy focused and its approaches have less strongly associated values and policy recommendations as approaches within economics do. For this reason, key assumptions and practices 1 and 6 are not listed for social network analysis, the cultural approach and field theory.

While core assumptions of individual approaches are most important, similarities between various perspectives are also relevant. Some have, for example, argued that a number of approaches, such as

post-Keynesian, institutional, Austrian, Marxian and feminist economics, collectively also known as heterodox economics, have many core assumptions in common (Lawson, 2006; Lee, 2009). Each of these approaches, for example, thinks of the economy as a dynamic open system of social interactions situated in historical time characterized by fundamental uncertainty, in contrast to the neoclassical assumptions of hyper-rational atomistic individuals that with probabilistic risks are able to optimize their utility in formalistically defined market equilibria. Others, however, believe there is more diversity and fewer meaningful similarities between the different heterodox approaches, which makes such broad categories less helpful (Davis, 2008; Dequech, 2007). Irrespective of whom one agrees with, it is important to explore with students how the different approaches relate to each other. Therefore, we encourage to actively discuss the differences and similarities between approaches, especially in more advanced courses.

For each approach, materials are listed that are useful for introducing its core assumptions and history. There are, however, a couple of resources that are useful for introducing the majority of perspectives. Chapter four in *Economics: The User's Guide* of Ha-Joon Chang introduces most approaches in a highly accessible and brief manner, providing short descriptions of their core ideas in only one chapter. The textbook *Rethinking Economics: An Introduction to Pluralist Economics* as well as the online platform *Exploring Economics* provide more in depth introductions with chapters per approach.

Approaches:

- Austrian School
- Behavioural Economics
- Classical Political Economy
- Complexity Economics
- Cultural Approach
- Ecological Economics
- Evolutionary Economics
- Feminist Economics
- Field Theory
- Historical School
- Institutional Economics
- Marxian Political Economy
- Neoclassical Economics
- Post-Keynesian Economics
- Social Network Analysis
- Structuralist Economics

Austrian School

Key assumptions and aspects:

- Main concern: Negative liberty (freedom from government interference into individual's person and property)
- Economies are made up of: Individuals
- Human beings are: Individuals formed by customs and traditions
- Economies change through: Individual subjective choices
- Favoured methods: Deductive logic and praxeology
- Typical policy recommendations: Free markets and laissez-faire

The Austrian school came into existence during the marginalist revolution at the end of the 19th century in Austria. In opposition to the historical school of economics and Marxian political school, it tried to explain economic reality by deducing it from certain universal principles such as subjective value, spontaneous order and opportunity costs. It argues that individuals always know what is best for themselves. Because the world is complex and even unknowable to a large extent, unconstrained markets are viewed as the best institution as they convey crucial information through price mechanisms. The school became more distinctly organized as such after the Second World War when neoclassical economics went through its formalistic revolution and thus moved further away from the Austrian school; at first the two were very similar.

Teaching Materials

- Austrian Economics on Exploring Economics, from 2016.
- Rethinking Economics: An Introduction to Pluralist Economics by Liliann Fischer, Joe Hasell, J. Christopher Proctor, David Uwakwe, Zach W. Perkins, & Catriona Watson, from 2018, chapter 3.
- Economics: The User's Guide by Ha-Joon Chang, 2014, chapter 4.
- A Companion to the History of Economic Thought by Warren J. Samuels, Jeff. E. Biddle & John B. Davis, from 2003, chapters 17 and 28A.
- The Oxford Handbook of Austrian Economics by Peter J. Boettke & Christopher J. Coyne, from 2015.
- An Introduction to Austrian Economics by Thomas C. Taylor, most recent edition from 2020.
- Advanced Introduction to the Austrian School of Economics by Randal G. Holcombe, 2014.

Behavioural Economics

Key assumptions and aspects:

- Main concern: Fixing behavioural market failures to enhance allocative efficiency
- Economies are made up of: Individuals and institutions
- Human beings are: Boundedly rational (shaped by biases, emotions and heuristics) and reciprocal (not fully selfish or altruistic)
- Economies change through: Individual choices
- Favoured methods: Experiments
- Typical policy recommendations: Nudging people into more 'rational' behavior

Human beings are understood as boundedly rational, because of their limited cognitive capabilities. People use heuristics, such as rules of thumb and mental shortcuts, and are influenced by framing in their decision making. Behavioural economics can be said to consist of two groups. The first group, sometimes also referred to as old behavioural economists, with scholars such as Herbert Simon, George Katona, and Gerd Gigerenzer, propose an alternative framework in opposition to the dominant unrealistic neoclassical one as they argue human behavior follows fundamentally different logics. The other group, also known as new behavioural economists, with people such as Amos Tversky and Daniel Kahneman, tried instead to improve neoclassical economics by analysing departures from its assumptions about human behavior. Recently, new behavioural economics in particular has become influential both within academia and policy making with various 'Behavioural Insights Teams'.

Teaching Materials

- Behavioral Economics on Exploring Economics, from 2016.
- Rethinking Economics: An Introduction to Pluralist Economics by Liliann Fischer, Joe Hasell, J. Christopher Proctor, David Uwakwe, Zach W. Perkins, & Catriona Watson, from 2018, chapter 6.
- Economics: The User's Guide by Ha-Joon Chang, 2014, chapter 4.

- Routledge Handbook of Behavioral Economics by Roger Frantz, Shu-Heng Chen, Kurt Dopfer, Floris Heukelom, & Shabnam Mousavi, from 2017.
- Behavioral Economics: Toward a New Economics by Integration with Traditional Economics By Masao Ogaki & Saori C. Tanaka, from 2018. .

Classical Political Economy

Key assumptions and aspects:

- Main concern: The wealth of nations
- Economies are made up of: Classes
- Human beings are: Selfish (in class terms), but also have moral sentiments
- Economies change through: Capital accumulation and the division of labour
- Favoured methods: Abstraction and reason
- Typical policy recommendations: Free markets and free trade

With the rise of capitalism, classical political economy arose at the end of the 18th century to understand how it was possible that through private ownership and markets, goods and services were provided to people. Classical political economists systematically analysed the economy by looking at the tendency of markets to move towards equilibrium and the power struggles between landowners, capitalists and workers. They argued that labour is the source of all value in opposition to physiocracy, with its focus on agriculture, and mercantilism, with its focus on exports, money and extraction. Based on the labour theory of value, most classical political economists argued for free trade and free markets. After being highly influential during the 19th century, classical political economic thought moved to the background of economic thinking in the 20th century.

Teaching Materials

- Economics: The User's Guide by Ha-Joon Chang, 2014, chapter 4.
- A Companion to the History of Economic Thought by Warren J. Samuels, Jeff. E. Biddle & John B. Davis, from 2003, chapters 7-9 & 11.
- Understanding 'Classical' Economics: Studies in Long Period Theory By Heinz D. Kurz & Neri Salvadori, from 1998.
- Classical Political Economy: A Survey of Recent Literature by William O. Thweatt, from 1988.

Complexity Economics

Key assumptions and aspects:

- Main concern: Resilient and adaptive systems
- Economies are made up of: Complex systems of interaction between actors
- Human beings are: Shaped by heuristics, social comparisons and habits
- Economies change through: System dynamics, evolution and emergence
- Favoured methods: Agent-based and computational modelling
- Typical policy recommendations: Generate desirable (self-reinforcing or balancing) feedback loops and maintain sufficient buffers

Complexity economics is still a very young and developing approach. It has mainly arisen out of the application of methods from mathematics, physics and biology to economic problems. Econophysics, therefore, also overlaps with complexity economics. While only a relatively small number of people engage

with complexity economics, its status within the discipline is already quite high, as various prestige scholars and projects focus upon it. Humans are understood as rule followers, as they emulate others and are adaptive to changes in their environment. Not everyone follows the same 'rules', and 'rules' are not constant over time. Hence, the system is always subject to change.

Teaching Materials

- Complexity Economics on Exploring Economics, from 2016.
- Rethinking Economics: An Introduction to Pluralist Economics by Liliann Fischer, Joe Hasell, J. Christopher Proctor, David Uwakwe, Zach W. Perkins, & Catriona Watson, from 2018, chapter 7.
- Complexity and the Economy by W. Brian Arthur, from 2015.
- Handbook of research on complexity by J. Barkley Rosser, from 2009.
- Econophysics: Background and Applications in Economics, Finance, and Sociophysics by Gheorghe Savoiu, from 2012.
- Complexity and the History of Economic Thought by David Colander, from 2000.

Cultural Approach

Key assumptions and aspects:

- Economies are made up of: Socially and culturally embedded individuals
- Human beings are: Shaped by culture, norms and meaning-making processes around them
- Economies change through: Altering understandings and interpretations of economic activities
- Favoured methods: Qualitative research

The cultural approach is a broad category which is defined by its focus on the importance of culture in how economies work. As such, it pays attention to the meaning people give to things and how these meanings are constructed and influence economic life. The origins of this approach go back to the beginning of the social sciences, with scholars such as Max Weber, Bronislaw Malinowski and Marcel Mauss. It has many forms and names, such as the culturalist approach, cultural economics, anthropological economics, cultural sociology, and constructivist political economy, which each refer to something slightly different. It should however be noted that it does not refer to the economics of the culture industry, which is a topic, not a perspective. One could also argue that a recent development within this broad category is performativity theory, which revolves around the idea that economic ideas do not merely (aim to) describe the world, but actively shape (perform) it. A famous example, mentioned earlier, is the Black-Scholes model, which initially described derivatives markets poorly, but after it changed financial regulations and began to be used by many traders, it came to explain derivatives markets very well (MacKenzie, 2006).

Teaching Materials

- Economic Lives: How Culture Shapes the Economy by Viviana Zelizer, from 2010.
- Constructing the International Economy by Rawi Abdelal, Mark Blyth, & Craig Parsons, from 2010.
- The Anthropology of Economy: Community, Market, and Culture by Stephen Gudeman, from 2001.
- Do Economists Make Markets? On the Performativity of Economics by Donald MacKenzie, Fabian Muniesa & Lucia Siu, from 2007. .

Ecological Economics

Key assumptions and aspects:

- Main concern: Ecological sustainability
- Economies are made up of: Ecological and socio-economic systems
- Human beings are: formed through social processes and value immaterial aspects of life
- Economies change through: Material and energy flows
- Favoured methods: System dynamics
- Typical policy recommendations: Degrowth to stay within planetary boundaries

During the 1970s, ecological economics arose out of the incorporation of material and energy flows in economic analyses. The fact that human economic activity had caused climate change, made it clear that nature had to have a more central place in economics than simply as a resource. Human societies and their economies are embedded in the environment and therefore fundamentally depend on it. Well-being is not reduced to material consumption, but redefined more broadly and socially. Similarly, economic development is not reduced to growth in material production and/or consumption (or monetary / market). Ecological economics often positions itself in opposition to neoclassical environmental economics, arguing that the economy and market should follow the rules of nature and the biosphere rather than the other way around.

Teaching Materials

- Ecological Economics on Exploring Economics, from 2016.
- Rethinking Economics: An Introduction to Pluralist Economics by Liliann Fischer, Joe Hasell, J. Christopher Proctor, David Uwakwe, Zach W. Perkins, & Catriona Watson, from 2018, chapter 9.
- An Introduction To Ecological Economics by Robert Costanza, John Cumberland, Herman Daly, Robert Goodland, & Richard Norgaard, from 2015.
- Handbook of Ecological Economics by Joan Martínez-Alier & Roldan Muradian, from 2015.

Evolutionary Economics

Key assumptions and aspects:

- Main concern: Economic progress
- Economies are made up of: Evolving and emerging populations and actors
- Human beings are: Socio-historical actors who act on the basis of heuristics, routines and rules
- Economies change through: Technological and social innovation
- Favoured methods: Wide variety, from evolutionary game theory and regression analysis to network analysis and interviews
- Typical policy recommendations: Facilitate and generate entrepreneurship and innovation

Since the 19th century, evolutionary thinking has had substantial impact on various economic thinkers such as Thorstein Veblen, Joseph Schumpeter, and Kenneth Boulding. More recently there have been attempts to create a more coherent intellectual school called evolutionary economics. Although the impact of evolutionary economics on the discipline has so far been quite limited, it is recognized as providing important contributions and is often considered to be one of the promising approaches for the future. It is argued that people adapt themselves to their natural but also social environment. Based on evolutionary principles such as variation, selection and replication, it tries to understand how markets, firms, and national economies develop.

Teaching Materials

- Evolutionary Economics on Exploring Economics, from 2016.
- Economics: The User's Guide by Ha-Joon Chang, 2014, chapter 4.
- The New Evolutionary Economics by Kurt Dopfer and Jason Potts, from 2014.
- Elgar Companion to Neo-Schumpeterian Economics by Horst Hanusch & Andreas Pyka, from 2007.
- Evolutionary and Neo-Schumpeterian Approaches to Economics by Lars Magnusson, from 1994.
- A perspective on the evolution of evolutionary economics by Richard R. Nelson, from 2020.
- Economics and Evolution: Bringing Life Back into Economics by Geoffrey M. Hodgson, from 1993.

Feminist Economics

Key assumptions and aspects:

- Main concern: Gender equality
- Economies are made up of: Individuals and social groups
- Human beings are: Shaped by their intersectional identities (combinations of class, gender, ethnicity, and other social identities)
- Economies change through: Cultural and social developments
- Favoured methods: Wide variety, from survey and regression analysis to interviews and participant observation
- Typical policy recommendations: Supporting and rewarding unpaid care work and fighting discrimination

Since the 1960s, feminist thinking have had a tremendous impact on the social sciences. However, in economics, this process only started in the 1990s and is still marginal as compared to other social sciences. Nevertheless, feminist economists have made important contributions to the study of unpaid work, well-being, care, households and of course gender. Human beings are seen as products of social interactions, engaging in conflict, competition as well as cooperation with each other at different moments in time. Instead of focusing on the 'economic man' who engages only in market transactions, feminist economists study the entire fabric of provisioning, investigating the ways people organize themselves to make a living as interdependent social processes.

Teaching Materials

- Feminist Economics on Exploring Economics, from 2016.
- Rethinking Economics: An Introduction to Pluralist Economics by Liliann Fischer, Joe Hasell, J. Christopher Proctor, David Uwakwe, Zach W. Perkins, & Catriona Watson, from 2018, chapter 5.
- A Companion to the History of Economic Thought by Warren J. Samuels, Jeff. E. Biddle & John B. Davis, from 2003, chapters 28B.
- The Routledge Handbook of Feminist Economics by Günseli Berik & Ebru Kongar, from 2021.
- Out of the Margin: Feminist Perspectives on Economics by Edith Kuiper, Susan Feiner, Jolande Sap, Notburga Ott, & Zafiriz Tzannatos, from 1995.
- Feminist Economics Today: Beyond Economic Man by Marianne A. Ferber & Julie A. Nelson, from 2000.
- Greed, Lust and Gender: A History of Economic Ideas by Nancy Folbre, from 2009.

Field Theory

Key assumptions and aspects:

- Economies are made up of: Meso-level social arenas with shared meanings and rules, also known as fields
- Human beings are: Competing for better positions in fields with their social, cultural, economic, and symbolic capital
- Economies change through: Strategic power struggles between actors and alternations in the rules of competition
- Favoured methods: Wide variety, from network analysis and multiple correspondence analysis to historical analysis and participant observation.

Field theory, sometimes also called the political-cultural approach, is a young approach, at least in its application to economic topics, as its first studies were conducted during the 1990s. One could distinguish two main branches of field theory, one located in the US of which Fligstein is a core proponent, and the other in France in which Bourdieu is central. Fligstein's version of field theory overlaps significantly with the sociological neo-institutionalist approach. Not to be confused with institutional economics, these two approaches have some links, as both field theory and sociological institutionalism emphasize the importance of institutions, legitimacy and the focus of organizations on survival. The core idea of field theory is that actors (people or organisations) orient their behavior to one another within meso-level social orders, called fields. Fields could be seen as social arenas in which constant games of jockeying for position are being played. In this game, it is necessary for actors to understand both the shared meanings and rules of a field and what others are doing, in order to act themselves. The structure of the field and an actor's position in it, shape the actor's interests and way of thinking, but do not fully determine it as the actors have the freedom to pursue their own strategies within fields.

Teaching Materials

- Varieties of Field Theory by Daniel Kluttz & Neil Fligstein, from 2016.
- Markets as Politics: A Political-Cultural Approach to Market Institutions by Neil Fligstein, from 1996.
- What is field theory? by John L. Martin, from 2003.
- The architecture of markets: An economic sociology of twenty-first-century capitalist societies by Neil Fligstein, from 2001.
- The Social Structures of the Economy by Pierre Bourdieu, from 2000.

Historical School

Key assumptions and aspects:

- Main concern: National economic development
- Economies are made up of: Nations
- Human beings are: Citizens of a nation
- Economies change through: Political decisions along national-cultural specific paths of development
- Favoured methods: Inductive statistical and archival analysis
- Typical policy recommendations: Infant industry protection, public infrastructure investment and social policy

The German historical school, together with the partially overlapping American school (or national system), arose as a reaction to classical political economy which argued free markets and free trade create prosperity. Furthermore, it was opposed to the deductive approach which had become dominant within classical political economy, and developed inductive historical and statistical approaches to studying the economy. Human beings were understood as part of cultural and historical specific nations. To understand how people behave

and economies work, one thus has to look at the history of a specific place instead of just making assumptions about individuals that are supposed to be universal. Germany was the centre of academic life during the 19th century, in doing so it inspired an English (and French) historical school of economics and institutional economics in the US. But because of the rise to power of the Nazi's and the Second World War, the influence of the historical school was abruptly ended.

Teaching Materials

- A Companion to the History of Economic Thought by Warren J. Samuels, Jeff. E. Biddle & John B. Davis, from 2003, chapters 14.
- The German historical schools in the history of economic thought by Peter Senn, from 2005.
- The German Historical School: The Historical and Ethical Approach to Economics by Yuichi Shionoya, from 2000.

Institutional Economics

Key assumptions and aspects:

- Main concern: Economic development
- Economies are made up of: Individuals and institutions
- Human beings are: Shaped by social rules, culture, instincts and habits
- Economies change through: Changes in institutions
- Favoured methods: Inductive statistical and qualitative analysis
- Typical policy recommendations: Regulate capitalism and prevent corrupt and extractive practices through legal institutions and societal countervailing forces

Institutional economics arose in the beginning of the 20th century out of the desire to make economics an empirical science. Instead of assuming that people behave according to universal and ahistorical principles, they argue that people derive habits and value-orientations from their institutional environment, which they in turn influence through their interactions with other people. The economy is, therefore, studied holistically, instead of looking at isolated individuals and markets. During the interwar period, institutional economics obtained great importance. After the Second World War, however, it was pushed to the margins of the discipline by the dominance of the neoclassical synthesis. Since the 1970s, there has been an attempt, under the name of new institutional economics, to include institutions in a neoclassical framework by thinking about institutions as transaction costs minimizers. This has caused institutional economists, who do not start from neoclassical assumptions, to call themselves original or old institutional economists.

Teaching Materials

- Institutional Economics on Exploring Economics, from 2016.
- Rethinking Economics: An Introduction to Pluralist Economics by Liliann Fischer, Joe Hasell, J. Christopher Proctor, David Uwakwe, Zach W. Perkins, & Catriona Watson, from 2018, chapter 4.
- Economics: The User's Guide by Ha-Joon Chang, 2014, chapter 4.
- A Companion to the History of Economic Thought by Warren J. Samuels, Jeff. E. Biddle & John B. Davis, from 2003, chapters 23 and 28C.
- Institutions in Economics: The Old and the New Institutionalism by Malcolm Rutherford, from 1999.
- The Institutional Movement in American Economics, 1918-1947: Science And Social Control by Malcolm Rutherford, from 2011.
- The Evolution of Institutional Economics: Agency, Structure and Darwinism in American Institutionalism by Geoffrey Hodgson, from 2004.

Marxian Political Economy

Key assumptions and aspects:

- Main concern: A classless society
- Economies are made up of: Classes
- Human beings are: Productive, creative and formed by their social context
- Economies change through: Class struggle, capital accumulation and technological progress
- Favoured methods: Dialectical method and historical materialism
- Typical policy recommendations: Collectivising the means of production

Marxian political economy arose out of the attempt of Karl Marx to bring together English classical political economy, German Hegelian philosophy and French socialist thought. Humans are understood as creative beings who realize their ideas through their work. Within the capitalist system, the class struggle between workers and capitalists is dominant. The drive for private profit leads to continuous technological advances and accompanying economic instability. Since the existence of Marxian political economy, it has been one of the emblematic heterodox approaches in most capitalist societies and a mainstream approach in socialist economies. Furthermore, it has not only been an influential school of thought in economics – Marxian scholars can be found in every social science discipline.

Teaching Materials

- Marxian Political Economy on Exploring Economics, from 2016.
- Rethinking Economics: An Introduction to Pluralist Economics by Liliann Fischer, Joe Hasell, J. Christopher Proctor, David Uwakwe, Zach W. Perkins, & Catriona Watson, from 2018, chapter 2.
- Economics: The User's Guide by Ha-Joon Chang, 2014, chapter 4.
- A Companion to the History of Economic Thought by Warren J. Samuels, Jeff. E. Biddle & John B. Davis, from 2003, chapters 10 and 28E.
- Routledge Handbook of Marxian Economics by David M. Brennan, David Kristjanson-Gural, Catherine P. Mulder, & Erik K. Olsen, from 2017.
- Radical Political Economy: A Concise Introduction by Charles A. Barone, from 2004.

Neoclassical Economics

Key assumptions and aspects:

- Main concern: Efficient allocation of scarce resources that maximizes consumer welfare
- Economies are made up of: Individuals
- Human beings are: (hyper)rational, self-interested and atomistic individuals with fixed and given preferences, also called the 'homo economicus' and 'economic man'
- Economies change through: Individual optimizing decisions
- Favoured methods: Equilibrium models and econometrics
- Typical policy recommendations: Free market or government intervention, depending on assessment of market and government failures

Neoclassical economics arose out of the marginalist revolution, during the long depression which started in the 1870s. Neoclassical economics was largely a reaction against Marxian political economy as it argued that markets create harmony, not conflict. Human beings were assumed to be rational and selfish, as their decisions are solely motivated by expected utility maximization based on their given and stable preferences. Mathematically deduced from these assumptions about individuals, an analysis of market equilibria arises. These markets work mainly through price mechanisms; their efficiency as well as their potential failures are

analysed. Neoclassical economics quickly became an important strand of thinking after its birth in the late 19th century, and after the Second World War it became the dominant theoretical approach in most countries. The increase in its practitioners gave rise to many different sub-branches of neoclassical economics, such as general equilibrium and neoclassical growth theory. Sometimes neoclassical economics is lump together with neoliberalism. While there is overlap between neoliberal thought and neoclassical sub-branches, such as monetarism and new classical macroeconomics, the two are not the same. Many economists, among which neo-Keynesians for example, use and build on neoclassical (microeconomic) models to oppose neoliberal ideas. To this day, neoclassical economics remains a highly influential approach, in research, policy making, and especially education. Many have been arguing for, or predicting, its demise for already a couple of decades. New approaches, such as behavioural, evolutionary and complexity economics, are often thought to replace neoclassical economics as core of the mainstream discipline. Whether this will indeed be the future remains to be seen.

Teaching Materials

- Neoclassical Economics on Exploring Economics, from 2016.
- Economics: The User's Guide by Ha-Joon Chang, 2014, chapter 4.
- A Companion to the History of Economic Thought by Warren J. Samuels, Jeff. E. Biddle & John B. Davis, from 2003, chapters 16, 18-21, and 24-6.
- What is Neoclassical Economics? Debating the origins, meaning and significance by Jamie Morgan, from 2015.
- The Making of Neoclassical Economics by John F. Henry, from 1990.

Post-Keynesian Economics

Key assumptions and aspects:

- Main concern: Full employment
- Economies are made up of: Individuals and classes
- Human beings are: Following rules of thumb and habits because of fundamental uncertainty
- Economies change through: Animal spirits and government intervention
- Favoured methods: Stock-flow consistent models and econometrics
- Typical policy recommendations: Stabilization of effective demand through active fiscal policy

Building on older underconsumption theories, Keynesian economics arose during the 1930s in order to explain and develop ideas to solve the economic depression. In doing so, it considerably overlaps with the Stockholm school. Keynesian economics argues that people compare themselves to others and build their decisions partly on rules of thumb and habits, because of psychological reasons and fundamental uncertainty. Effective demand, consumption and investment, therefore depends to a large extent on animal spirits and herd behavior. In the post-war period until the stagflation of the 1970s, it was highly influential, especially its neo-Keynesian (sometimes also called old Keynesian) branch which synthesized Keynes' ideas with neoclassical microeconomics, this period is therefore often called the neoclassical synthesis. After the 1970s, post-Keynesians (sometimes also called Cambridge Keynesians), who radically broke with neoclassical economics as they constructed a fundamentally new approach to economics with Keynes as main inspiration, became organized as a distinctive heterodox approach. At the same time, new Keynesians introduced imperfections in then influential neoclassical models of new classical macroeconomics, and in doing so came to Keynesian (pro government intervention) rather than new classical (free market) conclusions (but theoretically they are furthest removed from Keynes' own work and thinking).

Teaching Materials

- Post-Keynesian Economics on Exploring Economics, from 2016.
- Rethinking Economics: An Introduction to Pluralist Economics by Liliann Fischer, Joe Hasell, J. Christopher Proctor, David Uwakwe, Zach W. Perkins, & Catriona Watson, from 2018, chapter 1.
- Economics: The User's Guide by Ha-Joon Chang, 2014, chapter 4.
- A Companion to the History of Economic Thought by Warren J. Samuels, Jeff. E. Biddle & John B. Davis, from 2003, chapters 22 and 28D.
- The Oxford Handbook of Post-Keynesian Economics, Volume 1: Theory and Origins by Geoffrey Harcourt & Peter Kriesler, from 2013.
- Post-Keynesian Economics: New Foundations By Marc Lavoie, from 2014.
- Keynes: A Very Short Introduction by Robert Skidelsky, from 2010.

Social Network Analysis

Key assumptions and aspects:

- Economies are made up of: Social networks
- Human beings are: Embedded in social structures and relations
- Economies change through: Developments in interpersonal ties
- Favoured methods: Network analysis and graph theory

Social network analysis originated in the beginning of the 20th century in sociology, but has only been systematically applied to economic topics since the 1980s. In doing so, it helped initiate a revival of economic sociology. More recently, it has inspired economists to focus on networks, done often under the name “the economics of networks”. Social network analysis also has some overlap with complexity economics and interacts with the broader academic field of network science. Social network analysis applied to economic topics looks at how economic life is embedded in social life. Instead of analysing economies as if individuals operate rationally as atoms in markets, the focus lies on social relations and structures in which people interact with each other. As such, social network analysis neither focuses on individuals and their characteristics (such as preferences and rational or irrational behavior), nor on collectives (such as classes and nations). Instead it looks at how networks are structured by analysing the relations (also called ties, edges or links) between the nodes (which can be people, organizations or things).

Teaching Materials

- Social Network Analysis by John Scott, from 1991.
- The Impact of Social Structure on Economic Outcomes by Mark Granovetter, from 2005.
- Economic Action and Social Structure: The Problem of Embeddedness by Mark Granovetter, from 1985.

Structuralist Economics

Key assumptions and aspects:

- Main concern: Economic growth in developing countries
- Economies are made up of: Economic sectors, institutions and social classes
- Human beings are: Shaped by social and cultural structures around them
- Economies change through: Government policy and sectoral developments
- Favoured methods: Econometrics and historical analysis
- Typical policy recommendations: Import substitution industrialization

Structuralist economics emerged in Latin America during the 1950s out of a quest to better understand global inequality and how developing countries could grow. The Ricardian and neoclassical theories of comparative advantage did not seem to be able to explain why many developing countries experienced so many difficulties growing. While the use of military force had previously been crucial for colonial oppression and economic extraction, structuralist economists tried to understand how unequal development could continue through more invisible processes. A key insight economists, such as Raúl Prebisch, developed was that the economic structures of countries, such as sectoral specialization patterns, technological capacities, and the institutional arrangements concerning labour, financial and international commodity markets, were crucial in these matters. Unequal economic development is possible because of contrasting international economic structures, with a hegemonic industrial centre and a dependent agricultural periphery. A key source of inspiration for structuralist economics was Keynesian economics, but many other strands of economic thinking such as historical, institutional, neoclassical and Marxian economics, also influenced the approach. There is also overlap with other approaches, such as world system and dependency theory, which also emphasize unequal global economic relations, although they build more on Marxian ideas.

Teaching Materials

- The structuralist tradition in economics: methodological and macroeconomics aspects by Fabrício Missio, Frederico G. JayMe Jr, & José L. Oreiro, from 2015.
- Growth and Policy in Developing Countries: A Structuralist Approach by Jose Antonio Ocampo, Codrina Rada, & Lance Taylor, from 2009.
- New Structural Economics: A Framework for Rethinking Development and Policy by Justin Yifu Lin, from 2010.
- Developmental Macroeconomics: New Developmentalism as a Growth Strategy by Luiz Carlos Bresser-Pereira, José Luís Oreiro, & Nelson Marconi, from 2014.

Building Blocks: Overview

The meat and bones of the Economy Studies course design method are the ten building blocks. Each of these building blocks covers an area of knowledge or a skill that we see as essential for the education of future economists. They can be used as templates to create courses, of generally six to ten weeks each. One can also pick and choose elements of the different building blocks to combine them into a broader course, or split up a building block into several courses.

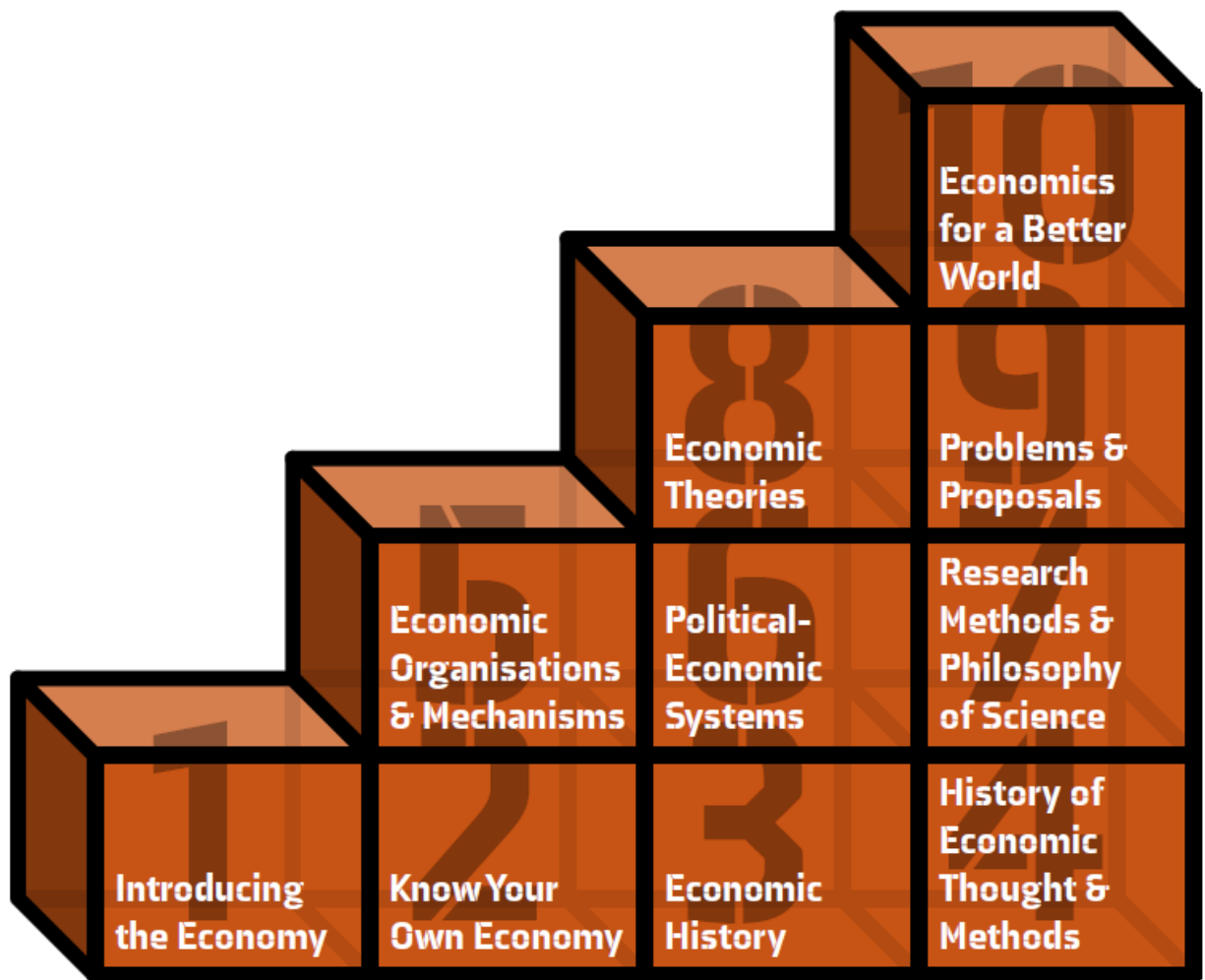


Figure 1: The ten building blocks that form the core of this book. The order of the numbers is not necessarily the order in which they should be taught. Their relative size varies, with building blocks 7 and 8 generally taking up much more space than the others.

The first two building blocks focus on helping students to develop a feeling for economic matters and teaching them basic conceptual and real-world economic knowledge. *Building Block 1: Introducing the Economy* discusses the definition and relevance of ‘the economy’ and how it is related to other aspects of the social and physical world. *Building Block 2: Know Your Own Economy*, explores actual national and local economies and their structures, institutions and sectors.

With this basic knowledge in hand, we explore the history of economic thought and of the real-world economy. *Building Block 3: Economic History* explores the fascinating and diverse history of economic events and developments. *Building Block 4: History of Economic Thought & Methods*, in contrast, is about the remarkable

and complex history of ideas about the economy. Together, these chapters provide a crucial foundation for students' further education.

Besides knowing basic economic concepts, facts and history, it is key that economics students learn how economies can and have been organised, at micro-, meso- and macro-levels. *Building Block 5: Economic Organisations & Mechanisms* investigates the different forms of economic interaction and organisation that operate at each level and together make up an economy. *Building Block 6: Political-Economic Systems* reviews the complex structures, institutions and power relations that form the overarching structure of an economy.

Another core element of a good economics education is a broad and diverse analytic toolkit, filled with relevant methods and theories. *Building Block 7: Research Methods & Philosophy of Science* is about both quantitative and qualitative data collection and analysis methods. In *Building Block 8: Economic Theories* we propose a 'pragmatic pluralist' approach to teaching theories by focusing on only the most important insights for every topic. These two building blocks will likely take more space in most programmes than the others, as the centre of gravity of an academic education lies in methods and theories.

The last two building blocks are largely concerned with the productive application of economic ideas in the real world. Economics education should be preparing the economic experts of tomorrow for their future roles in society. *Building Block 9: Problems & Proposals* deals with the practical skills necessary for the work of almost all economists: analysing real-world problems and working on proposals to address them, whether in a company, government agency, think tank or academic department. *Building Block 10: Economics for a Better World* deals with the values involved in decision making, asking what normative principles and visions can guide actions to address the major challenges of our times.

Building Block 5: Economic Organisations & Mechanisms

The different economic organisations and mechanisms – how market, hierarchical, communal, associational, familial and cooperative forms together make up the economy.

What: This building block discusses the different ways in which economic processes can be organised. These are the different ways in which people determine how to allocate the limited time and resources available, how to work together to create economic value and subsequently how to distribute it. The focus of this building block is on making students familiar with the variety of organisational forms and ways of interacting with each other that shape how our economies work.

Why: Without an understanding of the variety in the organisations and mechanisms that exist it is very difficult to grasp how an economy works and misunderstandings arise easily. A better grasp of the different ways in which economies are organised will also enable students to think openly, accurately and critically about any proposal to reshape economies.

Contrast with current programmes: Many academic programmes currently focus on markets. Additionally, even when the topic of study is not a market, it is often understood as if it were a market. This causes students to find it hard to think in ways that do not follow market principles. Upon studying a problem, the natural inclination of many economists is to introduce a market or correct a market failure. However, this causes (policy) recommendations to have a one-size fits all tendency, and causes many parts of the economy to be unstudied or misunderstood. We therefore encourage introducing and defining a wider range of economic organisations from the start, as well as the different coordination and allocation mechanisms that exist between and within them, examining where they occur, how they differ from each other and how they interrelate.

Sections:

- 1** Forms of Economic Organisation
- 2** Coordination & Allocation Mechanisms
- 3** Practical Suggestions

“The economy is much bigger than the market.”

Ha-Joon Chang (2014, p. 456)

Economies consist of many different types of organisations, ranging from multinational corporations to groups of volunteers caring for the elderly, and from small cooperatives to state-run infrastructure companies. Within and between these organisational structures, we find different coordination and allocation mechanisms, such as market transactions, hierarchies, commons, networks and reciprocity. These are all different ways in which people organise themselves to create value – whether monetised or not. Differences in both aspects, the organisational forms as well as the different coordination and allocation mechanisms, yield micro and meso level variations in how an economy is structured and functions.

Among all these economic forms, most contemporary economics programmes focus almost exclusively on market mechanisms. We suggest widening the scope, to include the large real-world variety of economic organisations and mechanisms. Without knowledge of how economic activities are organised, it is virtually impossible to understand how economies work or to give good advice for economic decisions. To be sure, we are not suggesting taxonomy or classification for its own sake. We argue for a better understanding of economic processes by conceptualising the wide diversity in forms.

This building block is closely linked to the next, Building Block 6: Political-Economic Systems, as they both focus on the different ways in which economies are organised. However, the current building block focuses more on micro and meso patterns, looking at the various ways in which specific processes can be organised, coordinated and allocated. The next building block has a more macro focus on economies as full systems with complex networks of organisations and mechanisms.x

1 Forms of Economic Organisation

Economic systems, like natural ecosystems, are made up of many different forms. Looking around us, we see a large variety of private businesses, cooperatives, governmental organisations, households and forms of non-profit organisations, most of which also exist in informal varieties. These social constructs vary amongst others on the following aspects, which in turn will vary by country:

- Legal form (as defined by the state);
- Main motive or purpose (profit or non-profit);
- Type and number of owners and transferability of ownership (tradable shares, private owners or state);
- Funding (sales, taxation, donations);
- Power structure (centralised or decentralised);
- Size (individual, small, medium, large);
- Geographic scope (local, national, international).

The universal system of taxonomy that biologists use to identify the different species of the natural world does not have an equally well-structured counterpart in economics. Fortunately, becoming familiar with this diversity does not always require much analysis, but it does require looking with an open perspective. To grasp the different forms of economic organisation that exist, students can simply look at the world around them, perhaps using something like the above list of variables. This list is not an existing theoretical framework; we put it together

for this building block, and the relevant variables would differ depending on the purpose of the investigation. We will now briefly review the main categories of economic organisations that can be distinguished.

Private businesses are perhaps the most visible type of economic organisations and come in all shapes and forms depending on amongst others ownership (who is the owner and how easily is ownership transferable such as on the stock exchange), their size and whether they act locally, nationally or internationally. Corporate businesses for example are large complex legal entities, owned by shareholders (often anonymous underneath a certain threshold and whose shares are freely tradeable) and run by managers. Their employees may be organised through trade unions in order to increase their bargaining power and have a voice in how the company is run. In many countries, large corporations are also required by law to have worker representation on corporate boards. Next to corporate businesses, there are various other forms of private businesses. Many companies are privately owned by a family, a partnership or a sole proprietor. It should be noted that family firms are not always small: the ALDI supermarkets, Tata Steel, Koch Industries and Dell are all majority-held by their founding families.

Cooperatives are run in a more direct democratic manner: not by shareholders but by their workers, customers, consumers and/or other stakeholders. These too come in many forms and sizes, ranging from small grocery stores to the Basque giant Mondragon. In worker cooperatives, such as Mondragon, the people who work at the company determine how it is run. Consumer cooperatives, on the other hand, are owned and managed by customers. These have been especially important in retail and finance such as The UK Co-operative Group and the Swiss Migros. Producer cooperatives have been particularly prevalent in agriculture, as they allow relatively small farmers to achieve economies of scale together. Recently, the idea of multi-stakeholder cooperatives has become more popular, with the aim to give all relevant groups a voice and seat at the table: from consumers and workers, to producers, investors and members of the local community.

Next to such formal forms of economic organisation exists a large variety of informal organisations, which together are generally referred to as the 'informal economy'. This includes all economic activity that is not fully grounded in the legal structures of the state. In the western world, this is relatively limited to particular sectors such as unregistered housekeepers and illegal drug trade networks. In many developing countries, on the other hand, the informal economy covers vast parts of economies. There are various myths surrounding the term, as it is often associated with 'black' markets and 'underground' activities. One should, however, realise that the majority of workers in the world, 61% in 2018, earn their living in the informal economy (ILO). It is not some backwater shadow world, but rather says something about how far the formal systems of state reach.

Most textbooks discuss government mainly as a rule maker, an arbiter and a mechanism of redistribution. While the formal regulations of the state cover only a relatively limited part of the economy in much of the developing world, states are in virtually every country highly important economic producers themselves. The public sector often contributes around half of GDP and government agencies conduct massive amounts of economic activity themselves: running hospitals and clinics, schools and universities, the military and police, infrastructure, energy and water systems, and state-owned enterprises in many other sectors.

Another core form of economic organisation is the household. While individually, households are fairly small, in sum they are an enormous part of economies. Think of all the unpaid labour, such as care work and housekeeping, that is coordinated and performed inside households. Estimates suggest that household activity may even amount to about half of all economic activities (OECD, 2018). Students should note that the structures and functions of households are different from place to place and from time to time, from the

stereotypical nuclear family to single-parent but also extended families. A look at the current situation in terms of household structures in the country can be useful and interesting for students.

Finally, there are also various civic non-profit organisations, such as charities, foundations, community groups, and voluntary associations, which receive donations to work on some cause and/or function on the basis of voluntary unpaid work. Recently, the line between non-profit and for-profit has become more complicated with the rise of social enterprises, which in varying complex ways combine social and commercial goals. There are also many civil society organisations, or non-governmental organisations (NGOs), trying to influence governmental policies. Commercial corporations are again key here, as private business through employers' and trade associations are the most powerful interest groups in many countries.

All the above descriptions refer to very large categories and there are many differences within them. Letting students choose more than one case of each category to look at or analyse can therefore be very useful, as it will show them how companies can be legally very similar yet function very differently in practice. Useful materials to teach about economic organisations in an accessible way are: *Introducing a New Economics*, *Economics: The User's Guide* and *Organisations: A Very Short Introduction*.

The study of these different organisational forms is not merely an intellectual pastime. The same product or service can be produced by very different types of economic organisations, and this often has far-reaching consequences for all stakeholders, from workers and investors to suppliers and consumers, as well as broader society and the natural environment. A concrete example from the Netherlands: when private equity started buying up child care organisations and transforming their internal organisation, from their services, labour arrangements and scheduling practices to their real estate ownership and lease structuring, this had serious consequences for the way they functioned, sparking societal and academic debate (Dutch Government, 2020; Dutch Parliament, 2019; Roosenboom, 2020; Van Bussel, 2020; Van de Weijenberg, 2018).

2 Coordination & Allocation Mechanisms

The previous section discussed fairly straightforward typologies of economic organisations: forms into which people organise themselves. This section focuses on the more complex underlying coordination and allocation mechanisms between and inside these organisation forms, which decide how people and organisations allocate their time and resources. The two most known of these are market transactions and hierarchical redistribution. There are, however, multiple other mechanisms that, despite their importance in real-world economies, have received less academic and popular attention. These include commons, networks and reciprocity. Students should become familiar with these different ways in which people interact economically with each other in order to understand how economies work.

Markets and Hierarchies

Markets are currently at the core of economics education, and for a good reason, as markets are highly important for how economies operate today. However, due to an abstract theoretical and mathematical approach, relatively little attention is paid to the exact forms that markets take in the real world. Not every market is the same, as markets are made out of social rules and practices that vary from place to place and from time to time. The economic sociology of markets and game theoretical field of mechanism design, in particular, have focused on the concrete ways in which markets are and can be structured. Markets allocate time and resources based on price, money, competition and individual gain. We suggest letting students study examples of different real-world markets in different contexts, identifying the actors, how they are organised and how they interact, so that they can better understand how markets function.

Hierarchical distribution allocates time and resources based on fixed roles and formalised lines of command. It is typically associated with public sector and state entities, but it is also the way in which many organisations within the private sector are organised internally. Although the number of self-employed people has increased over the last decades, most economic activity in the private sector still takes place within hierarchical organisations: private bureaucracies. This form is not restricted to large organisations. Small organisations can also function on the basis of hierarchical distribution. The key differentiating factor from the market is that decisions within such an organisation are made between people based on hierarchical interactions and not based on the price mechanism.

Similarly, entrepreneurship exists both within the private and public sector and small and big organisations. Change and innovation do not only come from small private start-ups. Big organisations, public and private, often play key roles in creatively developing new products and processes, and changing economic structures.

The interactions between markets and hierarchies are many and complex, as we already noted that many market actors, such as private businesses, are internally organised as hierarchies. Indeed there are various combinations and variations between hierarchical bureaucracies and markets which make the study of organisations so fascinating and important. Simplistic dichotomic notions of public versus private and big versus small are not likely to improve our understanding of how these dynamics play out in reality. Therefore, we suggest exposing students to this wide variety of hierarchies and how they can function.

Other Mechanisms: Commons and More

Besides the mechanisms of the market and hierarchy, there are various others that often get less attention than they deserve, given their importance in real-world economies. There are multiple theoretical conceptualisations of these other coordination and allocation mechanisms amongst which commons, reciprocity, gift economies, associations, networks and householding. The coordination and allocation may be done based on social relationships, trust, group identity, norms or shared practices. Compared to markets and hierarchy, these mechanisms are often somewhat more symmetrical and norm- or culture-driven. Contemporary Capitalism: The Embeddedness of Institutions gives a useful overview and introduction into a wide variety of economic mechanisms, from markets and public and private hierarchies, to communities, associations and networks.

How do these coordination and allocation mechanisms function? Here we take one example: the commons. In the online resources we provide a brief literature overview of other mechanisms, such as reciprocity, gift economies, associations, networks and householding, accompanied with suggestions and teaching materials for more in-depth courses on economic mechanisms.

Over the last decade the commons have received increasing attention. The term describes situations where resources are held in common by a community which governs them through informal norms and social practices. Traditionally, the concept has been associated with natural resources such as grasslands, fisheries, forests and irrigation systems. Recently, the concepts of the digital, urban, cultural and knowledge commons have gained prominence.

There are two main academic approaches to the commons. First, commons are analysed to determine why and how they can fail, centred on the idea of The Tragedy of the Commons popularised by Garrett Hardin in a paper in 1968. A second strand focuses on how they can succeed, centred on Elinor Ostrom's empirical body of work. Ostrom (1990) found that institutional arrangements largely determine the success of shared resource

management resources, requiring the following:

- 1 Clear boundaries regarding users and non-users and which resources are concerned.
- 2 Appropriation and provision rules are adapted to local conditions
- 3 Most people affected by the arrangements are able to participate in creating and changing its rules
- 4 The appropriation and provisioning, as well as the conditions of the resources, are monitored
- 5 Sanctions for rule violations start very low but become stronger if a user repeatedly violates a rule.
- 6 Mechanisms allow conflicts among users or with officials to be quickly and locally resolved at low costs.
- 7 Higher-level authorities recognize the rights of local users to make their own rules.
- 8 When connected to a larger economic system, governance is organised in multiple nested layers

Going beyond the notion that resources necessarily need to be managed by either the state or the market, Ostrom points out multiple other possible solutions that rely on voluntary self-governing. The point here is not that markets and states are not important, it simply means they are both part of larger governance structures, which she calls polycentric, in which commons also play important roles.

Rather than debating which mechanism in general is superior, she argues we should be more open-minded and consider the diversity in ways in which decisions about time and resources are made. We should look at specific cases with their own characteristics and contexts and analyse which (combinations of) mechanisms, and especially which design rules, lead to successes. In other words, rather than trying to simplify the world, we should recognise its complexity and learn about the many ways in which economies can be (more and less successfully) organised.

Coordination & Allocation Mechanisms elaborates upon this overview of the commons as well as the other mechanisms of coordination and allocation by examining them from three perspectives: economic anthropology, social systems of production and new institutional economics. We show how these three are connected, how their focus differs and offer suggestions on how to use them in teaching this material.

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3 Practical Suggestions

Below we describe four suggestions to consider when teaching economic organisations and mechanisms. First, treat forms both as analytical concepts and in their real-world expressions: always use examples. Second, start with basic explanations of individual static forms and move towards discussions of dynamic and interacting forms. Third, in specialised courses, showcase the different ways of organising surrounding that topic, such as different labour, financial or tax systems. Fourth, distinguish analytical description from normative evaluation of forms.

First, treat economic organisations and mechanisms both as concepts and as real-world phenomena. Forms of economic organisation (companies, non-profits, etc.) are easily spotted in the real world, and this can make for interesting student assignments. As for the different coordination and allocation mechanisms (hierarchy, the commons, market mechanisms, etc.), they can be quite difficult to grasp. So it might be useful to first discuss the concepts with the help of some clear examples of different mechanisms with students. Nevertheless, it is also important for students to learn how to see these forms in the complex real world around them.

An exercise for this could be to let students record the different mechanisms they themselves engage in on a day. A student might wake up and first make breakfast for him- or herself, an example of householding. Subsequently, they might go on public transport to university which is organised through hierarchical organisations of the state, partially funded by taxation. On their way, they might look up the topic of today's class on Wikipedia, a commons. In class, they might help out a friend by lending him or her a pen – reciprocity. For lunch, they buy a meal at a local cafeteria, a market transaction with a formal private business. In the end of the afternoon, they might go to the student sports club, a voluntary association. As a side job, in the evenings they tutor their neighbour's son in mathematics, an informal private business.

A more extreme exercise to make students understand the roles of these mechanisms in economies, would be to give them the assignment to avoid using one mechanism for a day. This could be done once, or multiple times to let students experience it with different mechanisms. How would a day look without being able to buy or sell anything? Not following any instructions from a superior or giving them yourself (please, only on the weekend). Or without being able to reciprocally receive and return favours (not for too long, or everyone will hate you)? And perhaps most impossible of all, without doing any householding and self-care activities? The goal here is not that students strictly adhere to the exercise, but that they realise the prevalence of each of these different economic mechanisms.

For a less extreme exercise, let students describe what life would look like if they were to avoid one particular type of economic coordination mechanism. Different groups could be assigned different mechanisms, and afterwards, groups could debate what mechanisms are most vital to our economic organisation. Our second suggestion: start simple and move to more complexity. To help students get an idea of the different organisations and mechanisms, it might be useful to start with isolated and static descriptions: “This is the concept of a multinational, and here is an example. This is the concept of a commons, and here is an example.”

Reality is, however, of course more complex. In the real world, organisations and mechanisms do not exist in isolation from each other but do interact in various complex ways. They might strengthen each other but they might as well undermine each other. Furthermore, things change over time. For example, elderly care might first be organised through households and religions organisations, but later through various state organisations and, after that, privatised to for-profit companies.

Understanding how some economic activities and resources move from one form to another is at the core of understanding economic change. Our advice is to start with isolated static mechanisms and, when possible, move to more complex discussions about how they interact with each other and change over time.

Our third suggestion: when teaching a specific topic, such as finance, labour or fiscal policy, use the same logic. Showcase different ways of structuring economic life. Say you are teaching a course on financial economics. This could include an overview of the highly different kinds of financial organisations: such as commercial and investment banks, public investment banks, credit unions, hedge funds and green banks. It could also include an overview of various mechanisms. For instance, the different financial systems such as a gold standard, fiat money, the international Bretton Woods system and, recently getting more attention, crypto-currencies, full reserve banking and central bank digital currency. The same could be done for various labour arrangements in labour economics courses, or for tax and government systems in public economics, etc.

description of organisations and mechanisms. Both are relevant for students to learn about, but mixing them can be very dangerous, so we suggest being explicit to students about whether the focus is on description or normative evaluation. Furthermore, we think it is helpful to start by giving students an analytical and real-world understanding of the different ways of organising, before going into the normative judgements about them (which is at the core of the final building block of this book, Building Block 10: Economics for a Better World).

This approach is somewhat opposite from the currently prevalent approach, which starts from a normative assumption and subsequently goes into analytical descriptions. How so? Many current programmes start by explaining to students that markets, if they are ‘perfect’, lead to optimal outcomes. Much of the subsequent programme then consists of learning analytically how these optimal outcomes, sometimes also referred to as ‘competitive equilibria’, do or do not come about, with the help of neoclassical models. Later, the state often comes in as a possible solution for market imperfections, although students are also taught to look out for government failures in such cases.

While this approach teaches students many valuable lessons, it can give students the impression that markets (sometimes accompanied by an interventionist state) are a priori desirable and superior compared to other mechanisms. We firmly believe that learning to think independently and critically is at the core of academic education. Therefore, we think it is important that programmes expose students to a wide variety of positions and analytical ideas, as opposed to teaching a single main perspective or starting point, with the danger of (unintentionally) instilling normative beliefs into students.

The point is not that the neoclassical answers to questions about economic mechanisms are false. It is rather that they are only one set of possible answers to complex normative and analytical questions. We therefore advise to expose students to these different sets of answers and help them to critically scrutinize the philosophical arguments and empirical evidence that underline them.

Furthermore, we think it is important to pay attention to the complex and often nuanced nature of arguments and positions. We would not suggest assigning students to write an essay or debate about which mechanism they think is superior. Rather, students might be given specific cases to analyse and argue about how they can best be tackled. This could require students to suggest combinations of mechanisms and organisational forms to address the real-world problem. The degree of nuance and complexity of such an assignment would depend on the level of the student or class.

Teaching Materials

- *Introducing a New Economics* by Jack Reardon, Molly S. Cato, Maria A..C. Madi, from 2018, chapters 10, 11 & 12. Three accessible and brief chapters, with accompanying classroom activities and questions, introducing students to what public goods, commons and firms are and how they can be governed, for example as a corporation owned by shareholders or as a cooperative owned by its workers or consumers.
- *Economics: The User’s Guide* by Ha-Joon Chang, from 2014, chapter 5. A short well-written chapter on different economic actors and organisational forms, from multinational corporations, cooperatives, and labour unions, to governments and a variety of international organisations.
- *Organisations: A Very Short Introduction* by Mary Jo Hatch, from 2011. A brief, accessible and yet highly informative book full with scientific theories and ideas on what organisations are, how they can be structured, how they change, and their internal dynamics and interaction with markets and society.

- *Governing the Commons: The Evolution of Institutions for Collective Action* by Elinor Ostrom, most recent edition from 2015, chapters 1, 2 & 3. A sharp and rigorous discussion of commons, how they are different from markets and hierarchies, how we should theorize them and real-world examples that help us better understand how they can be successful.
- *Contemporary Capitalism: The Embeddedness of Institutions* by J. Rogers Hollingsworth and Robert Boyer, most recent edition from 2012, chapter 1. An instructive analytical introduction and overview of different coordination and allocation mechanisms, such as markets, public and private hierarchies, networks, communities and associations.

The website provides a wider range of teaching materials for this building block.
economy.st/bb5

Conclusion

In this concluding chapter, we briefly review what this book has offered and then look ahead, offering practical suggestions and ideas for economics teachers and professors, programme directors and students.

1 A New Vision for Economics Education

Our rapidly changing world is faced with many economic challenges, such as increasing debt levels, staggering inequalities and serious forms of ecological breakdown. These challenges are complex and cross multiple dimensions of our social and natural systems. To face these troubles, therefore, it is not nearly enough for economists to hold knowledge in formal, theoretical abstractions. Whilst these may be sophisticated, they only reflect a fraction of what is actually going on in the real world. We need broadly-trained economists with an understanding of the real-world economy. We need economists who know for example how the main industries work, who can grasp the interfaces between state and corporate systems and who see how economies are embedded in the society and ecology at large.

This requires open minds which can look at issues from a variety of perspectives. Given the multifaceted nature of economic systems, no single theoretical framework or methodology can answer all questions, or capture all of its dimensions and mechanisms. Instead, economists need the ability to think critically and evaluate the appropriateness of a range of fundamentally different approaches. In doing so, they also need to be able to clearly distinguish and explicitly discuss the moral dilemmas and normative trade-offs involved in economic decisions.

This book sets out a concrete path towards building such a pluralist and real-world based economics curriculum. While we envision a large diversity of possible economics programs, we suggest that all programs would be improved by following these three organising principles: a pluralist toolkit of theories and methods, sufficient real-world economic knowledge and practical skills, and active training in the consideration of moral and social questions. To flesh out these principles, we propose ten concrete Building Blocks: practical material for the creation of courses. These Building Blocks include introductory material, history of economic thought and reality, forms of economic organisation, research methods, theoretical approaches, normative ideas, practical skills and knowledge of the real economy.

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What kind of graduates would a program based on these ideas and materials produce? It is important to acknowledge that they would not have all the skills that current-day graduates have. They would have less mathematical sophistication, less expertise in econometric analysis, and less knowledge of neoclassical theory. In exchange for this, students would gain a deeper understanding and more concrete knowledge of the economy they will live and work in. This includes:

- An understanding of the linkages between the economy, the environment and society.
- The ability to analyse different types of economic topics and problems, by using a variety of theoretical and methodological approaches.
- An integral understanding of how various smaller mechanisms make up larger economic systems.

- Practical skills for investigating and resolving questions of economic policy: both understanding the context and choosing the right tool.
- The ability to argue morally as well as analytically, and to clearly distinguish the two.

In short, such programmes would produce academically-trained professional economists: broad thinkers and practical scholars, rather than students who are trained to write academic research papers.

2 Change Is Necessary and Possible

It will not be easy to build such programmes. We fully realise that these changes cannot be introduced overnight. Surprisingly rare is the academic economist who can teach even a basic introductory course on their national economic sectors and institutions. The structure of the discipline - highly internationalised, methods-centred and organised around a single pyramid structure of journals - does not facilitate the creation of such knowledge. The same applies to pluralism in economic theory: the decades-long marginalization of valuable schools of thought has left us with a dearth of suitably trained academics.

In addition, academic programmes tend to have a strong path-dependency. Most are only updated infrequently and changed piecemeal. Long-running courses have to be adjusted, the order of courses stacking on top of each other has to be reconsidered, new courses have to be developed and new expertise has to come into the economics departments. In many countries, national or international frameworks regulate academic programme content. In short, this is a long road, but one that we believe is both necessary and possible.

The changes we propose are necessary. The devastating impact of our economy on the life-sustaining ecological systems of this planet is increasingly visible, making the realistic study of that economy all the more urgent. The unprecedented centrality of the economy in our society and the big role of economic ideas in political decision-making make it all the more vital for economists to be firmly rooted in the real world, to have a pluralist perspective and to be trained in distinguishing the moral tangles inherent to economic questions. We need to prepare a new generation of economists, and we should start this work now.

And the changes we propose are possible. Indeed, they are happening, thanks to the energy of a growing worldwide network of students and academics. More and more pluralist and real-world textbooks, course formats, readers, best practices and other materials are becoming available (see the online *Teaching Materials* resource chapter for many examples). Increasingly, faculties are teaching economics primarily as a subject-based pluralist discipline, rather than a method-centred monist approach. Economic faculties are hiring academics from other theoretical schools and other disciplines, thus reversing the narrowing of the past decades and enriching both students and colleagues with fresh insights. Various universities are starting to experiment with teaching-based career tracks, enabling staff to focus on developing better teaching materials rather than spending every free minute on trying to get published in mainstream academic journals. Pluralist programs are springing up inside and outside of traditional economics departments, throughout the academic world. Perhaps most importantly, more and more faculties are opening up to the idea of widening their student's view beyond the traditional theories and methods.

3 Calls to Action

But while there are hopeful signs of change, this is only the start. We need more students, teachers, programme directors and deans to make a difference and help ensure that the economists of the future are prepared for their roles in society. So what can each of us do to bring economics education to a higher plane?

Students, be critical of what you are learning. Do not just ask: “*Is this part of the exam?*”. Instead, ask: “*Does this reflect the real world?*”, “*In what other way could one also look at this issue?*”, and “*What are the moral dilemmas surrounding this case?*”. Look up the course you are following in chapter *Tool 2: Adapting Existing Courses* and discuss the suggested additions and changes with your teacher. Design your own ideal course with the tool of chapter *Tool 4: Example Courses* and campaign to make your dream into a reality. Talk to your lecturers and find out who is interested in your ideas. Build public support by publishing an open letter or petition that advocates for the creation of this new course.

Get in contact with the programme committee and apply the *Tool 3: Curriculum Review* to your programme to see what could be improved. Build, or join, a local team of critical students. Organise a reading group or an event. If you want, you can get affiliated with the international Rethinking Economics network and benefit from the experience, contacts and resources of a large worldwide network of student groups. Doing it together will not only help you last longer and achieve more impact, it will also be more fun.

Teachers, think about what you are preparing your students for. Less than 3% of them will become academic economists, the rest will work inside government agencies, policy institutes and think-tanks, (central) banks and other financial corporations, private sector and not-for-profit companies, NGOs and campaign groups, and journalistic entities. As such, they will work on tackling practical and real-world problems, rather than publishing academic articles. So, confront your students with the messy and complex real world, let them practice tackling actual cases, start lectures with today’s newspaper, ask guest speakers from the relevant field, and let students go out of the classroom and see it with their own eyes.

Stimulate open discussions and active participation from students, bring in literature from other disciplines, actively expose the weaknesses of the theories you are teaching. Make normative assumptions explicit and let students struggle with the resulting moral dilemmas. Make sure that you are not just pushing through a textbook; be proud of your role as a teacher and use it. Make use of the suggestions provided throughout this book, and in particular in *Tool 2: Adapting Existing Courses*. Kick-start discussions, play devil’s advocate. Trigger students to start thinking, critically and independently.

Most academics reach many more people through their teaching than through their academic papers. Yet today, teaching is underappreciated and under-rewarded. Often, the time allocated for teaching is not nearly enough. Please speak out about this. Challenge that status quo, with the students as your allies.

Deans and programme directors, support and facilitate good teaching. Make sure that your faculty have enough resources and time available for teaching. Enable them to constantly improve their teaching and update the taught material. Give students a voice and role in designing and adapting the courses. And ask yourself: how is our program built? Was it created through a departmental power struggle about which professors’ specialisation is more important and deserves most space in the programme? Or is it carefully designed based on a clear idea of the societal roles students are being prepared for?

Do not be afraid to deviate from the standard programme at other universities. Variety in programs makes economics education stronger, not weaker. Take a look at the chapter *Tool 5: Example Curricula* and draw

inspiration from other innovative programmes. And try your hand at the Curriculum Review Tool, to see where in your programme there might be gaps in terms of relevant knowledge or skills. You could also ask teachers or students to run this analysis, and set up a series of meetings to discuss the outcomes. Or you could ask members of the international Rethinking Economics movement to organise a workshop or conference to further explore how the programme could be improved. Attention and open discussion about how to better economics education can only be positive, contributing to better prepared future economists.

Governments, create the right conditions for good economics education. Look at how resources for teaching and research are distributed. Does this encourage relevant, open-minded and interdisciplinary research and teaching, or does it encourage scoring on the intellectual square millimetre through a competitive ‘publish or perish’ system? Are universities stimulated to offer their faculty career options focused on education and reward good teaching? Governments could also follow the French example (2014) and initiate an independent and in-depth investigation of the state of the economics education in the country.

Climate change, inequality, economic instability, ageing, power concentration, pandemics, biodiversity loss, social polarisation, resource depletion, migration, poverty; these are core challenges for the world of today and tomorrow. Economists have a central role in society and need to tackle these challenges head-on. Reforming and modernising economics education is therefore of great importance not only to the students and teachers directly involved in it, but also to society as a whole. Let’s build better courses and programmes, together.

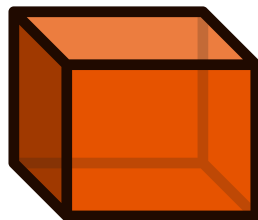
Ready to get started?

This book is free and open access. We hope it serves you. Here are three things you can do to help this movement for renewing economics education:

1. Send this or another booklet to three colleagues/students: economy.st/short

2. Contact us to organize a workshop at your faculty: economy.st/workshops

3. Subscribe to the newsletter: economy.st/news



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