

# Educating Economists?

## A Report on the Economics Education at Durham University

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With a Foreword by Lord Robert Skidelsky



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## Foreword by Lord Robert Skidelsky

*Emeritus Professor of Political Economy, Warwick University, and Chairman of the UK Economics Curriculum Committee (ECC) at the Institute for New Economic Thinking 2013.*

Economics is a branch of practical knowledge. Economists aren't entitled to just amuse themselves, as perhaps mathematicians are. An economist which fiddles while Rome burns hardly justifies its keep.

What radicalised many students and practitioners after the crash of 2007-8 is that this was exactly what economics seemed to be doing. Hardly any economists foresaw that a crash was likely; and because they were unprepared for it, their advice to governments on how to respond was weak and contradictory. We expect better from a discipline which claims to hold the keys to prosperity.

Most of those who were profoundly dissatisfied with the answers economics seemed to be giving to the economic problem failed to understand that these answers stemmed from the way economics was being done: its methodology. The way economists construct their models largely determines the answers they give to practical questions.

Hence the importance of *Educating Economists?* this excellent and timely study, written by four economics students at the University of Durham and published by the Durham Society for Economic Pluralism. In proclaiming boldly that the purpose of studying economics is to provide 'the best possible understanding of the economy', they point to the foundational importance of methodology for 'educating economists' – and its absence from the core curricula, not just of Durham, but of most other universities. As they emphasise, economics is unique among the social science disciplines at Durham in not making students take a compulsory course on methodology in their first year.

The authors offer an indispensable defence of pluralism, by writing that the study of different ways of 'understanding the economy' leads to a 'more dynamic discussion within the discipline', as well as to 'more reflective students'. By pluralism, the Report means not just the incorporation of different heterodox schools within the core curriculum but using the insights

into economic life of adjacent social science disciplines from which economics has become increasingly estranged.

The study of economic methodology will fill an important gap, especially in Anglo-American economics, whose practitioners are not much given to serious reflection about of their own way of thinking; most curriculum designers having taken their cue from Paul Samuelson: ‘Those who can, do economics; those who can’t babble about methodology’. But as one philosopher put it: ‘If we didn’t study philosophy, the academic bandwagon would rush by without being stopped to ask where the hell it was going and why it wants to get there’ (Agatha Johnson, *Standpoint*, June 2010, p.10).

The history of economic thought is also essential, for it shows that the micro-foundations of contemporary economics - the assumptions that underpin contemporary economic models - have always been fiercely contested, even by some of the greatest names in the discipline. A study of the history of the discipline is an invitation to join the ranks of the dissenters.

At the same time, it invites reflection on one of the most remarkable things about mainstream economics: the persistence of its methodology - and thus of most of the conclusions derived from it - in face of many disconfirming attacks. Most of these critiques have been water off a duck’s back, glancing blows at most. What are the reasons for such methodological - or in Thomas Kuhn’s word ‘paradigm’ - persistence given, the weakness of economics’ empirical basis? This will take the student beyond the ideas themselves into reflecting on the structures of power in the discipline and in the wider society.

Admirable is the way the authors of this Report have taken the time to write such a thoughtful analysis and empirical survey of the way undergraduate economics is taught, while studying full time for their own degrees. They have provided a notable public good for both teachers and students of economics.

## 1 Introduction

The economy is changing at increasing speed. Automation questions the role of labour and production. Money is changing form. Environmental change challenges our understanding of economic growth, while the digital economy confronts the way we understand ownership and property. The global economy raises issues of trade and regulations. Distribution of wealth is increasingly unequal. Understanding the economy as an integrated part of an increasingly complex society has never been more important.

Nevertheless, whilst the economy is increasingly complex, what economics students are taught is increasingly narrow. Economics teaching is separate from the other social sciences, and has less diversity in theories and schools of thought. Students of economics insufficiently examine history, ethical frameworks, or what is happening in the world around them. Not so long ago, understanding the development of economic theories - the history of economic thought - was a core part of an economics degree. Now, most economics degrees do not include this content at all.<sup>1</sup> As Samuelson put it, “Graduate students need at least 4 hours a night of sleep; that is a universal law, so something had to give in the economics curriculum”.<sup>2</sup> Modern curricula tend to focus heavily on just two aspects: quantitative skills and teaching a particular neoclassical brand of economics.

Combined with the financial crisis in 2008, these trends have led to increased attention upon the adequacy of the economics curriculum in the last few years. In February 2012, the Bank of England, The Government Economic Service and the Royal Economic Society held a conference discussing “Are economic graduates fit for purpose?”.<sup>3</sup> Student movements all over the world, such as the *International Student Initiative for Pluralism in Economics* and *Rethinking Economics*, have raised similar concerns about the development of the economics curriculum. *The Institute for New Economic Thinking*, set up by major UK and US economists in 2009, created two committees to investigate the undergraduate curriculum in 2013.<sup>4</sup> These concerns are the core of this report.

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<sup>1</sup> Dow, S.C. (2009) ‘History of thought and methodology in pluralist economics education’, *International Review of Economics Education*, Vol. 8, No. 2, pp.41–57.

<sup>2</sup> Samuelson, Paul A. (1988) ‘Out of the Closet: A Program for the Whig History of Science.’ *History of Economics Society Bulletin*. 9:1, pp. 51-60, reprinted in Blaug, 1991, pp. 171-90.

<sup>3</sup> See this article for what they agreed on <https://voxeu.org/article/are-economics-graduates-fit-purpose>

<sup>4</sup> See INET website <https://www.ineteconomics.org/education/curricula-modules/economics-curriculum-committee>

We have analysed the relative strengths and weakness of the economics curriculum at Durham by surveying students and conducting an investigation of all economics modules. Our purpose is to draw upon this analysis to identify where there may be room for improvement and to start a constructive dialogue between students and staff.

### 1.1 Essential Questions

When reflecting on the content and structure of the economics curriculum, we must first ask what the purpose of an economics degree is. Is the purpose of economics to study a subject area - i.e., the study of the economy - or is it to learn a methodology - i.e., to learn economic methods such as deductive modelling and econometrics? Is there a conflict between studying the economy and making students as employable as possible? Is there a conflict between educating professional economists for the private sector and those who will continue in academia?

These questions are challenging, but very important. The purpose of this report is not to give any final answers. Although we will set out abstract principles and make some concrete suggestions, our main aim is to kick off a continuing process of discussion and to strive for a more relevant economics curriculum. Only through this can we proceed to the more practical and challenging issue of putting it together.

In an attempt to respond to some of the questions above, our current understanding is that *the main purpose of the economics degree is to give students the best possible understanding of economic phenomena.*

Economics is the social science that focuses on economic phenomena, such as production, distribution and consumption within the society. It is often said that students should "learn how to think like an economist". Learning the frameworks of modelling and econometric analysis is central for economists. But we believe that they are crucial not in themselves, but as a means to understand economic phenomena. The aim is the latter, and any method - especially with new developments in technology, computing and empirical testing - should be explored if it can allow us to better reach this aim.

## 1.2 Core Principles

From this main aim, we deduced the following principles which we believe are crucial to designing an economics curriculum.

During this process, we asked ourselves questions such as: To what extent can economics be isolated from other social sciences? Should the normative part of economics be given any attention? Which schools of thought are relevant for undergraduate students, in order to expand their understanding?

The role, extent and practical implications of the principles described in the rest of the introduction must continue to be discussed and re-evaluated. Although we set out some principles below, and make some concrete suggestions later in the report, the main aim is to start a formal and continuing dialogue with the aim of improving the economics curriculum at Durham University.

PURPOSE OF THE ECONOMICS CURRICULUM		
To obtain the best possible understanding of economic phenomena		
CORE PRINCIPLES		
<u>Real world Approach</u>	<u>Core skills</u>	<u>Perspective</u>
Application of theory to the real world	Critical/evaluative thinking	History of economic thought
Current affairs	Technical and mathematical skills	Philosophy of science/ methodology
Economic History		Ethics
		A plurality of economic schools
		Interdisciplinarity

Figure 1. Core Principles

### 1.2.1 Real World Approach

The theories and methodology at the core of the curriculum give important knowledge about economic phenomena. However, the crucial point of learning these abstract theories is understanding how they relate to the economic world around us. This can be done in several ways: examples include testing theory against empirical data, or simply discussing how well certain theories explain current events in the economy. Knowledge about the economic history of various parts of the world is important for several reasons.<sup>5</sup> For example, many only think of the Great Depression and the recent financial crisis when talking about financial crises. However, they pay little or no attention to how this phenomenon has recurred for hundreds of years, and how lessons from all previous crises can prevent new ones. The fact that we stand in the middle of a substantial technological and digital revolution - another recurring and inherently economic phenomenon - highlights the importance of this point. In this way, contemporary economic issues like technological development, growth and inequality, can be examined and understood in both a theoretical *and* empirical framework. This type of learning has the potential to increase a student's understanding of abstract theories, and, crucially, how these theories relate to what happens in the economy.

### 1.2.2 Core skills

#### *Technical and mathematical skills*

Learning core economic skills - how to 'think like an economist' - is certainly important in order to understand economic phenomena. Mathematics, statistics, operating deductive models and being proficient in econometrics are core to an economist's task. These are aspects which give economists, as social scientists, their strength.

Nevertheless, whilst some of the phenomena economists study are purely quantitative, such as the inflation rate, many aspects of the economy are difficult to quantify. Mathematics is a powerful analytical tool, but applying it wholesale to social and qualitative phenomena comes with a certain responsibility. It is important that students are made aware of the strengths and weaknesses of mathematical representation in economics, and the manner in which non-quantitative data is made quantitative. In econometrics courses students need to understand not

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<sup>5</sup> Crafts, Nicholas, *Economic History Matters*, Working paper series, Centre for Competitive Advantage in the Global Economy - Warwick University, October 2011 No.58

just how to analyse a given set of data, but also understand how data is actually gathered and calculated, and the limitations it has.

### *Critical/evaluative thinking*

Having emphasized the necessity of the above quantitative skills, we would nevertheless argue that critical and evaluative thinking is the most essential skill for an economist (or any student in any other discipline, in fact) to have. These skills reflect the core of being a student, and indeed, being an engaged citizen of a modern and complex society. It is important that economics students are able to reflect critically, openly and reasonably on both theories and their own core assumptions. This need not entail generating new knowledge, given the complexity and depth of economics expecting students to synthesise entirely new arguments is likely a burden too high. Instead we believe students should be aware of the fallibility, or lack thereof, of the theories they learn. Unfortunately, these skills have been recurrently neglected as an important aspect of economics degrees.<sup>6</sup>

As economics is a central profession for policy making, the ability to think critically is especially important. As much economic theory and analysis is represented by apparently clear mathematical answers, critical thinking and scientific self-awareness is crucial. We believe that the other principles we emphasize in this report - an understanding of a plurality of economic theories and their respective foundations, the interface between economics and other social sciences, and how economic study is fundamentally related to the real world - will lead to more critical, reflective and curious students. This can and should be emphasised by the way assessments are designed. As shown by the curriculum review later in this report, most assessments in the economics degree at Durham do not ask students to critically assess or evaluate different theories or issues, but focus predominantly on the operation of models. Critical thinking is an explicit goal of the Economics degree and ought to be integrated throughout the degree at all levels.

### **1.2.3 Perspective**

The Perspective principle encompasses numerous ideas, but they all emphasize and are fundamentally linked to each other. We believe that the history of economic thought and the philosophy of science can be referred to as the *foundations of economic theory*. These are the

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<sup>6</sup> Earl et. al., 2016.

core tenets for developing a proper understanding of the social sciences, the economic discipline and its theories. Students cannot truly understand the theories they learn without understanding the respective contexts in which the theories were created. Equally, without a firm grasp of a subject's methodology students struggle to comprehend how and why theories are useful. Academic disagreements and discourse are ignored in economics where they might not be in other disciplines. It is important to understand the disagreements in a discipline and how each theory reflects the time in which it was developed: studying the history of economic thought stimulates this thinking. It is crucial to understand why Economics teaching has ended up where it is and why certain theories have been left. It seems odd that students are trained extensively in neoclassical economics without ever being taught *why* neoclassical economics became so prominent.

### *A plurality of economic schools*

Methodological and historical aspects are also connected to pluralism; in fact, history of economic thought is a natural and effective way of being introduced to economic pluralism. Learning the methodological aspects of neoclassical economics allows students to understand much of what distinguishes the economic schools from each other.

Pluralism is just that – it represents the inclusion of a variety of economic schools, methodologies and theories. The Austrian, Post-Keynesian, Behavioural, Complexity, Marxist and Institutional schools (among others) can all greatly contribute to our understanding of economics; however, they are often missing representation in Durham's curriculum.

Pluralism is important for several reasons. On epistemological grounds, if a scientific discipline relies heavily on one school of thought, i.e. Neoclassical economics, there must be *very strong justifications* for doing so, and a *very strong justification* for why other theories should be excluded. This is especially important for social sciences, where controlled experiments are very difficult to conduct and therefore difficult to establish "laws". Neoclassical economics gives us important insights, but fails to explain certain key economic phenomena: examples include (but are not limited to) the nature of economic agents and economic institutions, the role of money and the financial crisis. Learning Neoclassical economics is clearly necessary, but it is not sufficient. We believe that knowledge of other important and relevant schools of thought provides a better and more holistic understanding of the economy.

In this way, Pluralism gives us a better understanding of how the economy works. Additionally, it is important because learning about a variety of relevant theories leads to a more dynamic discussion within the subject as a whole, with more reflective and individual students.<sup>7</sup> Disagreement is inherently dynamic and a diverse range of discourse encourages critical thinking. We believe that a more pluralist curriculum, which provides more points of reference when reflecting on economic issues (which, notably, is the case for most other social sciences in their respective fields) would provide these important effects for the subject of economics and for its students.<sup>8</sup>

The extent to which these schools should be included in the curriculum is not a clear-cut decision, and it must be discussed. However, at minimum students should have knowledge about the existence of various schools and know the main features of at least a few. Some schools might be included in core modules, in the way Complexity Economics has been in the second-year Macroeconomics module (see Section 2). Others might do better as optional modules, such as Post-Keynesian Economics and Behavioural Economics. Some might be better suited as sub-sections in a module, in the way Ecological Economics is included in the Environmental Economics module.

A problem that occurs is to define which schools are ‘relevant schools’. Some fear that pluralism collapses into relativism; that all types of economic schools, theories and methodologies are merely equally relevant. We stress that we do not think that everything labelling itself an ‘economic school’ should be included in the curriculum. However, there are certainly many schools of thought which follow scientific methodology, are recognised by most academics, and are crucial to the development of the economic debate. The definition of a ‘relevant school’ is not necessarily easy to define, but there is a clear difference between pluralism and relativism, and the awareness of this distinction is very important when considering how to design the economics curriculum.

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<sup>7</sup> Mearman, Andrew; Wakeley, Tim; Shoib, Gamila; Webber, Don, (2011), ‘Does Pluralism in Economics Education Make Better Educated, Happier Students? A Qualitative Analysis’ *International Review of Economics Education* Vol.10(2), pp.50-62.

<sup>8</sup> Ibid.

## *Interdisciplinarity*

We believe interdisciplinarity between economics and other social sciences contributes to a more complete understanding of the economy. There are compelling reasons why economics is a separate discipline, just as is the case with any other field: it allows specialization and a depth of understanding. Nevertheless, in both the real world and other academic fields, different disciplines often come together in areas where they have synergy. Dealing with each discipline in total isolation neglects the important insights they can give each other. Unfortunately, since the 1950s economic papers have been citing other sciences the least of all disciplines. Even mathematics, considered to be a ‘pure’ science, cites other disciplines more than economics.<sup>9</sup> Economics overlaps other social sciences to a large degree, all of which try to understand different parts of our society. Knowledge of these subjects and how they relate to economics gives us a deeper and wider understanding of the economy. Geography can give us insights to how spatial and environmental differences affect economic phenomena such as production. Sociology can help us understand how different cultures affect economic phenomena. Psychology can help us understand the behaviour of economic agents more precisely. Politics can help us understand how economic outcomes affect power relations and the political environment.

This importance of interdisciplinarity is recognized by many distinguished economists throughout history, both explicitly and by their own academic practice.<sup>10</sup> Indeed, this is the reason why a leading university like Oxford does not offer single-honours Economics at all to undergraduate students. Other universities, such as Cambridge, require their first-year economics students to take interdisciplinary modules which contextualise the economy within the frame of society. Interdisciplinarity is also well represented in the academic sphere:

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<sup>9</sup> Haldane, Andrew G; Turrell, Arthur E, Staff Working Paper No. 696 for Bank of England *An interdisciplinary model for macroeconomics*, November 2017.

<sup>10</sup> **Hayek:** *"But nobody can be a great economist who is only an economist - and I am even tempted to add that the economist who is only an economist is likely to become a nuisance if not a positive danger"* (1974 Nobel Prize Ceremony Award Speech, [https://www.nobelprize.org/nobel\\_prizes/economic-sciences/laureates/1974/presentation-speech.html](https://www.nobelprize.org/nobel_prizes/economic-sciences/laureates/1974/presentation-speech.html), accessed 18/03/18), **Keynes:** *"The paradox finds its explanation, perhaps, in that the master-economist must possess a rare combination of gifts. He must reach a high standard in several different directions and must combine talents not often found together. He must be mathematician, historian, statesman, philosopher-in some degree. He must understand symbols and speak in words. He must contemplate the particular in terms of the general, and touch abstract and concrete in the same flight of thought. He must study the present in the light of the past for the purposes of the future. No part of man's nature or his institutions must lie entirely outside his regard"* Keynes, John M. 1924. "Alfred Marshall, 1842-1924." *The Economic Journal* 34 (135): 311-372, find at <https://economicsociologydotorg.files.wordpress.com/2015/03/keynes-19241.pdf>, accessed 18/03/18.

Economists from the Bank of England are currently working on developing ‘An Interdisciplinary Model for Macroeconomics’.<sup>11</sup>

Many social science subjects at Durham offer interdisciplinary modules, such as Philosophy of Economics, Global Political Economy and Economic Geography. Of these, Philosophy of Economics is especially important, as it emphasises the methodological and philosophical foundations of economics - such as the deductive/inductive debate, causation/correlation and rationality - as well as its fundamental ethical questions on welfare and preferences.

Many Economics students never realise that these modules exist. We believe that students must be made more aware of them. Leaders for some of these modules have been receptive to including more economics students, and want to develop their modules to better fit them. We believe that there is a potential both to improve existing modules, and to create new ones.

Having studied these principles and questions, we wanted to understand how well the economics curriculum at Durham prepared students to use these skills. We decided to use quantitative and qualitative analysis to see if our intuitions were justified beyond our limited experience. What follows in this report is an overview of that investigation, a discussion of our results, and some suggestions for how students and staff can work together in improving economics at Durham.

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<sup>11</sup> Haldane, Andrew G; Turrell, Arthur E, Staff Working Paper No. 696 for Bank of England *An interdisciplinary model for macroeconomics*, November 2017

## 2 Economics at Durham: Review of current course structure and content

### 2.1 Aim

Some of the main purposes of this report are to map out the course structure and content of the Economics degree at Durham, to ascertain the distribution of economics students in the modules and to investigate the presence of the points developed in Section 1 - that is, whether the degree:

1. Approaches issues from any other economic schools than the mainstream
2. Covers the history of economic thought
3. Covers any economic methodology/philosophy of science
4. Offers any interdisciplinary courses
5. Covers anything concerning ethical questions connected to economics
6. Applies theories to analyse real world issues
7. Covers economic history
8. Encourages critical thinking, not only memorization of models

### 2.2 Methodology

#### 2.2.1 Sources

The sources we used to investigate the above 8 points were:

- Data on student registration based on degree for each module 2016/17 and 2017/18
- Module handbooks 2001/02-2017/18
- Module course descriptions 2017/18
- Module coursework (formative and summative assessment) 2017/18
- Module summative examination 2016/17 for final May/June exams
- Module content of modules offered in other Departments

#### 2.2.2 Definitions of assessment of examination questions and course work

The procedure we took in reviewing the economics degree was inspired by the review conducted in *The Econocracy* (2016), where curriculum reviews were conducted on 7 British universities. Along these lines, when looking at exam questions and coursework, we analysed what types of skills and way of thinking the questions encouraged, in order to investigate the presence of evaluative/critical thinking. We assumed that the examination questions and summative assignments were a fair representation of what was required for the student to have a good understanding of.

We sorted each examination question into one of four categories.

1. % of exam marks allocated to questions that ask students to **describe**.

*Describe is defined as students writing information down from memory; it requires no independent judgement.*

2. % of exam marks allocated to questions that ask students to **operate a model/mathematical exercise**.

*This entails focusing on a particular economic model and performing a task with that model. Here, there is no evaluation of whether the model is appropriate, nor is there any consideration of its strengths and weaknesses. Such questions can be graphical, mathematical or descriptive.*

3. % of exam marks allocated to questions that ask students to do **multiple choice**.

*Multiple choice simply means choosing from a range of pre-set short answers.*

4. % of exam marks allocated to questions that ask students to **evaluate**.

*Evaluate entails that the student has to apply independent thinking; a key requirement is that there is not only one correct answer.*

It is of course acknowledged that some modules completely entail the skills of operating a model because they are purely courses to develop mathematical or other technical skills. Nevertheless, for **econometrics**, which is supposed to be economics' branch on empirical research, another review framework was used - also adopted from the method taken used in *the Econocracy*. It was assessed based on the following four categories:

1. **Independent approach to a problem.** Questions that give students an issue to investigate or some raw data and then ask them how they would analyse it and why.
2. **Abstract/theoretical econometrics.** Questions where no actual data or problem is mentioned, but a student is either asked mathematical questions about statistical/probability theory, or asked to manipulate regression model and test statistics at a purely abstract level.
3. **Interpreting a given result.** Questions where a student is given a particular set of results or econometric method and asked to interpret it.
4. **Applying an econometric technique to a given result.** Examples would be performing hypothesis tests from a given regression or discussing omitted variable bias (either in general or for a specific case).

The first point here entails that students are actually encouraged to understand how to apply econometric analysis to real world data and situations. One example given in the survey

conducted is if students were “given data on oil markets and asked to produce a report on global demand and supply for oil, would they have at least a half-decent idea of where to start?”. In a lot of econometric teaching the student learns how to apply the models and are asked to assume the data satisfies the central assumptions, without first exploring the empirical dimensions of where the data came from, its properties as well as limitations. See Freedman (1991), who argues that statistical methods often cannot be “adequate substitute[s] for good design, relevant data, and testing predictions against reality in a variety of settings” (see also Breiman, 2001, for other statistical methods).

### *2.2.3 Weaknesses*

We acknowledge that our research cannot fully represent everything which is covered in the modules. Handbooks and exam questions do not necessarily reflect everything which is brought up in lectures or seminars which may depend very much on the lecturer. Due to resource and time-constraints we were not able to expand our research to lecture content.

Nevertheless, we do think that exam questions and handbooks reflect the most important elements and learning outcomes of the modules. Exam questions reflect what students spend the bulk of their time studying and preparing for. Students often have little time or incentive to study material which they won't be examined on. It may be that the principles we are investigating are included in the modules more than is evidenced by our research; however, if they are not included in any of the module handbook, coursework or examination, that somewhat reflects the very small importance they are given.

We also acknowledge that our way of categorising exam questions is not perfect. Questions which ask students to operate a model may require thinking beyond just memorisation. An exam may be largely composed of mathematical questions, but that wouldn't necessarily mean that rote memorisation would be sufficient. Equally, “evaluate” was sometimes very difficult to identify. Some questions ask students to “critically evaluate the strengths and weaknesses of x”, but does in fact already have a set, correct answer which the student has memorized and repeats, with no independent thinking involved. A few questions defied categorisation, matching characteristics of more than one category.

While it may be true that we couldn't capture the nuance of some questions, these categories still reflect the priority of exams. A question asking students to operate a model might require

some reflection and thought but compared to questions which are explicitly structured to encourage such thinking would likely fall short. The number of questions which we struggled to categorise in a consistent manner was thankfully few; however, even if a great number of questions did not properly fit our categorisation scheme, that would still allow us to assess where there is a lack of a certain type of question.

## 2.3 Results

### 2.3.1 *Other economic schools than the mainstream and the history of economic thought*

By looking at handbook content we could see that there are a few modules which incorporate non-mainstream economic schools and theories. The Introduction to the History of Economic Thought (ECON1081) and History of Economic Thought (ECON3051) modules are entirely based on looking at the development of the economic discipline through time, and thus different economic schools. Post-Keynesian Economics (ECON3291) is in itself a heterodox school, and a Heterodox Economics (ECON3311) course might be launched in the coming years. The occurrence of non-mainstream economic schools within otherwise mainstream economic courses is nevertheless fairly scarce. Introduction to Environmental Economics (ECON1051) has a section on Ecological Economics, and Macroeconomics (ECON2011) presents an introduction to the Post-Keynesian school and Complexity Economics in the last three lectures (though is not examined). As mentioned above, it might be that lecturers *mention* other economic schools in lectures, however this is not sufficient to claim that a module is *covering* an economic school. Only 8% of the economics students took Post-Keynesian Economics in 2016/17, 53% Introduction to History of Economic Thought and 13% History of Economic Thought.

### 2.3.2 *Interdisciplinarity*

Durham University previously offered more interdisciplinary degrees, such as Economics and Law, Economics and Sociology, Economics and History. The joint degrees with Sociology and History were taken away in 2004/05, and Law taken away 2005/06. The Politics, Philosophy and Economics (PPE) degree was however introduced in 2003/04 and Economics and Politics has been offered for the entire period.

The emphasis of this report, however, has been the degree of interdisciplinarity in a single-honours Economics degree, where interdisciplinarity was found to be very limited. Even

interdisciplinary modules for students taking PPE are scarce, since students mostly study each subject separately. A few interdisciplinary modules were however found:

- Economics and Politics: *Global Political Economy* (SGIA2301, Department of Government and International Affairs)
- Economics and Geography: *Economic Geography* (GEOG2641, Geography Department)
- Economics and Psychology: *Behavioural and Experimental Economics* (ECON2141, DUBS)
- Economics and Philosophy: *Philosophy of Economics and Politics: Theory, Methods, and Values* (PHIL2171, Philosophy Department)

Here, only *Behavioural and Experimental Economics* is an actual economics course, offered for second-year students, whilst the others are available for economics students to take as an optional module form outside of the Business School (only one allowed each year). An exception to this is *Global Political Economy*; no modules from the Department of Government and International Affairs are available to Economics students as optional modules.

### 2.3.3 Ethical questions

In 2015/16 *Economic Ethics* was introduced as a first-year module at the Business School. Nevertheless, it was taken away in 2017/18 and never properly launched. In its course description, it states that one of its aims was “To explain the close relationship between ethical frameworks and economic theories” (course description 2016/17).

In current modules, the only module which properly touches upon ethical questions as a part of the coursework is *Introduction to Environmental Economics* (ECON1051). This module has two short formative essays, both including ethical discussions such as “Discuss the ethical aspects of applying economic method and monetary valuation to natural resources and environmental problems and policy” (Michaelmas Term, Formative Essay, 2017).

Besides this module, *Economics of Social Policy* (ECON2091) and *Public Economics* (ECON3191), whilst concerned mainly with efficiency, do discuss issues of inequality and government provision of benefits and therefore briefly discuss questions of equity. For example, in the *Public Economics* formative assignment the motivations for the US 2007 “*Freedom Flat Tax Act*” are discussed, including the motivation for “fairness”. Nevertheless,

whilst they do discuss issues of equity, the discussion is mainly technical, and rarely encourages students to discuss the actual ethical question of whether government should strive for equality or not. How equity is dealt with in a technical way is for example reflected in one of the Economics of Social Policy exam questions (2017):

*Attempts by government to redistribute income by the tax and benefits system and in kind inevitably creates significant distortions as far as incentives are concerned and may do little to improve equity'. Critically assess this statement.*

Durham does offer the module *Philosophy of Economics and Politics: Theories, Methods and Values* (PHIL2171) in the Philosophy Department, whose aim is to “introduce students to theoretical, methodological and ethical issues raised by economic science” (course description 2017/18). This module covers ethical issues in economics, but also the methodological aspects in “measurement; econometric inference; modelling, economic experiments; evidence-based policy”, connected to one of the other principles investigated: economic methodology/philosophy of science, leading on to our next section.

#### *2.3.4 Philosophy of Science/economic methodology*

The philosophy module above is available as an optional module to economics students, but a very small number of economics students take it each year. This may be due to various reasons: economics students do not know about it; economics students would like to take it but they can only choose one optional module outside the Business School and thus had to prioritize something else; or there is no interest among economics students. However, for the latter it should be noted that 70.7% of students said they would be more engaged in their degree learning the scientific process of economics and 81.5% on the ethical aspects of economics (see Appendix 2 for survey results).

Nevertheless, the argument put forward in this report is that these elements are not something which should be offered as an optional module in second year, but foundational aspects which should be introduced in the first year of economic studies. A quite astounding finding is that students in most other social science disciplines, such as Sociology, Anthropology, Geography, Psychology, Philosophy, Archaeology and History, all have a compulsory course in first year where they are introduced to the methods of their discipline, how research is conducted and how theories and knowledge is produced. These are the modules in question:

- *Introduction to Research* (SOC11321, Sociology Department)
- *Doing Anthropological Research* (ANTH1101, Anthropology Department):
- *Introduction to Geographical Research* (Bsc) (GEOG1232, Geography Department)
- *Introduction to Geographical Research* (BA) (GEOG1222, Geography Department)
- *Scientific Methods in Archaeology 1* (BSc) (ARCH1041, Archaeology Department)
- *Applied Archaeological Methods* (BA) (ARCH1081, Archaeology Department)
- *Reading Philosophy* (PHIL1041, Philosophy Department)
- *Making History* (HIST1561, History Department)
- *Introduction to Psychological Research* (PSYC1062, Psychology Department)

The aims of these modules are for example “To introduce students to a range of **strategies used in producing sociological knowledge**”, “To introduce students to **ethical issues embedded in research**”, “To encourage students to consider **the role of evidence in producing 'theory'**”, “To enable students to experience **the process of collecting and analysing data, and creating anthropological knowledge**”, “To enable students **to select appropriate methods to study diverse geographical issues**”, “to develop a **basic critical awareness of the potential and limitations of the data** and its analysis when applied to archaeological problems”, “To introduce students to **the practice of researching and writing history** by examining ways in which **historians shape knowledge** in particular areas”, “introduces students to **some of the methods used in conducting, analysing and presenting research**” in their discipline and even “will also **cover related conceptual and historical issues**” in their discipline.

The point is to give students an overview of the subject as an *academic discipline and science*. The knowledge and theories which will follow in their degree have not just appeared from nowhere: each discipline has different methods to arrive at their “knowledge”, theories or models.

The module in the first year of an Economics degree which one would assume would provide an introduction to this, *Economic Methods* (ECON1021), has the following aim:

“To familiarise students with **the use of mathematical and numerical tools in solving economic problems**, and to provide a quantitative basis for progression to final honours. In addition, students will have the opportunity to **develop key skills**” (Module Description 2017/2018).

This module, whilst essential, has as its only objective to develop mathematical skills, as well as the introduction to econometrics at a latter part of the course, although not mentioned here. Whilst econometrics gives a start to one way in which economists generate knowledge (the other being purely theoretical and deductive), this still leaves a large gap for economic students in terms of developing an understanding of how models and knowledge are developed in economics, the limitations of theories, assumptions economists have to make, the difficulty in conducting experiments and ways in which economists can overcome this. It is also very unclear what is meant by “key skills”. *Principles of Economics* (ECON1011) is another first-year core module one would assume might introduce students to these methodological aspects but goes directly into learning the theories of micro- and macroeconomics without any reflection on the background to these and how they were developed.

The only module where any philosophy of science is mentioned is in the first lecture of the first-year module *The World Economy* (ECON1071) which includes the topic *theories of knowledge, science, social science* (Module Handbook 2017/2018). Here they discuss the role and use of models in economics and encourage students to read Daniel Rodrik’s *Economics Rules: The Rights and Wrongs of the Dismal Science* (2015), which at least encourages students to reflect on methodological issues in economics. Nevertheless, this is not part of the examination.

It should be mentioned that the modules *Economic Data Analysis* (ECON2061) in second year and *Applied Econometrics* (ECON3011) in third year do develop a student’s understanding of testing economic theories and analysing economic data. Nevertheless, as is common for most econometrics courses (as mentioned above in section 2.2.2) they do not involve conducting research, limitations in doing research, gathering data, data sources, but only applying econometric linear regression analysis. Econometrics is also just one aspect to the empirical side of economics. However, the *Behavioural and Experimental Economics* (ECON2141) course does also offer insight into the knowledge generation in *behavioural* economics by learning how behavioural experiments are conducted. However, only 7.5% of economics students take this module.

### *2.3.5 Apply theories to analyse real world issues and economic history*

Durham does not offer any modules in **economic history**, nevertheless, the compulsory first-year module *The World Economy* does provide students with a lot of economic history content.

The only drawback is that this is mainly available for students in first year taking Economics degrees. Only 25 students with economics-related degrees<sup>12</sup> took it, compared to the 241 students enrolled in the course (2016/17). Whilst discussing a lot of theory, it is very much a module discussing historical, present, and future real-world events. For example, one of its formative essay questions was: *What does new trade theory predict will happen as a consequence of the UK leaving the European single market? Why might such predictions not be forthcoming?* (2017/18).

Besides that, plenty of modules apply theories to empirical evidence and studies or discuss real world issues to a certain degree, as many modules are applied by nature: *Introduction to Environmental Economics*, *Environmental Economics and Policy*, *European Economics*, *Economics of Social Policy* and *Public Economics* form good examples. *European Economics* applies micro- and macroeconomic theories to empirical reality in each section of the course (see seminars and lecture readings), and *Economics of Social Policy* discusses current issues in healthcare, education and the benefit system in the UK. Similarly, in *Public Economics*, one of the exam questions discussed current tax evasion and the leakage of the Panama Papers (Exam 2017). However, only about 30% of economics students take *Introduction to Environmental Economics* and *European Economics*, whilst just above 20% take *Economics of Social Policy*; even fewer take the third-year modules.

The real-world analysis is not a part of the core of what is considered important for students to learn. The numbers above are only *economics students*, whilst the large majority of those taking economics-related degrees, such as *Economics and Politics*, usually don't take these modules. The core modules, such as *Principles of Economics*, *Economics Methods*, *Microeconomics*, *Macroeconomics* and *Economic Data Analysis*, are mainly theoretical or technical.<sup>13</sup> Whilst these theoretical and technical aspects are essential, based on the exam questions, coursework and handbooks we have gone through, it is clear that it is possible for an economics student to go through their economics degree having encountered a very limited amount of discussion or analysis about the real world economy.

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<sup>12</sup> 'Economics related degrees' is a joint honours degree where Economics is one of the disciplines, e.g. BA Politics and Economics or BA Philosophy, Politics and Economics

<sup>13</sup> Some of them do try to incorporate some kind of empirical aspect in the coursework, for example a second year Microeconomics summative essay on studies which have tested microeconomic theory to real world industries.

### 2.3.6 Encouragement of critical thinking

The table below summarizes our findings when conducting the review of skills developed in module assessments. It should be restated that mathematical and technical skills are essential to an Economics degree: therefore, certain modules such as Economic Methods and Intermediate Methods for Economics and Finance are 0% evaluative and 100% either multiple choice or operate a model/mathematical.

The modules which score highest in valuing critical/evaluative thinking in their assessment are *Introduction to the History of Economics Thought, Behavioural and Experimental Economics, Development Economics, Security Investment Analysis, History of Economic Thought, Environmental Economics and Policy and Post-Keynesian Economics*, all scoring above 80%. Again, none of these are core modules, and so are taken by a smaller percentage of students.

Module	Describe	Operate a model/ Mathematical	Multiple choice	Evaluate	Summative as coursework (% of grade)	Combining exams and coursework
<b>Principles of Economics</b>	10%	71%	0	19%	NA	
<b>Economic Methods</b>	0	67%	33%	0	100% operate a model/mathematical (20%)	73.33% operate a mode; 26.67% evaluate
<b>The World Economy</b>	52%	31%	0	17%	NA	
<b>Accounting and Finance in Business</b>	9%	68%	18%	5%	NA	
<b>Introduction to Environmental Economics</b>	50%	0	0	50%	NA	
<b>Introduction to the History of Economic Thought</b>	0	0	0	100%	NA	
<b>Macroeconomics</b>	0	50%	0	50%	100% evaluate (40%)	30% operate a model; 70% evaluate

<b>Microeconomics</b>	0	80%	0	20%	100% evaluate (40%)	48% operate a model; 52% evaluate
<b>Behavioural and Experimental Economics</b>	17%		0	83%	100% evaluative (40%)	89.5% evaluate; 10.5%
<b>Business Competition</b>	22%	73%	0	6%	NA	
<b>Corporate Finance</b>	0	27%	0	73%	NA	
<b>Economics of Social Policy</b>	0	44%	0	66%	NA	
<b>European Economics</b>	52%	8%	0	40%	NA	
<b>Intermediate Methods for Economics and Finance</b>	0	100%	0	0	NA	
<b>Advanced Microeconomic Theory</b>	0	100%	0	0	NA	
<b>Advanced Macroeconomic Theory</b>	0	100%	0	0	NA	
<b>Development Economics</b>	0	0	0	100%	100% evaluative (40%)	
<b>Financial Theory and Corporate Policy</b>	29%	17%	0	54%	NA	
<b>Industrial Organisation</b>	21%	15%	0	64%	NA	
<b>Labour Economics</b>	34%	13%	0	54%	NA	
<b>Public Economics</b>	10%	53%	0	37%	NA	
<b>Game Theory and Applications</b>	0	60%	40%	0	100% operate a model (30%)	

<b>Post-Keynesian Economics</b>	0	0	0	100%		
<b>Security Investment Analysis</b>	8%	9%	0	83%	(40%)	
<b>Monetary Economics</b>	17%	83%	0	0		
<b>International Economics</b>	40%	40%	0	20%		
<b>History of Economic Thought</b>	0	0	0	100%	(40%)	
<b>Environmental Economics and Policy</b>	17%	0	0	83%		
	<b>Independent</b>	<b>Abstract</b>	<b>Interpret</b>	<b>Apply</b>	<b>Summative as coursework (% of grade)</b>	
<b>Economic Data Analysis</b>	0	0	25%	75%	100% independent (40%)	40% independent; 15% interpret; 45% apply
<b>Applied Econometrics</b>	-	-	-	-	(50%)	

Figure 2. Summary of based on what skills students are assessed in each module (only summative, i.e. which actually counts to the grade) (Appendix 1).

### 3 Suggestions for change

Our purpose in writing this report is not to blindly criticize the economics taught at Durham. Rather, we want to identify where there may be room for growth in the curriculum and to encourage a systematic dialogue between staff and students to improve it. In this section, we will carefully examine these areas, highlight the ways other academic departments have adapted their taught material and provide some concrete suggestions for change.

We acknowledge that a great deal of time and effort has gone into constructing the curriculum, exams, and module handbooks that we have reviewed thus far. We are lucky to have highly educated and trained experts who have constructed these elements of the curriculum. We do not suggest or indicate that we know economics better than researchers who have dedicated much of their professional life to its study. Instead, we want to bring fresh perspectives, both those of other academic departments, as well as our own.

#### 3.1 Areas for growth

We identified areas for growth using three criteria. First, we examined whether the curriculum reaches the purpose and core principles outlined in the introduction. Is a given skill or topic important for giving students the best possible understand of economic phenomena? Students cannot, for example, conduct economic research if they have not been prepared to understand how the theories they test manifest in the real world.

Second, the principles must be sufficiently developed in the current curriculum. We used two types of evidence to examine this: our own qualitative assessment presented in Section 2, as well as results from the Durham Economics student survey conducted in March 2018. If a majority of students felt that their degree was not providing them with some skill, greater emphasis may need to be placed on that skill. Similarly, if module curricula and exams neglect an important topic, it may be considered to be an area for growth.

Third, we examined the feasibility of change in this area. A pluralism of schools of thought is fundamental to the pursuit of knowledge, and our review turned up that many schools of economic thought simply aren't taught at Durham. Unfortunately, for many of these schools - Complexity Economics for example - there are no staff at the Durham Business school specialized in that field (to the extent of our knowledge). Organizing a module on a topic would

not be productive without sufficiently knowledgeable lecturers, especially as one of the goals of the Business School is to have “research-led teaching”.<sup>14</sup> Whilst we would prefer more modules which explore different schools of economic thought, without long-term changes such a suggestion would likely not be feasible.

Using this method, we have identified three areas in which currently there is potential for growth in the Durham economics curriculum. **These are: critical evaluation, real-world analysis, and an awareness of the foundations of economic theory.** Each of these are principally important, currently underdeveloped in the curriculum, and have feasible potential improvements.

Only 53.1%, half of **surveyed undergraduate students**, felt that their degree encouraged them to think critically. 46.2% feel they do not develop the ability to handle and analyse real world data. Only about 60% say they are given the opportunity to apply economic models to real world issues. While 88.5% say they have developed an understanding of mainstream economics, only 48.5% say they are given an understanding of why the mainstream is the preferred method and why this is what they are taught in their degree.

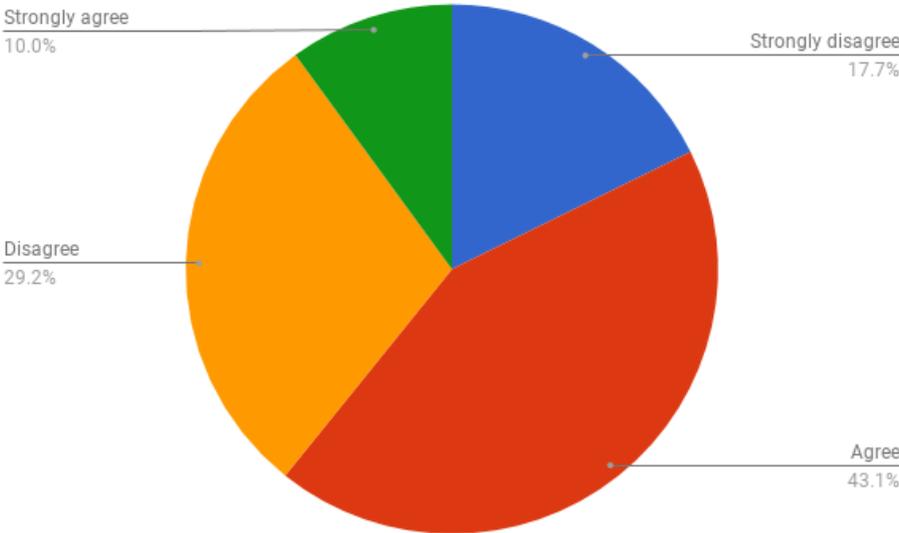


Figure 3. Survey answer to “I feel that my economics education from Durham has provided me with: Encouragement to think independently and critically (e.g. not just to memorize theories and implement models, but encouraged to investigate and arrive at you own judgements on the applicability and validity of models and encouraged to think about alternatives)” (Appendix 2).

<sup>14</sup> <https://www.dur.ac.uk/learningandteaching.handbook/3/principles/>, accessed 13/04/18.

These results are corroborated by our findings in the curriculum review that most compulsory modules give students few exam marks for evaluation. The highest scoring compulsory module was *Macroeconomics*, with 50% of exam marks coming from critical evaluation. Of the other compulsory economics modules, none had more than 20% of exam marks awarded for questions required evaluation. This trend is somewhat more varied amongst optional modules, some awarding the majority of marks for evaluation (for example *Development Economics*) and some giving no marks (*Game Theory and Applications* for example).

Regarding **the foundations of economic theory**, students are not introduced to the philosophical and scientific foundations of economic methodology until at least their second year, and somewhat minimally even at that point. No compulsory first-year module includes the foundations of economic theory as either a stated topic or question on an exam. While “Introduction to microeconomics and its methodology” is listed as a topic for second-year Microeconomics, this is never developed upon in the exam. Macroeconomics again stands out as an exception, where students are introduced to and examined upon some of the foundations of the economic theory they learn.

We focus here on both compulsory modules and exams for a few reasons. For students taking economic related degrees (e.g. PPE) they are unable to take many optional modules given their restrictions on credit bearing courses. Material in other modules often builds on the foundations laid in compulsory modules. Many topics in *Economics of Social Policy*, for example, rely upon indifference curve analysis, a topic taught in both *Principles of Economics* and *Microeconomics*. Some optional modules also have relatively low enrolment rates, so while it is true that *Behavioural and Experimental Economics* awards 82.5% of exam marks for evaluation, only around 10% of students taking economics take that module. Finally, compulsory modules should provide students with the foundational skills they need to succeed in economic analysis. If students are not given these important skills in their compulsory modules, they may never receive them.

We acknowledge that **exam questions** provide a limited view of a module. A lack of exam questions asking students to be critical does not indicate that teaching staff don't ask students to be critical in seminars, lectures, or formative assessment. Despite this, we think summative

grades do deserve most attention. Students may fail to attend seminar and lectures, either physically or mentally. Even when students are attentive, based on their incentives they will focus on topics which will be in the exam. Even if a lecturer encourages and presents critical views to students, if students look at past exam papers and know they will not be examined on them, they will find little point in revising it. Past exam papers are a popular method of study; students learn what they practice, and if they spend their study time practicing exam papers with little or no critical evaluation, they will receive little practice in that skill. Students, like their teachers, face serious time constraints. Between socializing, extra-curricular activities, and studying, students maximize their utility subject to their time constraint – so non-essential material is likely to get left behind.

These three areas - critical evaluation, real-world analysis, and the foundations of economic theory - are currently somewhat lacking in compulsory economics modules. This is unfortunate, given that there are a variety of compelling reasons to believe that they are important skills for economics students to develop - least of all because, based on the survey results, students want to learn them.

**Student academic engagement** is important. When we asked students, what would make them more engaged with their degree, the most common answer was “application of economic models to real world issues”. An impressive 94.6% of students agreed that this would make them more engaged. Critical thinking also scored highly, with 90% of students agreed (with 60% strongly agreed) that more focus on critical thinking would make them feel more engaged with their degree. In long answer questions where we asked students what they would change about their degree, the most common response was some variant on wanting to understand how the theories they taught related to economic world around them. The clear majority of students (over 80%) indicated they wanted to pursue a career in a field related to economics. It is understandable why students care about real world analysis, wanting to utilise such skills in their future career.

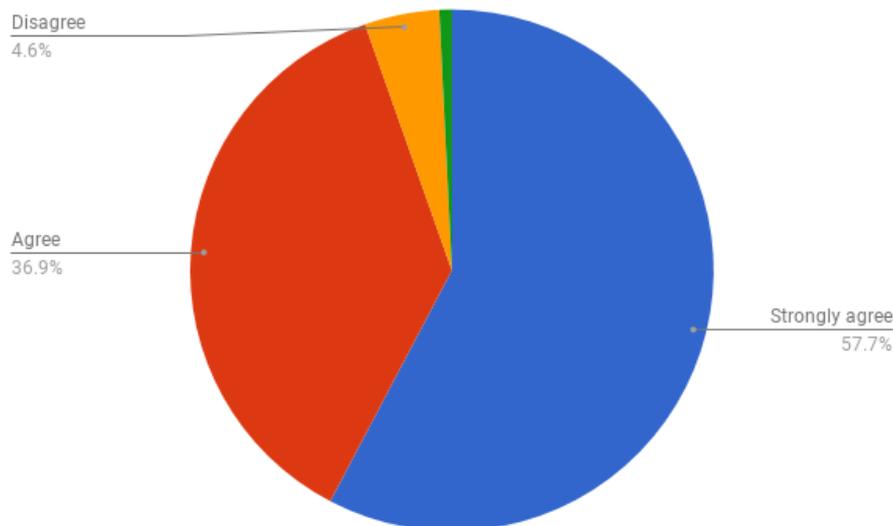


Figure 4. Survey answer to “I would be more engaged with my degree with the inclusion of: The opportunity to apply economic models to real world issues and evaluate how well they can help us understand these issues” (Appendix 2).

There is a strong case that these skills - critical evaluation, real-world analysis, and the foundations of economic theory - are important for **careers related to economics**. Economics graduates hold a certain appeal to employers: they have a unique technical toolkit, a grasp of important economic theories, and solid skills working with qualitative data. Despite this, however, employer opinions of economics graduates are unfortunately low in some important areas. According to the 2014-2015 Economics Network ‘Economics Employer Survey’, the skill of economics graduates was consistently “not very high for critical self-awareness”. Equally employers rated economics graduates as not very high for “the ability to apply what has been learned in a wider context and general creative and imaginative powers”.<sup>15</sup> This is particularly concerning when cross-referenced with the skills that employers value. According to a study performed by the Royal Economic Society in 2007, economics employers cited the skill to “apply economics knowledge” as the most important skill for an economics graduate.<sup>16</sup> The Economics Network survey found that employers value the ability to analyse economic, business, and social issues as amongst the most important skills of an economics graduate.<sup>17</sup> This is not to say that economics graduates are not competitive or well trained; data from the Higher Education Career Service Unit demonstrates clearly that economics graduates have

<sup>15</sup> <https://www.economicsnetwork.ac.uk/projects/surveys/employers14-15>, accessed 10/12/17.

<sup>16</sup> <http://www.res.org.uk/view/art1Oct07Features.html>, accessed 10/12/17.

<sup>17</sup> The ability to construct constrained solutions was the least valuable skill.

higher employment rates than many other degrees.<sup>18</sup> However, maintaining this competitive edge requires looking at the skills employers want and making sure economics graduates meet those standards.

The importance of these skills is nothing new. Both the Durham University “**Principles for the development of the taught curriculum**”<sup>19</sup> and the “**Communities of Practice in Durham University Business School**”<sup>20</sup> support the importance of these ideas. In the former, an explicit goal of curriculum design is to enable students to progress in “the exercise of critical thinking and intellectual enquiry”.<sup>21</sup> In the latter, students are expected to “be able to critically analyze problems, policies and decisions, and plan the responses and changes required in an uncertain and changing environment” by the end of their degree. We appreciate that the Business School as well as broader University policy encourages the teaching of these skills, and we hope to bring suggestions which will better allow the fulfillment of these goals.

### 3.2 Obstacles to change

As has already been acknowledged, multiple resource constraints in terms of time, limited space in the degree, professors with knowledge in those areas and funding are present when making changes in the curriculum. Another element which we believe might act as a constraint, which is in fact connected to almost all of the above, is the Research Excellence Framework (REF).

In 1992, the Higher Education Funding Council for England (HEFCE) was created to carry out the allocation of funding for research based on three points: volume of research, subject costs weights (e.g. laboratory research cost more than other forms) and quality of research. The latter was to be based on the assessment first carried out by the Research Assessment Exercise (RAE), and currently by the REF, every couple of years (most recent one carried out in 2014, and next one in 2021).

The quality of research is assessed on the “vitality of research environment”, citations and what journals academics publish in, as well as what “impact” the research has had (a new element to the REF). Impact is defined as having “an effect on, change or benefit to the economy, society,

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<sup>18</sup> [https://www.hecsu.ac.uk/assets/assets/documents/what\\_do\\_graduates\\_do\\_2017.pdf](https://www.hecsu.ac.uk/assets/assets/documents/what_do_graduates_do_2017.pdf)

<sup>19</sup> <https://www.dur.ac.uk/learningandteaching.handbook/3/principles/>, accessed 20/02/18.

<sup>20</sup> <https://www.dur.ac.uk/resources/business/Communities-of-Practice-Statement-Oct2015.pdf>, accessed 20/02/18.

<sup>21</sup> See section 13 in the Principles for student support.

[https://www.dur.ac.uk/learningandteaching.handbook/2/principles\\_for\\_student\\_support/](https://www.dur.ac.uk/learningandteaching.handbook/2/principles_for_student_support/), accessed 20/02/18)

culture, public policy or services, health, the environment or quality of life, beyond academia”.<sup>22</sup> In the submissions to the UOA’s, universities now have to include case studies on how specific research findings at the university have made an impact on society in any way, such as in policy making. For example, ‘University researchers’ insight into the relationship between the NHS and Private Finance Initiatives has influenced UK government policy and approaches to health in the developing world’<sup>23</sup>

Whilst this is a well-meaning initiative from the government, it is an incredibly time-consuming and ill-designed venture in terms of incentives. In 2015 there was a Call for Evidence from the government and Lord Stern on the opinions and experiences of the 2014 REF. Based on the 301 responses received from government bodies, individual academics and HE institutions, the “Independent review of the Research Excellence Framework (REF): Synthesis of responses submitted to the REF Review Call for Evidence and follow-up interviews” was produced in July 2016. This was also made into the report “Building on Success and Learning from Experience” discussing the future of the REF.<sup>24</sup>

This report discusses many of the difficulties which have arisen in how academic departments carry out research. For example:

*The desire to be included in the REF, and associated pressures from within the institution, could strongly influence academics in their choices about what problems they choose to tackle. This can drive them towards safe topics and short-termism, and a reluctance to engage in risky or multidisciplinary projects, in order to ensure reliable, high quality publication within the REF period, and may be discouraging innovative thinking and risk taking.*

*As well as [...] exclusion of good research staff who do not fit the HEI selection strategy, potentially demotivating some staff, and reducing the completeness of the picture of UK research strength.*<sup>25</sup>

Funding from the government is an important income for academic departments. It enables them to hire professors and conduct good-quality research, two things which crucially

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<sup>22</sup> <http://www.hefce.ac.uk/rsrch/REFimpact/>, accessed 24/06/17.

<sup>23</sup> <http://impact.hss.ed.ac.uk>, accessed 24/06/17.

<sup>24</sup> Published by the Department for Business, Energy and Industrial Strategy, July 2016.

<sup>25</sup> Ibid.

determine what resources there are for different areas to be taught in the Economics degree. Therefore, due to the pressure and burden put on academic departments and their respective staff to demonstrate their competence for funding, we understand there may be reluctance to broaden the scope of teaching, both in term of time and resource constraints, and incentives. For example, “Beginning in 1998, steps were taken to realign the research and teaching interests of the new Department within the mainstreams of the Economics and Finance disciplines and thus to ensure that in RAE2001 there would be strong submissions to both UoA 38 and UoA 44 (Accounting and Finance). To achieve this, four academic staff have been transferred to other Departments of the University where their expertise has a better fit”.<sup>26</sup>

In the short-term, the suggestions we make have been adapted to fit these circumstances. The changes in staff allocations and research topics mean that many topics we would like to have included in the curriculum lack the requisite specialized lecturers, and that there may be a reluctance to include these. We understand that the REF imposes restrictions on both research and teaching. Nevertheless, this should not preclude change.

### **3.3 An overview of UK and European Economics degrees**

The economics course at Durham shares its main characteristics with most other courses in the UK: mandatory Macroeconomics, Microeconomics, Mathematics, and Statistics modules in first and second year, followed by an open third year with dissertation. A selection of elective modules is available throughout, though most of the choice occurs in the third year. Among 12 of the UK’s leading economic research departments (as per the 2008 Research Assessment Exercise), none of them deviated significantly from this structure<sup>27</sup>; a later survey of 7 Russell Group universities confirmed this result.<sup>28</sup> The choice of elective modules on offer can vary significantly for each university.

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<sup>26</sup> Research Assessment Exercise 2001 UND/CF7/R1/2001, Palace Green Archives

<sup>27</sup> Wigstrom (2011)

<sup>28</sup> Earle et. al. (2016)

### Typical UK Single-Honours Economics degree

Year 1	Micro Principles	Macro Principles	Quant. Methods	Elective
Year 2	Intermediate Micro	Intermediate Macro	Econometrics	Elective
Year 3	Dissertation	Advanced Macro/Micro	Elective	Elective

Figure 5. Adapted from INET Curriculum Task Force working paper<sup>29</sup>

Some universities offer variations in structure and content against this norm. The purpose of this section is to identify some relevant examples of alternative economics courses and modules in relation to the current method of teaching used at Durham. The examples are taken from universities that broadly match the British degree system - that is, a subject (which may be dual-honours; European universities tend not to offer Economics as a single honours course, but typically with Business or Management) is selected before admission, and a significant majority of modules are then taught by that department. Hence the ‘Liberal Arts’-style structure, common in the US, shall not be examined. All examples are taken from undergraduate courses, since these represent the common teaching of fundamental Economics, rather than the increased diversity offered at Masters level.

#### Leeds University

Leeds University offers a module entitled “Theories of Growth, Value and Distribution”. It is a compulsory second-year module worth 10% of the grade; it explicitly encourages a comparative and critical approach to learning theories. These theories - specifically Classical, Neoclassical, and Keynesian - are situated in their respective historical and ideological contexts, with the vested interests of the theories’ proponents examined along with the more standard content of those theories. Students are encouraged to critically engage with the theories themselves and examine ‘the conflictual nature of the economic science’. In addition, a debate format is used within tutorials, as opposed to the more rigid classroom format.<sup>30</sup> This module represents a focus on epistemological and methodological concerns; a stated aim is to aid understanding in the application of theories to real-world problems. In this way, critical thinking and a real-world approach to theories are taught.

<sup>29</sup> [https://www.ineteconomics.org/uploads/downloads/INET\\_undergrad\\_economics\\_curriculum\\_UK.pdf](https://www.ineteconomics.org/uploads/downloads/INET_undergrad_economics_curriculum_UK.pdf), accessed 5/03/18

<sup>30</sup> <https://leedsforlife.leeds.ac.uk/Broadening/Module/LUBS204>, accessed 23/03/18

“Ethics and Economics” is an optional module worth 10% of the second year. The content of the module focuses on the “ethical assumptions inherent in economic concepts”; examination is based solely on coursework, enabling in-depth research and discussion to be a requirement for excelling in the module. The pedagogy of the module is also important: individual learning and free choice is emphasised in the rubric, as is critical engagement: “[Classes] are a vehicle for [the student] to build on the knowledge gained in the lectures, [and] to *develop a methodology for applying [their] knowledge to problems...*” additionally the module aims to allow students to “apply... theory to an appropriate, but *freely chosen* economic policy”. Finally, the main learning outcome is that students are able to “engage critically with current theoretical and empirical literature in economics and moral philosophy as well as critically evaluate the potential of economic activities...”<sup>31</sup>. This module is therefore an outstanding example of good practice: as well as teaching ethical issues in economic context, it includes aspects of a real-world approach, a focus on academic literature, a requirement for choice-driven learning, and a defined purpose of teaching critical engagement with economic concepts.

### *Nottingham University*

Nottingham offers several modules directly related to our Core Principles. During a student’s first year they may take a variety of single-term modules, each of which contributes to a pluralist education. In “Economic Perspectives”, material focuses on the changing definitions of basic Economic concepts such as growth, money, and government.<sup>32</sup> Students taking “Current Economic Issues” learn to apply the methods learned in theoretical classes to contemporary issues such as economic nationalism.<sup>33</sup> Finally, in “Careers & Employability for Economists” students are provided with guidance on the uses of both personal and technical skills learned within the Economics degree.<sup>34</sup>

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<sup>31</sup> <http://webprod3.leeds.ac.uk/banner/dynmodules.asp?Y=201718&M=LUBS-2680>, accessed 13/04/18

<sup>32</sup> [http://modulecatalogue.nottingham.ac.uk/nottingham/asp/ModuleDetails.asp?crs\\_id=020264&year\\_id=000117](http://modulecatalogue.nottingham.ac.uk/nottingham/asp/ModuleDetails.asp?crs_id=020264&year_id=000117), accessed 23/03/18

<sup>33</sup> [http://modulecatalogue.nottingham.ac.uk/nottingham/asp/ModuleDetails.asp?crs\\_id=020263&year\\_id=000117](http://modulecatalogue.nottingham.ac.uk/nottingham/asp/ModuleDetails.asp?crs_id=020263&year_id=000117), accessed 23/03/18

<sup>34</sup> [http://modulecatalogue.nottingham.ac.uk/nottingham/asp/ModuleDetails.asp?crs\\_id=026973&year\\_id=000117](http://modulecatalogue.nottingham.ac.uk/nottingham/asp/ModuleDetails.asp?crs_id=026973&year_id=000117), accessed 23/03/18

### *Cambridge University*

Cambridge University offers a single-honours Economics course, broadly structured along the standard model. However, it differs from mainstream UK courses in its broader module content and more intensive teaching provision. In addition to lectures and classes, Cambridge offers ‘supervisions’: students complete worksheets and essays, discussing them in small groups with an academic. An emphasis is placed on discussion among the students and the teacher about the issues and theory at hand, encouraging critical thinking and ensuring regular reading (This has in fact been found to be used in *one* module at Durham, Economics of Social Policy). A key feature of the Cambridge course is the number of broad, contextual modules. In the first year, all students are required to take ‘Political and Social Aspects of Economics’, which focuses on the interrelationship of economics with other social sciences; in the third year, students also undertake two compulsory modules ‘Principles and Problems of Macroeconomics’ and ‘Principles and Problems of Microeconomics’. These modules focus on economic analysis of problems and solutions; they are designed to teach techniques required for the professional application of theory. They emphasize a comparative approach to theories, and a ‘problem-first’ approach.

Most distinctly, Cambridge makes a large selection of interdisciplinary modules available in the second year. Of 7 optional modules, 4 are interdisciplinary: there are external Politics, Sociology, and International Relations courses, and one internal course, ‘History and Philosophy of Economics’. This course is a noteworthy example of good practice in contextualizing Economic theory. It aims to ‘help students fully appreciate the strengths and weaknesses of economic theories ... by teaching them the major theoretical innovations and debates [in economics] ... and the key issues involved in the assessment of different methods of economic investigation’. The course is structured so that students study both aspects over the whole year and regular formative essays are completed. This module stimulates a pluralistic mode of thought that carries over into evaluative thinking within the context of theoretical modules.

### *Oxford University*

Oxford, like many European universities, does not offer a single-honours undergraduate Economics course, instead offering Economics in conjunction with either History,

Management studies, or Philosophy and Politics (PPE).<sup>35</sup> This approach encourages Economics to be seen instrumentally: each degree introduction page emphasizes the importance of learning Economics in relation to similar subjects in the Social Sciences.<sup>36</sup> Another notable aspect of Economics teaching is its ‘Tutorial System’: a small forum (2-3 per tutorial) where students are encouraged to share and discuss their own ideas, via essays, with an academic; this approach is fundamentally different to the teacher-student dynamic used in seminars in that it encourages individual engagement and critical discussion<sup>37</sup>; it shares key features such as individual knowledge generation with the ‘Problem-Based Learning’ approach in Aalborg detailed below. While the tutorial approach may not be suited to certain topics, such as econometrics and quantitative methods, it can be applied to more qualitative areas of Economics and application of models.

### *Aalborg University*

Aalborg takes a “Problem Based Learning” approach to teaching Economics: in this approach, the specific quality of an economic problem dictates the theory used to solve it. It represents a significant diversion from the traditional ‘Teacher-Lecture-Seminar’ approach, common in Economics courses. A key feature is the reimagining of the role of the teacher from expert to facilitator: instead of learning in a lecture scenario, students learn concepts through solving tasks set by the teacher.<sup>38</sup> There is extensive use of group work; students adapt to an environment where there is no expert, instead generating relevant knowledge necessary to solve the task. The group of 6-8 people meets with the teacher weekly; external work in the group is expected.

Aalborg University integrates this concept in a partial manner within their main Economics degree, Economics and Business Administration. Basic concepts are taught in a lecture format, and expanded upon through the use of both a year-long group project and multiple smaller projects. The course content also aims to “integrate theory and practice, focusing on the application of economic principles to real life and preparation for an economics-focused job.”

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<sup>35</sup> <https://www.economics.ox.ac.uk/teaching/programmes-homepage>, accessed 23/03/18.

<sup>36</sup> <https://www.economics.ox.ac.uk/undergraduate/b-a-hons-in-economics-management>;  
<https://www.economics.ox.ac.uk/undergraduate/b-a-hons-in-philosophy-politics-economics>;  
<https://www.economics.ox.ac.uk/undergraduate/b-a-hons-in-history-economics>, accessed 02/04/18

<sup>37</sup> [https://www.ppe.ox.ac.uk/images/stories/Web\\_PDFs/PPE\\_Handbook/pe\\_handbook\\_prelims\\_2017-18\\_final.pdf](https://www.ppe.ox.ac.uk/images/stories/Web_PDFs/PPE_Handbook/pe_handbook_prelims_2017-18_final.pdf), accessed 02/04/18

<sup>38</sup> [http://economicsnetwork.ac.uk/handbook/printable/pbl\\_v5.pdf](http://economicsnetwork.ac.uk/handbook/printable/pbl_v5.pdf), accessed 23/03/18

Using problem-based learning, Aalborg notes that students acquire employability skills and academic skills in the same environment.

### *Greenwich University*

Greenwich is notable for its comprehensively pluralistic approach to Economics teaching. It markets the course as offering a ‘broader approach to economics’ and that it enables students to ‘apply economic theory to the real world’.<sup>39</sup> Greenwich explicitly states that the ultimate goal of its economics degree is to meet demand from employers, and thus emphasizes career-oriented skills such as information management. The approach taken is ‘problem first’ - in this degree, theories are presented solely in conjunction with real-world problems, rather than as standalone topics. The introductory Macro module is an example: it “covers critical issues such as macroeconomic stabilization [...]; while laying down the foundations of the core principles of economic theory and analysis, it contextualizes the relevance, applicability and limitations of theories, providing a pluralistic view from the macroeconomic perspectives”.<sup>40</sup>

This trend is continued throughout the degree: Greenwich also provides the mandatory second- and third-year modules “Macroeconomics and Microeconomics in Context”. These modules focus heavily on the contextualization of economic theory and include common criticisms of mainstream theory.

### *Kingston University*

Kingston also markets its degree as being an alternative to mainstream courses. Both traditional and alternative approaches are taught; the purpose is to “develop a better understanding of the real world and a more critical approach to economics”.<sup>41</sup> This critical and real-world teaching method is shown primarily by the first-year teaching: 50% of the first year is made up by two compulsory modules “Capitalism” and “Economic Policy and Principles”. The Capitalism module “offers a detailed survey of the origins and emergence of capitalism and the economic thinking that paralleled these developments”. Theories containing market dynamics and firms are thus taught in historical context. The “Economic Policy” module also focuses on a value-neutral approach to economic theory: students are taught basic economic

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<sup>39</sup> <https://www.gre.ac.uk/ug/business-school/1100>, accessed 21/03/18

<sup>40</sup> [https://www.gre.ac.uk/ug/content/ajax/courses-ajax-call/?sq\\_content\\_src=%2BdXJsPWh0dHA1M0E1MkY1MkZuZWxz24uZ3JlLmFjLnVrJTJGcGxzJTJGY3JzZSUyRnVvZ3dlYnNpdGUucF9jcnNISW5mbyUzRnR1cm0lM0QyMDUwMDA1MjZzdWJqJTNERUNPTiUyNmNyc2U1M0QxMDA4JTI2Y29kZSUzRCZhbGw9MQ%3D%3D](https://www.gre.ac.uk/ug/content/ajax/courses-ajax-call/?sq_content_src=%2BdXJsPWh0dHA1M0E1MkY1MkZuZWxz24uZ3JlLmFjLnVrJTJGcGxzJTJGY3JzZSUyRnVvZ3dlYnNpdGUucF9jcnNISW5mbyUzRnR1cm0lM0QyMDUwMDA1MjZzdWJqJTNERUNPTiUyNmNyc2U1M0QxMDA4JTI2Y29kZSUzRCZhbGw9MQ%3D%3D), accessed 21/03/18

<sup>41</sup> <http://www.kingston.ac.uk/undergraduate-course/economics/>, accessed 23/03/18

principles - such as market analysis and rational choice, mainstream Keynesian macroeconomics - but do so from the perspective of model building, with critical analysis of mainstream solutions emphasized.<sup>42</sup> In addition to these prior modules, the first-year programme includes a personal development and employability module entitled “Becoming an Economist”.

### *Stockholm School of Economics*

This university provides a mandatory module entitled “Global Challenges”.<sup>43</sup> It runs for two years alongside the BSc Business and Economics degree, SSE’s closest match to a single-honours Economics course. The module focuses on the issue of sustainable development: students first learn a basic overview of different areas within sustainable development, then focus on the ways that these varying problems can be solved within the business context.<sup>44</sup> There is a strong focus on individual ethics and contextual knowledge: in the module, students examine ongoing issues in relation to their own experience, and focus on dealing with existing problems. A stated aim of the Stockholm course is to “show how the economic dimension is linked to environmental and social challenges”.<sup>45</sup>

Although the module is designed in the specific context of creating business people to address the single area of sustainable development - rather than a broader view designed for economists - the underlying concepts of interdisciplinarity, real-world application, and critical thinking can all be easily transferred to Economics education. This module forms a representative example of contextual studies, and the importance given by this university to students’ individual progress in relation to the content of the course and its broader context.

### *3.3.2 Key themes*

Incorporating a real-world and critical approach to teaching economics need not be a difficult task. As we have shown above, many universities have already incorporated this philosophy to a large extent in their course design. Of course, the approach they take may not necessarily be a good fit for Durham. The Oxford and Cambridge tutor system is possible because of their extensive resources, while European universities’ Economics teaching can vary from the UK

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<sup>42</sup> <http://www.kingston.ac.uk/courses/modules/economic-policy-and-principles-6215/>, accessed 23/03/18

<sup>43</sup> It is funded by the ‘Global Challenges Foundation’, which works to raise awareness of what it terms “Global Catastrophic Risks”. These include climate change, poverty, political violence, and population growth, all topics which few would reject to be issues economists should be concerned with.

<sup>44</sup> <https://www.hhs.se/en/outreach/sse-initiatives/global-challenges/courses/>, accessed 30/03/18

<sup>45</sup> <https://www.hhs.se/en/outreach/sse-initiatives/global-challenges/educational-shift/>, accessed 30/03/18

in that they are taught more primarily from a business perspective. These examples should therefore be treated as instructive rather than prescriptive and must be translated into the Durham context.

A common feature of these examples is the importance these universities place on *contextualization*, or real-world approach. This is the practice of teaching economic theories so that they are seen as instrumental, not defining; theories are seen in the context in which they were created, and in which they are currently used. In putting forward this idea, most of the examples above stressed the development of a comparative and evaluative ability in the student as fundamental goals. In addition to creating a more academically rigorous student, universities note that they aim to stimulate discussion and achieve greater real-world understanding. This process of contextualization can be achieved directly in theoretical teaching – for example by noting the uses for a theory being taught and its place in current academic research – and indirectly, for example within a History/Philosophy of Economics module.

A striking feature of the European examples is their emphasis on the students' place in the world as an economist. Along with Greenwich and Kingston, they include compulsory teaching of *careers skills*, and encourage students to consider the possible uses of the content they are learning. In addition, they promote the conscious formation of employable 'soft skills' through the process of learning itself. This can be seen in SSE's Global Challenges program: by asking the students to study and work on larger issues, they implicitly encourage the direct application of taught concepts to the real world. We believe that this idea can be imputed into the Durham degree through promoting a greater amount of discussion in Economics teaching and stressing the real-world use of the degree.

The last key insight is the concept of *Problem-Based Learning* (PBL). This is incorporated in Aalborg's Economics teaching, and also at various other European universities such as Maastricht<sup>46</sup> and Ulster<sup>47</sup>. Problem-Based Learning is based around the dynamic of knowledge generation. Its main claimed advantage is that it forces the individual to deeply engage with material, and in doing so discuss it with their peers and an authority academic figure. In different words, the same dynamic can be seen in 'Supervisions' and 'Tutorial System' at Cambridge

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<sup>46</sup> <https://www.maastrichtuniversity.nl/education/why-um/problem-based-learning>, accessed 10/04/18.

<sup>47</sup> Forsythe, F. P. (2002). The Role of Problem Based Learning and Technology Support in a 'Spoon-Fed' Undergraduate Environment. In *Educational Innovation in Economics and Business VI* (pp. 147-161).

and Oxford: a large requirement placed on individual thought and work, on paper and in conversation. In both cases, students learn how to approach complex problems through a specific mode and learn to take control of their own study in a defined, purposeful manner. In its extreme variety, this system is unfeasible. However, ideas from it can be incorporated into existing seminars: for example, students could be encouraged to work on larger projects over multiple tutorials, with extra complexity being added each time when new material is covered. Alternatively, topics could be prepared for debate and discussion within seminars. The key feature that PBL and its variants encourage is a more lively and productive interface between teacher and student, something that students would like to see.

### 3.4 Concrete Suggestions

#### 3.4.1 *Encouraging relevant interdisciplinary modules*

Several modules are offered by other Durham departments which approach important economic issues from an interdisciplinary perspective. These include, Philosophy of Economics, Global Political Economy, and Economic Geography. Such modules contain material that is highly relevant for economics students. Contrary to modules that focus on Business and Finance, these interdisciplinary modules are not mentioned or listed in the Faculty Handbook for the degree, so many students are unaware that they exist.<sup>48</sup> Listing these modules as an option in the economics degree handbook and being mentioned at the economics introductory week would help improve awareness

#### 3.4.2 *Change exam marks*

Many exams give students few to no marks for critical analysis. Even if some questions ask students to assess or evaluate there is no guarantee students will answer these questions if they can choose between many questions on an exam. We believe composite questions which ask students to both operate a model and evaluate encourage students to develop a more diverse skillset. Consider for example the following question from the 2017 *Public Economics* exam.

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<sup>48</sup> Handbook: [https://www.dur.ac.uk/resources/faculty\\_handbook/degrees/frameworks/1100.pdf](https://www.dur.ac.uk/resources/faculty_handbook/degrees/frameworks/1100.pdf).

*Consider the Mirrlees (1971) model of optimal income taxation.*

*a) State and briefly discuss the assumptions of the model.*

*(40 marks)*

*b) Discuss the results regarding marginal tax rates under the most general formulation?*

*(40 marks)*

*c) To what extent can the actual income tax schedule for the UK be explained by optimal tax theory derived from Mirrlees (1971) model? Explain.*

*(20 marks)*

Students are still required to understand and describe the relevant theory but additionally must try to make an evaluative statement about its explanatory power. If more exams adopted this style of question it would improve the ability of students to be critical and evaluative. Questions which ask students to assess the validity of models help ground the theory in real-world analysis. Increasing the amount of exam marks awarded for these types of questions would help improve students' skills.

### *3.4.3 Include Economic foundational theory*

Economics stands alone among other social sciences at Durham in that students are never fully instructed in the methodology, limitations, and ethical considerations of their subject (see Section 1), nor its historical development. These elements are essential to understand how research is conducted and how theories and knowledge are produced in the field. In the Introduction, we established the importance of foundational knowledge, however to include it in economics education at Durham necessarily means making room in the already full curriculum. Below are outlined three potential ways to incorporate foundational economic theory into the curriculum.

#### *Proposal 1: Modify Principles of Economics*

The module which is one of the likely candidates to teach this material, *Principles of Economics*, has a conspicuous lack of this type of content. Understandably this module needs to include a breadth of material, making room for the foundations of economic theory necessarily means

not teaching something else. Thankfully, there is room in the curriculum. The compulsory second-year module *Microeconomics* repeats many topics that were taught in *Principles of Economics*. A substantial amount of time is spent re-teaching redundant material between *Principles of Economics* and *Microeconomics*.

The following topics were listed in the handbook for both *Principles of Economics* and *Microeconomics*: Consumer demand theory, indifference curves and the budget constraint, Utility optimization, Slutsky demand curve, theory of the firm, game theory, competitive firms, monopoly, and oligopoly. These concepts are of course developed more fully in the second-year module, but a worrying chunk of taught material simply re-treads old grounds. Eliminating repetitive content would open up a substantial amount of time in which to learn these foundations. Learning the foundations of economic theory is surely more useful than learning introductory theory of the firm for a second time.

*Proposal 2: Modify History of Economic Thought*

First year
<i>Principles of Economics</i>
<i>Economic Thought: Its Methodology, History and Philosophy</i>

Another feasible suggestion is to modify the current first-year *Introduction to the History of Economic Thought* module so as to include a significant amount of philosophy of science and make it a core module. This would promote a more rounded and evaluative view of the theories taught in *Principles of Economics*, but from outside, and enable students to discuss theories on their own merits from the start of the degree course. This module could thus be in line of that offered at Cambridge, “History and Philosophy of Economics” and made compulsory in first year.

*Proposal 3: Separate Microeconomics and Macroeconomics*

First year
<i>Microeconomics I: Methodology, Theory and its Context</i>
<i>Macroeconomics I: Methodology, Theory and its Context</i>

Currently, the first term *Principles of Economics* is devoted to *Microeconomics* and second term to *Macroeconomics*. Nevertheless, their methods and issues they deal with are quite

different, and thus there is no actual necessity to have them taught in the same module. Alternatively, these could be separated into a *Microeconomics I* module and *Macroeconomics I* module. This practice is commonplace among other universities, such as Warwick<sup>49</sup>, Oxford<sup>50</sup>, Nottingham<sup>51</sup>, and Cambridge<sup>52</sup>. Whilst the theoretical content currently taught would remain the same, these would be combined with the relevant methodological and philosophical aspects, as well as the historical aspects, relevant to each theoretical area. This means that each theory could be taught with a deeper substance and context, allowing students to think in a more evaluative sense about the theories they learn. The *Introduction to the History of Economic Thought* module could be moved to the second year or only keep its third-year equivalent.

The two latter suggestions imply adding an additional required module in the first year of the economics course. In proposal two, both modules might just be obligatory for economics students, while proposal three creates an issue for PPE students when splitting Micro and Macro. The practicalities would need to be discussed.

#### 3.4.4 CORE textbook adoption

CORE is an international project of leading social science scholars, mainly economists, aiming to make textbooks about the economy in a more interdisciplinary and holistic way, including recent research and data. Their first book, *The Economy*, is developed by leading economists and focuses on critical and real-world analysis. It is freely available and approaches economics in a way which helps ground theory in evidence. The Macroeconomics handbook lists the CORE textbook *The Economy* as recommended reading and students have been receptive to its adoption. Although not a particularly pluralist book, we believe wider adoption of CORE textbooks in various economics modules, also the new book *Economy, Society and Public Policy*, would help the curriculum grow. For example, chapter 3 (Scarcity, work and choice), chapter 7 (The firm and its consumers) and chapter 8 (Supply and Demand: Price-taking and competitive markets) might be relevant for Microeconomics and Principles of Economics.

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<sup>49</sup> <https://warwick.ac.uk/fac/soc/economics/prospective/ug/courses/economics-bsc>, accessed 13/04/18

<sup>50</sup> [https://www.ppe.ox.ac.uk/images/stories/Web\\_PDFs/PPE\\_Handbook/ppe\\_handbook\\_prelims\\_2017-18\\_final.pdf](https://www.ppe.ox.ac.uk/images/stories/Web_PDFs/PPE_Handbook/ppe_handbook_prelims_2017-18_final.pdf), accessed 13/04/18, p. 8.

<sup>51</sup> <https://www.nottingham.ac.uk/ugstudy/courses/economics/bsc-economics.aspx>, accessed 13/04/18

<sup>52</sup> <http://www.econ.cam.ac.uk/apply/ba-economics/course-structure>, accessed 13/04/18

### *3.4.5 Long-term perspectives: pluralism, interdisciplinarity and an Economics Department*

The suggestions made in this section are those we find plausible at this point (see Obstacles for Change above). Nevertheless, in a long-term perspective we think it is possible to stretch the frame, making room for further change.

Firstly, we hope the Business School will include academics that are able to give students a **variety of perspectives and approaches to economic issues**. This makes it possible both to create new modules on schools such as Complexity, Austrian or Institutional Economics and/or make existing modules more pluralistic. One of the reasons to why such change seems somewhat implausible at this point is due to the constraints of the REF, described earlier in this section.

Secondly, the Business School and its Economics department could cooperate more with other social science departments at Durham in creating new **interdisciplinary modules** and further develop existing ones. For example, sociology and economics are closely related disciplines and could heavily benefit from collaborating on issues such as inequality. An economics-sociology module is currently not offered at Durham but might be of interest as an optional module for economics students interested in similar issues.

Lastly, we want to present the idea of creating a **standalone Economics Department** at Durham. Whilst Economics has very much to exchange with Business, Finance and Management, it similarly has very much in common with other social science subjects. For example, as mentioned above, economics professors conducting research on inequality might have more productive exchanges with sociology professors rather than business professors. By having a separate Economics Department, the department could specialize in the subject they are in fact researching or teaching, and professors and students could interact with whichever department suits the specific issue being studied.

### *3.4.6 Further meetings to discuss changes*

We understand how incredibly difficult it is to design module content and course structures, and that the Business School would like to further discuss what aspects are relevant to include, as well as the practical matters of realizing this. For example, there are a variety of suggestions on how foundational economic theory – that is, the historical and philosophical perspective -

could be included. This is a fairly substantial change, and it is something to be developed and improved upon over the coming years.

Therefore, the main suggestion of this report is to establish working or focus groups for each of the issues highlighted in this report. These groups would include input from a wide variety of perspectives – students, Business School academics and staff, as well as other relevant stakeholders, and would be an effective way to establish the right course to take from here.

### **3.5 Concluding remarks**

There is nothing particularly ground-breaking about the Core Principles set out at the beginning of this report. Most of the suggestions we make are highly recognized today or have previously been given greater importance in the economics discipline. Those who disagree with the notion that these should take up a bigger part of the economics degree may still agree with their importance in principle. The issue therefore is about practical priority and the limits of space in the curriculum. If that is the case, we strongly believe that improvement of the curriculum is possible if students and academics work together, determined to find solutions.

The neglect of the principles described in this report and the failure of the discipline to properly explain recent economic downturns has triggered the growth of a movement to once again emphasize these issues. The Durham Society of Economic Pluralism exists because of this, as well as many other student societies around the world and the UK.

However, for the students involved in these campaigns, the majority would have preferred to simply take part in their regular “Economics Society”, and spend their time discussing economic issues, confident that pluralism, interdisciplinarity, real world issues and philosophical foundations were a natural part of the discussion. Currently, this confidence does not exist, and we are forced to discuss whether these ideas are relevant in the first place. The findings of this report, along with those of the many other reports which have been conducted, reflect a large waste both of intellectual development as well as students’ and academics’ time.

This report is meant to be a starting point and a basis for further discussion, and our findings and the above suggestions are things which need to be built upon, refined, and discussed further. We hope that students and academics both within and without Durham can use this report as reference for further investigations.

Durham Society for Economic Pluralism exists because its members truly care about the discipline we have chosen to study and are eager to discuss ways economics teaching at Durham may be improved. Establishing a dialogue between students and staff is crucial to help make the process cooperative and productive, we hope that the reception of this report will be susceptible and constructive.

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