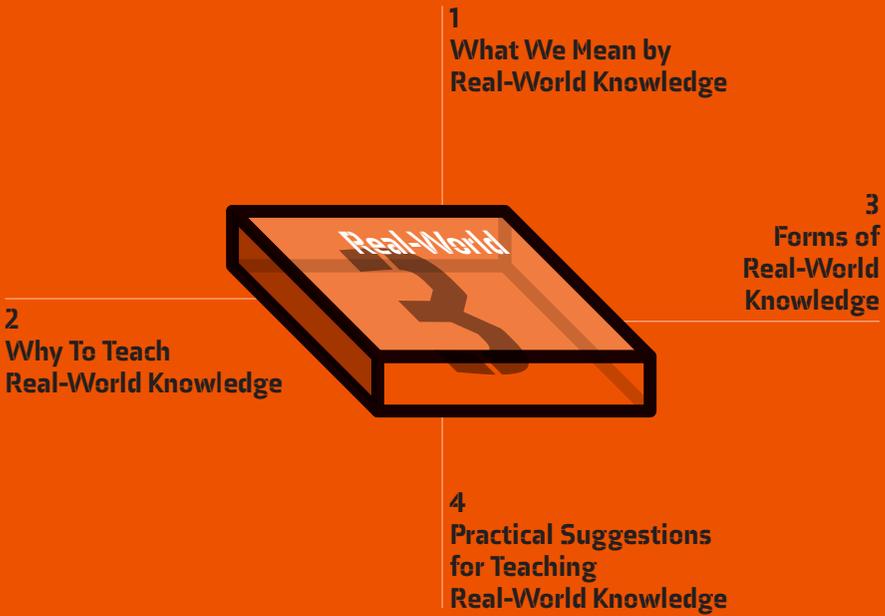




## Foundation 3

# Real-World

Teaching more concrete knowledge about actual economies gives students motivation, helps them to anchor theory to something in the real world, and gives them a basis of knowledge to build on.



Real-world economics has long been a core demand of the *Rethinking Economics* movement. It is an ideal that you cannot really be against; who would actively reject the real world in their teaching? Still, it is not easy to put into practice. In this chapter, we set out how economics education could be enriched by systematically incorporating real-world knowledge.

By ‘real-world knowledge’ we mean concrete knowledge about economic sectors, actors, institutions and history. In this way it goes beyond giving ‘real-world examples’ that illustrate theoretical ideas. Real-world knowledge is a goal in itself, not merely an instrument to help students understand theory. We believe that making space for such knowledge makes an economics programme far more worthwhile, informative, and relevant to almost anything one might do after graduating. It also makes a programme considerably more enjoyable, motivating students and enabling them to relate more actively to the theoretical parts of the programme.

This chapter starts with a more detailed explanation of the term, including the questions: is there such a thing as raw ‘real-world’ knowledge, what types of real-world knowledge are we referring to, and is this the same as empirics? We then provide an overview of the various reasons for including more real-world knowledge in programmes: motivation, anchoring theory, and professional applicability. Finally, we provide a number of practical suggestions for implementing this principle in economics courses.

*“A man who thinks that economics is only a matter for professors forgets that this is the science that has sent men to the barricades. A man who has looked into an economics textbook and concluded that economics is boring, is like a man who has read a primer on logistics and decided that the study of warfare must be dull.”*

Robert Heilbroner (1953, p. 14)

## 1 What We Mean By Real-World Knowledge

The notion of real-world knowledge is closely related to the concept of ‘*idiographic*’ knowledge within philosophy of science. It refers to knowledge of the particular, unique, and contingent. It is contrasted with the ‘*nomothetic*’ approach which is about arriving at universal laws through generalisation. For instance, an understanding of the financial instability hypothesis is nomothetic knowledge, whereas familiarity with the main events and dynamics in the 2007-2008 financial crisis is idiographic knowledge.

As economics became more and more focused on the nomothetic approach and general laws, idiographic knowledge has drifted out of sight (Wallerstein et al., 2003). This is problematic, as both idiographic and nomothetic knowledge are required for a good understanding of the world that can then inform actions and decisions. Economics education would greatly benefit from systematically including idiographic knowledge, restoring the balance between the two approaches.

### **Is there such a thing as pure real-world knowledge?**

A frequent objection to the argument for teaching more real-world knowledge is this: *‘There is no such thing as real-world knowledge, everything is an interpretation!’* On an abstract epistemological level, we agree with that statement. There is no such thing as a raw presentation of reality. If we want to meaningfully make sense of what we see and hear, we need

to interpret. And, this interpretation must be conducted through some sort of assumptions or theory. The kind of real-world knowledge we argue for, however, does not require any sophisticated mathematical models or epistemological discussions.

The theoretical assumptions that one holds shape one's interpretation and framing of real-world developments. A book by a more evolutionary-inclined economic historian will present historical facts differently from an economic historian with more Keynesian inclinations. While both deal with the same reality, they arrive at different interpretations of this reality. This highlights why it is important to combine real-world knowledge with pluralism. Students need to become aware of the multiple ways in which reality can be interpreted and presented. Still, they will agree about *most* of the historical facts. For example, a sustained period of privatisation and marketisation would be seen as an important event by many schools of thought, even if they drew very different conclusions about the consequences.

We are simply arguing for exposing students, as much as possible, to the real world. Let them experience economic processes for themselves. Teach them basic stylised facts about the economy around them. Introduce them to different historical situations. Let them observe directly how organisations work. Give them a basic understanding of the specific institutions shaping the economy. Stimulate them to observe their own behaviour as consumers and workers. In general, just make sure they get some mud on their shoes.

### **The 'empirical revolution' in research**

Is 'real-world economics' the same as 'empirics'? In short: not quite.

Real-world knowledge is about exposing students, as much as possible, to actual economic processes and providing them with a wide variety of factual information. On the other hand, "*Empirical work in positive economics is designed to test and develop theories*" (Davis, 2002, p. 167). So, while real-world knowledge can never be completely theory-free, as discussed above, it is not focused on general theories and explaining causal mechanisms, as empirical research is.

As such, it is also different from the 'empirical revolution' within research. This term is used to refer to the trend among mainstream top journals in recent decades to pay more attention to empirical analyses. This trend is one that we support, but it does not mean that economics has become increasingly a-theoretical. As Cherrier (2016, p. 2) writes, "*economics has not really gone "from theory to data," but has rather experienced a profound*

*redefinition of the relationship of theoretical to empirical work*". Rather than having rediscovered empirical research, the discipline has further developed the way empirical research is done and how it connects to theory. In Rodrik's (2015, p. 201) words *"The standards of the profession now require much greater attention to the quality of data, to causal inference from evidence and a variety of statistical pitfalls"*.

While we applaud doing more, and more careful, statistical analysis, this is not what we are arguing for in this 'real-world' principle. Instead, what we are proposing is more direct observations of the complex and messy real world. Advanced statistical analysis is a different activity: once these messy observations have been transformed into stylised and clean data, statistical analysis might be conducted.

Nor is this principle simply about raw data and statistics. We also suggest that students go out of the classroom to directly observe economic phenomena and speak to the people directly experiencing them. In general, we suggest that a plurality of approaches be used to confront students with the real world. Gathering concrete knowledge of the economic world from as many sources as possible, trying to understand how they fit together. That is what we argue for.

So, while students should also learn how to conduct good economic research combining theory and empirics, this principle focuses on teaching students concrete knowledge about actual economies.

## 2 Why To Teach Real-World Knowledge

While virtually no one is actively against teaching real-world knowledge, many professors do not prioritise it. We have often heard arguments like: *"Of course, students find it interesting to talk about recent events, but they can read the newspaper in their own time."* ... *"History is fascinating and relevant, of course. But students can read history books in their own time. Now, mathematics, they won't learn by themselves."* ... *"Applying economic theory to the real world? That comes later, at the master or PhD level. First they need to learn the basics."* Many professors see real-world knowledge as an interesting and sometimes even fun addition, but not as a serious and foundational element of economics education because of its specific nature and their tendency to teach at a more abstract level.

We strongly disagree. Real-world knowledge should be at the centre of economics education. Understanding the real-world economy should

be the ultimate goal of economics. Luckily, this is a core motivation of students. Many chose to study economics because they wanted to understand the economic and social world around them. Methods and theories are tools to better understand the real world, but they are not the goal itself. While we understand why professors focus on teaching students analytical tools, we think it is vitally important students also learn how to apply and contextualise those tools. The only way for students to grasp the relevance of the tools they are being taught is to see how they relate to reality. Once they do, they will also remember and apply the theory better. It is also key to realise that on average less than 3% of economics bachelor students go on to do a PhD (Colander & McGoldrick, 2010; de Goede et al., 2014). For the other 97%, who go on to become professional, rather than academic, economists, learning pure theory is not a goal in itself as they need to be prepared to apply economics in practice.

Another frequently heard objection is the idea that all real-world knowledge is fleeting, whereas economic theory is timeless. While this is true to an extent, teaching theory only on this basis would be akin to lawyers learning only to think about legal systems in the abstract, but not learn the laws of today. After all, every year new laws are introduced and others are struck from the books, so why bother learning anything about actual laws or landmark cases? A good education combines these two forms of knowledge: theoretical and real-world.

In addition to the question of motivation, a lack of attention to real-world economics greatly increases the risk that students will confuse theory with the real world itself (Clower, 1995; Morgan, 2012). Metaphorically speaking, the map gets mistaken for the territory (Korzybski, 1931). Stepping outside the classroom and engaging with the real economy helps counter such effects. Through real-world knowledge, the contingency of theoretical models is put into a sharper focus.

An example may serve to clarify. If one teaches students different theories and models about unemployment, students might quickly become lost in the equations. The practical concept of unemployment is defined somewhere, but it is not discussed in detail. In such a situation, students often quickly forget the theories once they have passed the exam, as the significance of the ideas never quite reached them. The different models were simply different characters in the equations one had to memorise and work with. Even by the end of the temporary, structural, frictional, cyclical, voluntary, and involuntary unemployment are all too often still just abstract terms. This does not help students to retain the theory, nor will it help them much in recognising these patterns in the real world later on in their working life.

Now let's imagine taking a different approach to teaching these theories on unemployment. The first lesson of a master's course on unemployment is not in a lecture hall, but at the government (un)employment offices. The concept of unemployment is introduced to students through informal conversations they have with actual people who are unemployed. The second lesson is devoted to giving a factual and historical overview of the topic, with the help of readings, videos and statistics on the history of unemployment up to the current day. The third and fourth lesson consist of guest lectures by and discussions with a union organiser and an economist working for the employers' association.

Having focused on the real world in the first four lessons, the class turns to the different theories on unemployment in the fifth lesson. Still, the connection to the real world is kept alive and present. Later on in the course, students are given the exercise to interview different stakeholders: long- and short-term unemployed people, those who were previously unemployed, employers, and people who work at the unemployment office or the ministry of social affairs, in order to better understand how they view the issue. The course then explains the current institutions and policies regarding unemployment. This is done in a guest lecture by a policy economist working at the ministry of social affairs, who also provides real-world case studies and current policy problems as exercises for students to work on in the course.

Through these various ways of incorporating the real world in the course, students will not only have acquired knowledge about the actual economy around them, but will most likely also have learned more about the theories and remember them for longer because they acquire real meaning.

It is not only students who emphasise the significance of real-world knowledge. Professional economists and their employers do so as well. In a recent survey of Dutch economists, the majority ranked '*profound knowledge of the national economy*' and '*the ability to place issues within their historical context*' among the top five skills a professional economist should have (van Dalen et al., 2015b). Furthermore, a UK study among employers of economics graduates found that one of the top three skills economists need to have is the "*application of economic knowledge to real-world problems*" (Yurko, 2018). One consultancy employer (anonymously) said:

*"It's important that graduates have had some hands-on experience of trying to work through the use of those [economic] tools for a practical question. So, when the rubber hits the road: how do you go from some sort of perfect way of answering something to the pragmatic way that understands the intricacies of the problems involved, tries to use real world data, understands the human*

*priorities that are involved there and things like that.”*  
(Yurko, 2018, p. 7)

Another employer, working at a major financial institution, noted that the high degree of abstraction in economics degrees frequently leads to frustrations among graduates, and can hinder them in their careers:

*“Economics graduates tend to be quite linear in their thinking. Therefore, there is a sort of resilience aspect, a complacency within economics graduates to think that because they’ve understood something on paper, why is the actual practical application of these things so damn tough? Well, it’s partly because what they’ve learnt is not actually relevant to the much more ambiguous, holistic, 360 thesis. So, I think there’s a sort of frustration that an economics graduate may develop in their career, which may hinder their career, which is they feel like they have moved so far away from the nice box of their learning into a very messy place.”*  
(Yurko, 2018, p. 10)

Despite its widely recognised relevance and importance, real-world knowledge seems to lack stature within the academic discipline of economics (Fullbrook, 2007). Many have argued that the obsessive focus on the technicalities of analytical tools has made the work of economists less relevant to the world around us (Colander, 2001). Krugman notes how the love for abstraction has led to wrong and damaging policy advice, saying that *“the economics profession went astray because economists, as a group, mistook beauty, clad in impressive-looking mathematics, for truth”* (2009, p. 2).

In sum: real-world knowledge improves understanding of theory and ensures this is retained in the long run rather than forgotten, enabling the application of analytical tools in practice in a responsible and correct manner. The vast majority of undergraduate economics students do not progress to further study and a career in academia, so for undergraduate programmes in particular, prioritisation of technicalities over applications is inappropriate.

### 3 Forms of Real-World Knowledge

There are many forms of real-world knowledge about the economy. Here we highlight a few important ways in which it could be incorporated into economics education: historical knowledge, basic knowledge of the current economy, and knowledge of the main economic challenges of today.

First, teaching history is a great way of exposing students to the different and changing economic realities that have existed. Think of the various

waves of colonisation and globalisation. Think of the rise of capitalism and socialism, and the historical development of monetary systems. Consider the ways that economic organisations have changed throughout history, how industries have evolved through technological progress, how people's lives have changed because of the changing nature of work and consumption, and how government policies have differed over time. Look at the recurrent economic up- and down-swings, from the 19th century and the 1930s Great Depression to the 2008 Great Recession and the economic downturn caused by the COVID-19 pandemic.

Not only are these topics fascinating to learn about, they also expose students to a vast array of facts and events, giving them concrete knowledge about economies. This will allow them to better understand how things evolved and came to be. Additionally, learning about the diversity of economic patterns and forms of organisation throughout history helps students get a better feeling for the wide variety of future possibilities that exist. As such, teaching economic history will help students to better grasp current phenomena and come to realise that economies are ever-changing. Armed with knowledge of the past they become better economists in the present and future. For further discussion, see *Building Block 3: Economy History*.

Second, it is worthwhile for students to gain an understanding of the economy that currently exists around them. That overview could include its central governing institutions, the different sectors and growth poles, as well as basic facts on issues such as growth, income and wealth inequality, carbon footprint, biodiversity, inflation, (un)employment, wages, profit, productivity, investment, current accounts, levels of debt, and the structure of social stratification. A good economist knows the basic shape of the economic landscape around them. Such knowledge allows students to place ideas in context. Institutional knowledge provides insight in the actual structures of economies and the relations between their main sectors and actors. Sectoral overviews provide an entry point into actual economic dynamics, all the while giving students a setting to try out the theories they learn. For further discussion, see *Building Block 2: Know Your Own Economy*.

Third, economists need to be acquainted with the main economic challenges our society faces today. Examples are climate change, financial and economic crises, rising wealth and income inequality, hunger and poverty, pandemics, a lack of education and development of human capital, and gender and ethnic disparities within economic relationships. As well as learning about these problems in a global context, focusing on the problems (and the aspects of those problems) that are most relevant for their own country or region will better equip them to be of use to their

societies after they complete their studies. This will also be more engaging for students, as they are more likely to have a personal connection to the problems being discussed in their classes.

Much of economic theory and policy work is concerned with these major challenges. Understanding exactly what is going on comes prior to explaining why it is happening and what should be done about it. We suggest paying explicit and substantial attention to teaching these matters to students in economics programmes, by devoting lectures and readings to such factual information. For further discussion, see *Building Block 1: Introducing the Economy* and *Building Block 9: Problems & Proposals*.

## 4 Practical Suggestions for Teaching Real-World Knowledge

One fruitful looking glass into real-world economic structures and developments is the traditional or mainstream media. Go beyond the common suggestion to ‘start your class with today’s newspaper’ and for example suggest that students take a (trial) subscription to the *Financial Times*, subscribe to digital newsletters, high-quality blogs, podcasts or video series, or follow any other economics-focused media. Even if their reading is not directly related to the class at hand, this will help students to explore the territory of economics on their own, making them more motivated and knowledgeable students throughout the programme.

Most students will need more than a mention of a few media outlet names to get started. It can help to make these materials an integral part of teaching, at least for some classes, to set the gears in motion. One way to include this in a regular bachelor programme would be assigning one student or group each week to give an update of the recent economic news, and include at least one other stylised economic fact, insight or argument that they personally find fascinating. Another might be to set media materials as required reading or listening, to be debated in a seminar. One way or another, educators need to kick-start their students, to take them by the hand and help them explore the sometimes intimidating world of economic discourse.

For example, climate change may be the predominant societal challenge of our time. Yet we know few students who would, on their own, start reading IPCC reports, evaluations of the European carbon dioxide cap-and-trade system, or research on how climate change will impact the Dutch economy. However, in the rare cases that we have seen professors assign such reading, students were happy to be pushed into this opportunity. This led

to lively discussions in class, about both climate change and the economic drivers behind it. Students appeared to learn much more from this than from more abstract readings.

Besides reading, there are many other ways in which students can learn about the real world. Teachers can invite guest lectures from outside academia, whether that may be government employees, entrepreneurs, private sector workers, non-governmental organisations (NGOs), or trade union members. Alternatively, teachers can organise excursions to visit organisations to get a more direct impression of the topic at hand. A course on financial economics could, for example, visit a (central) bank or stock exchange. A longer and more intense version of this would be to allow and stimulate students to do internships at such places.

All this may seem like stating the obvious. After all, nobody is against more inspired students. But there is a tricky bind here which we need to address: lack of time. Most economics professors we know have a strong sense of duty to at least put their students through the essentials of the subject. Again, students can read the newspaper for the rest of their lives, and they might yet dive into the fascinating world of economic history. But they will never practice statistical regression or study pure theory on their own. So, feeling that they have to focus the limited attention of students on the core theory, professors often end up focusing strongly on the types of material that most students find very dry. The students then quickly become tired from this diet of abstraction only, and the professors conclude that they are not motivated.

The problem here is zero-sum thinking. The way out of this double bind is to spend more time on the real-world material. Not as a footnote in the first lecture or a 'case study' box in a textbook, but as an integral part of the programme. It does of course require some time to kick-start students in their explorations, and this may initially feel like a waste of precious teaching time. But it pays off. We are convinced that by helping students to continuously build the bridge between day-to-day events and economic theory and data, professors can engage the long-term interest of many more of their students, thus ensuring themselves of a far more involved audience throughout the programme. When students can see how the theoretical knowledge from their classes helps them to understand the world around them they are also far more likely to internalise this knowledge, to genuinely understand the theories and models that they are taught, rather than merely memorising them. The time spent to get students interested repays itself many times over.