



MONASH University

Expressions of value in education: credit, money and the case of foreign qualification recognition in Australia's skilled migration program.

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Peter Hurley

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Abstract:

Expressions of value in education are a fundamental part of all formal education systems. These expressions are an essential social technology that make the value of educational experiences calculable, intelligible and communicable. Without them it would not be possible for education systems to perform the many functions we expect of them in modern societies. However, despite their centrality, they remain an underexplored area and their nature is contested by different parts of the literature. Moreover, there is a paucity of research that explores how these expressions are able to function as they do in society.

To explore these issues, this study uses monetary theory, and particularly credit theories of money with a focus on the use of qualifications in labour market and migration settings. Monetary theories help guide the exploration of the following three main research questions, what are the functions of expressions of value in education, what are the origins of their value as a form of currency, and what is the specificity of expressions of value in education? In response, this study proposes that expressions of value in education in labour market settings have the same three functions as money, that is, as a measure of value, as a store of value and as a medium of exchange. The study suggests that it is features extrinsic to an individual and their educational experience that confer the necessary properties for these expressions to function as they do in society. Moreover, rather than specifying some technical skill, ability or knowledge, the essential nature of these expressions is embedded in credit relations and better characterised as a form of credit.

To explore these issues in a real-life situation, this study uses the case of foreign qualification recognition (FQR) in Australia's skilled migration program. FQR is the act of assessing qualifications obtained in a foreign jurisdiction and the Australian Government uses FQR to determine who can migrate to Australia as a skilled migrant. Using a policy discourse analysis and case study approach, this study applies monetary theories to the example of FQR in Australia's skilled migration program. The findings suggest that instead of directly recognising skills, the process is better understood as recognising relative credit. The Australian Government uses educational qualifications as a measure of value and as a store of value to rank and sort individuals. Educational qualifications act as a form of credit used as a medium of exchange to facilitate a migration outcome.

The findings suggest that rather than expressing some neutral, objective form of value, the nature of expressions of value in education is subject to a range of social, political, economic and cultural forces.

The findings of this study have applicability to a range of situations in education theory, policy and practice. The study contributes to a wider heterodox education literature that attempts to understand why education is valuable and ways to interpret the various expressions of value that education systems produce.

Part I: Introduction

Chapter One: Introduction

Background to the topic

All formal education systems produce expressions of value to communicate the worth of an educational experience. These expressions take various forms and are recognisable in phenomena such as qualifications, subject grades and assessment regimes. They are fundamental components of formal education systems and make the value of an educational experience calculable, intelligible and communicable. Trying to avoid their use when dealing with the value of educational experiences would be like trying to tell a story without text. They are an essential social technology we use to communicate the value of educational experiences and without them it would not be possible for education systems to perform the many functions we expect of them in modern societies.

However, despite their prevalence, expressions of value in education remain the subject of considerable debate and, considering their importance, are an underexplored area of the education literature. Their specific functions remain unclear, as well as how they gain societal legitimacy and currency. While there is significant evidence that there is something valuable about the expressions that formal education systems produce, the origins of this value remain the subject of conjecture, particularly in the economics and sociology of education.

For instance, there is a significant literature that describes the association between bachelor's degrees and socioeconomic attainment (Daly *et al.*, 2015; Dickson & Harmon, 2011). While this correlation between educational attainment and socioeconomic attainment "may be the firmest empirical finding" (Bills, 2003, p. 441) in both the sociology and economics of education, the cause of this link remains the subject of dispute. Nominally, a bachelor's degree indicates successful completion of a

formal course of study in a particular body of knowledge, such as science, medicine or philosophy. When this bachelor's degree is presented to a third party, such as an employer, there are a series of judgements made regarding what this qualification means, its value, and what it might say about an individual. When the observation is made that those with bachelor's degrees generally also achieve higher levels of socioeconomic attainment, what can we say about bachelor's degrees and their role in this association?

In answering this question, the assumption can be that higher levels of socioeconomic attainment are a function of the skills, knowledge or some other type of value acquired during the educational experience (Becker, 1962, 1964; Mincer, 1958, 1984; Schultz, 1961, 1963). From such a perspective, expressions that communicate the value of an educational experience, like qualifications, signify something intrinsic about an individual and they are instruments of great convenience, but their ontological status can be unimportant or self-explanatory. There is, however, a large body of research that problematises phenomena such as qualifications and the various measures used to identify skills. This area of the literature suggests that expressions of value in education can serve a multiplicity of purposes, and the specificity of their value can be located in something other than an individual's acquisition of some knowledge or skill (Berg, 1973; Bourdieu, 1977, 1986; Collins, 1979; Hirsch, 1976; Spence, 1973).

In order to explore these debates, this study uses money and monetary theory. Money is an archetype of value and provides a rich source to explore the subject matter of this study. Like expressions of value in education, money makes the value of different things calculable, intelligible and communicable. Moreover, one of the greatest areas of strength that monetary theories offer to debates concerning the value of education is access to a rich body of research and a new set of language to describe how

the expressions produced by education systems come to acquire the properties necessary to function as they do in society. The scholarship surrounding monetary theories is much more advanced than education research in this regard and uses a series of terms and concepts that can further inquiry regarding the nature of expressions of value in education.

This study's use of monetary theories came by chance while investigating debates concerning the recognition of foreign qualifications and subsequently stumbling across the literature on monetary theory. Foreign qualification recognition (FQR) is analogous to a type of currency exchange where an international educational experience must undergo some form of conversion in order to have value in another country, much like how foreign money must undergo an exchange into a different currency. The applicability of currency exchange as a metaphor to the example of FQR led to an investigation into monetary theory in the hope that such theories could shed light on the vexed issue of why there remains so many problems with the recognition of foreign qualifications (Guo, 2007, 2009, 2014; Hawthorne, 2015; Papadopoulos, 2017; Schuster *et al.*, 2013; Sweetman *et al.*, 2015). Upon researching the literature on money, and particularly the ontology of money, it became clear that monetary theories could offer a unique opportunity to explore expressions of value in education. This was especially true of the body of monetary theories known as credit theories of money, which exist in both the sociology and economics literature, and emphasise the nature of money as a social phenomenon. Indeed, while reading the literature associated with credit theories of money it seemed possible to replace the word 'money' with a variation of the phrase 'expressions of value in education' and arguments concerning value and education became more cogently expressed than in substantial parts of the education literature. The reasons for these similarities are the subject of exploration throughout this study

and they originate in the similar functions that both money and expressions of value in education perform.

The use of monetary theories, and particularly credit-based theories, opens up new avenues of research into issues involving education and value. First, it is possible to ascribe to the various expressions produced by education systems the same three functions that economic textbooks ascribe to money (Mankiw, 2016). These functions are as a measure of value (or unit of account), as a store of value and as a medium of exchange. Second, while these functions can help understand how we make the value of educational experiences calculable, intelligible and communicable, they do not necessarily explain the nature of their value. This study examines whether the currency of expressions of value in education comes primarily from something intrinsic to an individual or whether their primary nature is better understood as emanating from societal and relational factors. Third, while the denomination of expressions of value in education takes various forms such as skills, bodies of knowledge or areas of study, this study examines the role of credit relations in constructions of educational value. By examining the role of credit relations, it is possible to explore the various features that enable expressions of value in education to function as they do in society.

To understand in praxis the application of monetary theories to debates concerning value and education, this study uses the case of foreign qualification recognition, or FQR, in Australia's skilled migration program. FQR in Australia's skilled migration program involves the submission of documents, particularly educational documents such as qualifications, to an authority approved by the Australian Government in order to determine eligibility to migrate. The process is known as a 'skills assessment' and is largely mandatory for anyone who wishes to migrate to Australia as a skilled migrant (Hugo, 2014a, 2014b). As a consequence,

hundreds of thousands of people every year submit various expressions of value produced by education systems all around the world to authorities in Australia in order to determine their eligibility to migrate (DHA, 2018). The rationale behind the use of FQR in Australia's skilled migration program is that expressions of value like foreign qualifications signify some form of ability. As the Australian Government states, "the skilled stream of Australia's migration program has been designed to target people who have skills or outstanding abilities that will contribute to the Australian economy" (DIMIA, 2005, p. 2). Furthermore, skilled migrants "need to show that they have the skills and attributes necessary to succeed in the Australian labour market" (DIAC, 2012, p. 22). These comments suggest that expressions such as qualifications act as a type of proxy for some economically productive capacity in an individual conceptualised in the form of 'skills'. This study will use monetary theories as a lens through which to examine the skills assessment process. It will do so in order to explore whether such a process assesses skills, or whether the assessments of certain expressions such as foreign qualifications may instead be recognising a different characteristic or set of characteristics associated with a migrant.

Definition of terms

Before applying monetary theories to the education sphere, it is important to define a number of terms used in this study. The first is education. Education in this instance refers to educational experiences in formal education systems that are usually associated with institutions such as schools, colleges and universities. Often research in the literature uses the term 'schooling' to describe this phenomenon, particularly in a North American context. Formal education usually occurs under the auspices of an accreditation regime and involves a validation and certification. It is also important to differentiate between the term education and the general use of the term learning.

Learning can occur anywhere and at any time and while formal education can encompass learning, the two are not synonyms and have different qualities.

Second, this study uses the phrase expressions of value in education to refer to all the different ways that formal education systems make the value of an education experience intelligible, calculable and communicable. Importantly, these expressions have both a physical existence and an abstract existence. Physical examples include tokens such as qualifications and transcripts. Abstract forms include grades, year levels and credit points. Other examples include university entrance results and mass testing regimes such as the Programme for International Student Assessment (PISA) and Trends in International Mathematics and Science Study (TIMSS). Consequently, the term expressions of value in education is multifaceted and encompasses a broad range of phenomena. Not only does it have a tangible existence, but it also refers to the systems of thought and mechanisms that enables the value of educational experiences to have currency and legitimacy.

Third, the term value refers to a broader sense of the word than its traditional economic use. Education systems exist to create and identify a range of different forms of value. This certainly has an economic aspect, particularly in education policy with the focus on some notion of skills. Indeed, the research literature often attempts to quantify the economic returns on education (Psacharopoulos & Patrinos, 2018). However, the functions of education systems have a long history of being for purposes other than the creation of economic value (Durkheim, 1979; Weber, 1968 [1922]). Consequently, value in its use in this study refers to something of worth that has possible deployment in social, political, cultural and economic realms.

In terms of the object of analysis, this study focuses primarily on labour market value and the ways in which education is valued in labour markets. The data collected

and analysis pertain primarily to the role of qualifications in mediating this relationship. Labour market value is relevant in a migration context because it is the association between educational outcomes and labour markets outcomes that policymakers can use in order to justify the centrality of educational outcomes as a selection mechanism (DIAC, 2012; Hugo, 2014a, 2014b). While broader notions of value in education are relevant to this endeavour, and it is important to understand them to contextualise the analysis, these broader notions are not the direct object of study. In the discussion chapters, these broader notions of educational value are returned to as a means to link the research to wider debates and also to suggest further avenues of research. Finally, this study uses credit theories of money as the primary basis for exploring expressions of value in education. Credit theories of money are a part of a heterodox literature that challenges classical and orthodox understandings of the nature of money. It is possible to trace these theories in particular to the work of Alfred Mitchell Innes (1913, 1914) who first propounded an explicit theory of money as credit. It is also possible to align credit theories with the positions of prominent economists such as Knapp (1924) and John Maynard Keynes (1958 [1930], 1963 [1933]), although Knapp and Keynes are not directly identified as credit theorists and instead are viewed as part of a wider heterodox economics literature. More recently, monetary theories emphasising the role of credit can be found in the work of the Cambridge sociologist Geoffrey Ingham (2000, 2004c, 2007) and Modern Monetary Theorists such as the economist Randall Wray (2005, 2014). These credit theories arose to challenge the orthodox perspective concerning the nature of money, known as commodity-based theories and they are explored in more detail throughout the study (Ingham, 2004c).

Outline of the current research and gaps in the literature

The use of monetary theories to explore the nature of value in education has not been a task that the education literature has on the whole sought to undertake. Some authors have made the connection between currency and education (Brown, 2004; CEDEFOP, 2010; Collins, 1979). However, this has not extended to using monetary theories to explore the different phenomena that make the value of education experiences calculable, intelligible and communicable.

Certification theories are the part of the education literature that deals most explicitly with value and education. Certification theories concern themselves with the nature of value in education, how formal education structures work and the link between educational attainment and job assignment. They first arose in the late 1950s and 1960s with human capital theory, which aimed to describe the economic return on investment in education (Becker, 1962, 1964; Mincer, 1958, 1984; Schultz, 1961, 1963). Human capital theorists demonstrated that formal education, at least for individuals, was indeed a good investment. Early human capital theorists conceived of expressions of value in education like any other asset in that an individual forgoes current earnings in order to acquire the 'capital' that they can use in return for higher earnings. The certification theories that followed largely challenged the underpinning ontological approach to representations of educational value adopted by human capital theorists. Spence (1973, 2002) operationalised education as a 'signal' that individuals acquired in order to communicate information to third parties in situations of uncertainty. Arrow (1973) described higher education as a type of filter that sorts individuals by their abilities and thereby conveying information to third parties. Stiglitz (1975) continued this tradition by proposing the idea of education as a screening device used by employers in order to discriminate between potential employees. These economic theories also have alignment with Hirsch's (1976) concept of the positional

good, which describes education as something that enables someone to gain access to rewards relative to another.

In the sociology literature, the human capital approach has also been the subject of significant critique. Rather than describing educational attainment as politically neutral, meritocratic or signifying skills for deployment in the labour market, sociologists often highlight the various ways that education systems influence and reproduce social structures (Bourdieu, 1977, 1986). Credentialism (Brown, 2001) is an example of a prominent certification theory that questions whether formal education structures are meritocratic sorting devices with the purpose of inculcating some technical skill for use in the workplace. Berg (1973) and Collins (1979) were early proponents in this area and drew upon a much longer tradition based on the work of Max Weber (1968 [1922]) that emphasised the role of education systems as a theatre for conflict between status groups in society.

At the centre of all these accounts are competing, and often irreconcilable, approaches to expressions of value in education. Every certification theory carries with it an understanding of what these expressions mean and the type of value they specify. Indeed, how one views what an expression of value in education signifies will, in large part, shape explanations for how education functions in society and explanations for the link between socioeconomic attainment and educational attainment. However, despite their centrality to any research that deals with value and education, explicit explorations of the various ways we communicate value in education are relatively uncommon. The research literature particularly focuses on either quantifying the returns on education or demonstrating the various factors that influence the use of educational outcomes.

Significant gaps in the literature lie in a thorough understanding of the ontology of expressions of value in education. This ontology refers to the functions they perform,

what enables them to act as a form of currency, and the type of value that they specify. This is important to explore because these issues go to the heart of competing theories concerning why education is valuable. For instance, human capital theory operationalises different representations of value in education as if their nature is similar to any other asset and consequently deploys them in economic analyses that emphasise returns on investment and economic growth. From such a perspective, the expressions produced by education systems can become asocial representations of some income-producing capability or technical ability. Sociological perspectives are much more likely to emphasise the nature of expressions of value as socially constructed phenomena whose value is subject to a range of influences. Expressions of value in education are a type of language that make all phenomena relating to value in education possible and it is important to understand their role in constructions of educational value, as well as their limitations. Moreover, there is a relative paucity of research concerning how the expressions produced by education systems acquire the properties necessary to function as they do in society. This is especially important to consider because perceptions of the nature of expressions of value in education not only influence interpretations concerning the value of education experiences, they also influence the various functions that we ask education to perform.

Research questions

Due to the gaps in the literature as noted in the preceding section, this study aims to explore three main research questions. They are:

1. What are the functions of expressions of value in education?
2. What are the origins of their value as a form of currency?
3. What is the specificity of expressions of value in education?

Using monetary theories as a basis, this study then breaks the three research questions into the following sub-questions:

1. Do expressions of value in education have the same three functions as money?
(Main Research Question One)
2. Do expressions of value in education rely on characteristics that are exogenous or endogenous to the individual and their educational experience? (Main Research Question Two)
3. Is the essential nature of expressions of value in education an asocial representation of 'real' value or does it exist as a credit? (Main Research Question Three)

As a type of currency, monetary theories suggest that expressions of value in education have three important functions like that of money, that is, as a store of value, as a measure of value and as a medium of exchange (Mankiw, 2016). If one employs these three functions to examine a student who chooses to study a course at a university, then we can see that firstly, an individual enrolls in a program most typically to acquire a set of skills or knowledge. These skills or knowledge act as a type of store because they can be retrieved and used at a later date. Education systems enable the measurement of the relative worth of these stores through various means such as qualification levels, credit points, grades and the status of the awarding institution. An individual can use evidence of acquiring the store of value as a medium of exchange for some kind of benefit, such as a higher paying job, further study, a licence or a form of status.

It is also possible to apply the three functions of money more generally to education policy initiatives. Using the example of publicly funded education, governments invest in education to create stores of value within their population. The stores of value can be economic in the form of technical skills or they could be a set of

personal values, such as with the teaching of civics education. We can measure the value through various means such as mass testing regimes and qualification outcomes, and these stores and measures then facilitate a range of exchanges within society.

Where there is divergence in the wider literature relates to responses to the second question concerning the origins of expressions of value in education as a form of currency. Some aspects of the education literature describe them as referencing some intrinsic ability within an individual, such as human capital theory, while others emphasise its societal or relational aspects, like many parts of the sociology of education. There is a similar divide in monetary theories, with some theorists suggesting that what is of primary importance to the existence of money in society are extrinsic factors, such as the status of the authority, who essentially underwrite the expression's value (Innes, 1914). Consequently, this study will explore whether it is features intrinsic or extrinsic to the individual that confer the necessary qualities for expressions of value in education to function as a form of currency.

The final research question relates to whether the specificity of expression of value exists as an asocial representation of value or whether it is better characterised as a type of credit. Credit has its etymological roots in the Latin word *credere* meaning to trust or to believe (Hoad, 2003) and shares this lineage with the word credential. Credit-based monetary theories emphasise the social nature of value and one where money is essentially “*assignable* trust” (Ingham, 2004c, p. 74, emphasis in original), and rather than something ‘real’, the specificity of money’s value is “intangible, immaterial, abstract” (Innes, 1914, p. 159) and “only a claim upon society” (Simmel, 1978 [1900], p. 177). In contrast is the position that money is a neutral representation of commodities and one whose categorical identity is not different from the commodities whose value money makes intelligible (Wray, 2014).

A way of understanding these differing approaches is to think of what makes a coin valuable. The commodity-based position argues that a coin is valuable because of the precious metal that the coin contains. A credit-based position disputes the need for money to have a connection to a commodity, such as gold, and instead argues the specificity of money's value is abstract and "constituted by social relations of credit denominated in a measure of value" (Ingham, 2006, p. 266). This means it is primarily social factors, and not an association with some precious commodity like gold, that enables money to function as it does in society.

Similarly, in the case of FQR in Australia's skilled migration, the question is whether the expression of value in the form of foreign qualifications represents some actual skill embodied by an individual, or whether the value of the foreign qualification comes from its establishment of credit relations between a potential migrant and the Australian Government. This study will directly explore this issue in response to the third research question by analysing the assessment process to determine whether it is skills that are the subject of recognition or whether it is relative credit that the process recognises.

These issues are very important to explore because not only do they influence the wider policy rationale for using educational outcomes in the migration process, they impact on the lives of tens of thousands of people each year. For instance, in 2017–18 over 110,000 people migrated under the skilled stream of Australia's migration program, the vast majority of which were required to undertake a form of FQR with an approved authority (Department of Home Affairs, 2019). The outcomes of the process have enormous effects on the lives of people wishing to migrate to Australia and their families. Moreover, the process sits within a wider framework that decides who can participate in migration processes and why. Understanding the mobilisation of

expressions of value in education in Australia's skilled migration program can help further interrogation of the various ways education is used to decide who can migrate to Australia and also who is excluded by the process.

Study outline and methodology

This study is an exploration of the nature of value in education. To explore the research questions, this study uses monetary theory and the case of FQR in Australia's skilled migration program. While there is a focus on a single case, there is a wider applicability of the findings to a range of education policy issues. The structure of the study is, therefore, designed to support both a general exploration of expressions of value in education and the application of the arguments to a specific example. Part I of this study introduces the topic and the main research questions guiding the study.

Part II of this study outlines the current literature on the topic. As certification theories are the main aspect of the literature that examine the topic of this study, Chapter Two outlines four major areas of certification theories: human capital theory, signalling and sorting, credentialism and control theory. While these theories all involve positions regarding expressions of value in education, there is a paucity of research that explicitly examines its nature. Consequently, Chapter Three introduces the literature on money as an archetype with which to explore expressions of value in education and to refine responses to the research questions. There is a focus on demonstrating the applicability of monetary theories to the education research literature as well as demonstrating how money can help frame wider debates regarding the case of FQR in Australia's skilled migration program.

Part III discusses the conceptual framework, research methodology and research methods used in the study. Monetary theories are used throughout this study and Chapter Four explores monetary theories in more detail. There is an outline of a

conceptual framework that emphasises the role of credit in expressions of value in education. Chapter Five outlines the research methods and methodology including the evidence collected, the data collection methods and measures to ensure the validity and reliability of the analysis. There are two main sources of data for the exploration of the case of FQR in Australia's skilled migration program. The first is a series of reports into FQR in Australia's skilled migration program undertaken by various government bodies. These reports are the subject of a policy discourse analysis using the "what's the problem represented to be?" approach outlined by Carol Bacchi (2009, 2012). The second form of evidence is a case study of an organisation that undertakes FQR in Australia's skilled migration program. The aim of this case study is to analyse the assessment process to determine whether the process recognises skill or whether it is better suited to a description as facilitating the establishment of credit relations.

Part IV outlines the results of the data analysis and is presented in two parts. Chapter Six presents the results of the discourse analysis. This chapter shows how it is possible to align problems associated with FQR in Australia's skilled migration program to the same three functions as money. The discourse analysis also shows how there is a repeated search for a neutral and objective standard due to the belief that such a standard would resolve many of the problems associated with FQR in Australia's skilled migration program. Moreover, there is an absence of questioning whether expressions of value, such as qualifications, can act as a neutral and objective proxy for some form of skill. The policy rationale that emerges in the discourse analysis stands in contrast to the case study that demonstrates how FQR functions in praxis. Chapter Seven outlines a process that suggests a skills assessment does not recognise skill but rather the accreditation arrangements associated with certain qualifications. This chapter also outlines how the findings at the case study site have wider applicability to other

instances of FQR in Australia's skilled migration program and to other examples of assessing foreign qualifications undertaken in other countries.

Part IV of this study discusses the findings and places them in a more general context. Like money, expressions of value in education play fundamental roles in society and, as the case of FQR in Australia's skilled migration program demonstrates, these roles are the subject of constant reinterpretation and redeployment. Chapter Eight uses monetary theory, the conceptual framework for this study and the findings to explore other areas of education debates that relate to how we understand and communicate the value of educational experiences. These areas include the commodification of education, and phenomena such as qualification frameworks and digital credentials. The aim of the discussion is to suggest further areas for research in the education literature using the insights from monetary theories. Chapter Nine concludes this study by summarising the main findings and discussing the implications for theory, policy and practice.

Conclusion

All societies use the expressions produced by education systems for a range of purposes. These include deciding who can access certain professions, who can proceed through our formal education systems and, as the case of FQR in Australia's skilled migration program shows, who can participate in migration processes. Yet despite this, their existence remains an underexplored area of the literature. The nature of expressions of value in education is important to explore because they make the value of all educational experiences calculable, intelligible and communicable. Individuals, organisations and governments all rely on these expressions in order to facilitate a huge range of transactions. Moreover, positions concerning the nature of expressions of value in education are used to legitimise actions that result in the admittance or exclusion of

individuals and groups, as the case of FQR in Australia's skilled migration program demonstrates. This study will examine this topic using monetary theory as a basis. It will use the case of FQR in Australia's skilled migration program to explore the debates concerning these expressions in a real-life situation. It will analyse the deployment of expressions of value, such as foreign qualifications, to determine the features that enable them to function as a type of currency. Moreover, the study will analyse the specificity of these expressions of value to determine whether they are better understood as a signifier of some 'real' and actual value, or whether their value is embedded in the establishment of credit relations. These issues have applicability to a wide range of topics in education and contribute to a wider endeavour to understand how expressions of value in education acquire the features necessary for them to function as they do in society.

Part II: Literature review and positioning the research

Chapter Two: Certification theories

Introduction

This chapter will begin to position this study within the wider research by examining the literature on certification theories and how prominent certification theories align to the research questions of this study. The research questions of this study focus on understanding the nature of expressions of value in education. The three research questions are: what are the functions of expressions of value in education; what are the origins of their value as a form of currency; and what is the specificity of expressions of value in education? Certification theories are the parts of the research literature that most concern themselves with exploring what makes education experiences valuable and how we communicate this value. They are also theories that closely examine the cause of the link between socioeconomic attainment and educational attainment. Consequently, it is important to explore how certification theories use expressions of value in education and where gaps in the literature may exist.

This chapter outlines four prominent areas of certification theory: human capital theory, signalling and sorting theory, credentialism and control theory. This chapter begins with a brief account of the development of certification theories and their areas of focus. They are theories that occupy different parts of academia, particularly the sociology of education and the economics of education. Human capital theory is the most prominent certification theory and emanates from a position that identifies expressions of value as representing some intrinsic, embodied form value. In many ways, theories like signalling and sorting, credentialism and control theory arose to challenge the underlying position of human capital theory. This chapter will focus on

the different ways these theories utilise expressions of value in education, and where there are gaps in the literature.

The chapter finishes by discussing how certification theories can help us understand the case of FQR in Australia's skilled migration program. The policy rationale for the use of FQR in Australia's skilled migration program explicitly takes an approach aligned to human capital theory. Consequently, the policy rationale adopts a position where FQR becomes thought of as a largely neutral and meritocratic exercise in determining 'real' value embodied by an individual. This policy rationale is important to establish, as it will be the subject of closer examination throughout the study.

Certification regimes, theories and expressions of value in education

Certification is the act of confirming certain characteristics of people, objects or organisations. In education systems, certification regimes differentiate formal education from other types of education and constitute the mechanics and governance of a formal education system (Hansen, 2011). Certification gives rise to standardised nomenclature, such as bachelor's degrees and high school certificates, and delineates which actors can participate in the formal education sector. A certification regime establishes the common language that makes claims to the possession of skills and knowledge possible. Certification regimes are also part of a wider system that creates the constituent parts of an education system, such as the curriculum, standards, assessment and all other features that make education a discrete and recognisable thing. Essentially, certification regimes make the value of education intelligible, calculable and communicable. Hansen (2011) writes that:

certification regimes play an essential role in the regulation of social life and, in the process, assume multiple functions. They delineate the very meaning of education and skill, for without public means of verification, one cannot substantiate a claim

to either. Since they vary across societies and over time, so does what counts as education and skill. (p. 32)

Whereas a regime describes the operation and governing of a formal education system, certification theories attempt to explain why there is an association between socioeconomic attainment and educational attainment as well as why education systems operate in a certain way. There is a considerable literature associated with certification theories (Bills, 2003; Blaug, 1992; Brown & Bills, 2011). Often the focus of certification theories is the link between educational attainment and job assignment, or the interplay between education, the workplace and productivity (Bills, 2003). Certification theories also often focus on formal education systems, sometimes referring to education as 'schooling'. Economists use certification theories to describe the economic value of education and to propose ways to maximise education's economic potential. Sociologists have used certification theories to explore the social, political and cultural uses of education that are often crucial in perpetuating unequal power relations and class divisions. It is an area of research that attempts to describe not only the use of education but also the nature of its value, value that can be economic, political, social and cultural.

Certification theories first appeared in the research literature beginning in the late 1950s and early 1960s with human capital theory. As human capital theory came to prominence in the 1960s a number of competing theories emerged. In the economic sphere, these included theories such as signalling (Spence, 1973) and sorting (Stiglitz, 1975) which challenged the assumption that higher levels of educational attainment increase productivity. In the sociological field, what become known as credentialism emerged in the 1970s with two seminal works, Berg's (1973) *Education and Jobs: The Great Training Robbery* and Collins' (1979) *The Credential Society*. Credentialism is

associated most closely with credential or degree inflation, however, it has a much wider sociological objective to describe the role that education plays in the stratification of different groups within society (Bills, 2003). One other major strand of the certification literature that also emerged in the 1970s is known as control theory. Control theory is a Marxist interpretation of the role of education systems, most closely associated with the works of Bowles and Gintis (1975, 2002), that describes the role of education systems in perpetuating class divisions and preparing the proletariat class to function in a compliant manner in capitalist societies.

In selecting these certification theories as a focus to position this study, the aim is to examine their use and the operationalisation of expressions of value in education. There are other parts of the literature that involve examining the different ways we make the value of educational experiences intelligible as well as their use in society, and it is possible to classify the literature according to a different set of criteria than the approach used in this chapter. For instance, Brown and Souto-Otero (2020) organise the literature concerning the link between credentials and job assignment according to three groups: technical-functionalist accounts, queue theories and social closure theories. These categories have broad alignment to the certification theories explored in this chapter where technical-functionalist accounts align to human capital theory, queue theories align to signalling and sorting, and social closure theories more closely align to credentialism and control theories. This chapter focuses on certification theories because of the centrality of expressions of value in education to each of their arguments. However, there are many parts of the literature that, while not specifically identified as certification theories, have applicability to the subject matter of this study. A notable example is the work of Bourdieu (1977, 1986) and Bourdieu's exploration of important concepts such as habitus, cultural capital and misrecognition. Other social theorists such

as Foucault (1979, 2007) also take an approach that makes them amenable to an exploration of the different ways the value of educational experiences become intelligible but do not appear in the research literature as discrete certification theories. While this chapter focuses on established certification theories, in order to benefit from other aspects of the literature there are references to other prominent theories and theorists when appropriate to the discussion.

Human capital theory

It is important to note that the definition of human capital in certification theories differs from the broader definition of the term that exists today. The Australian Productivity Commission (2006) in its report on migration sets out three basic requirements for human capital: “it is embodied in the person; it is productive in the labour market or in consumption; [and] there are costs (including opportunity costs) to its acquisition. Skills acquired through formal education (especially post-school education) ... fulfil these requirements” (p. 90). In the broader definition of the term, human capital describes a range of income-producing characteristics within an individual and across the population. As Figure 1 from the United Kingdom’s Office of National Statistics shows, the more recent definition of human capital involves “putting a monetary value on the knowledge, skills, competencies and attributes of a person” (ONS, 2014). What constitutes human capital in this definition can encompass a range of features such as educational attainment, age, and health and lifestyle characteristics. As Figure 1 suggests, the notion of human capital has become central to a range of policy areas such as health, education, and workforce productivity. It can encompass a set of statistical measures that often are related to income and earnings. For instance, Figure 1 quantifies human capital in the United Kingdom between 2004 and 2013 and says that during the recession caused by the global financial crisis there was “a drop” in human capital “due

to higher unemployment and lower average real earnings". Consequently, economic conditions can impact the measurements used to quantify the value of human capital and the ultimate return on investment associated with various phenomenon such as education and training.

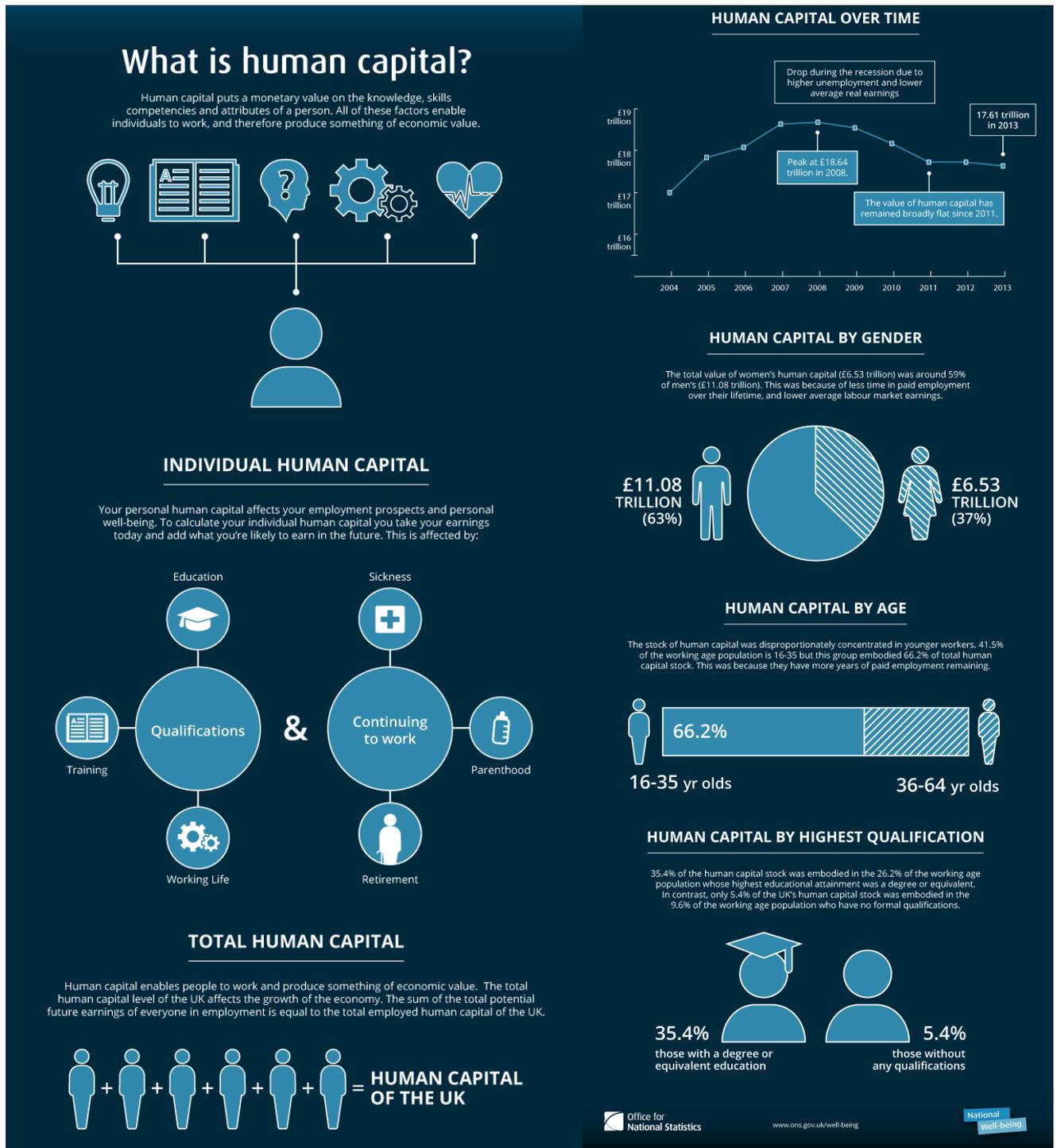


Figure 1: “What is human capital?” (ONS, 2014). Used under Open Government Licence version 1.0 (OGL v1.0).

In its original definition, and in its use as a certification theory, human capital theory has a narrower definition that focuses on education. Early human capital theorists

posited that one can invest in human capital in the same way that one can invest in physical capital, such as factories or equipment (Blaug, 1992). It is primarily an economic doctrine based on the apparent universality of the positive association between education and earnings as one of the most noticeable findings that can be made about labour markets in all countries (Blaug, 1992). It is an economic observation used to make a series of assumptions about the link between socioeconomic attainment and educational attainment. The simplest explanation for the correlation between higher wages and educational attainment is that employers offer higher pay to more educated workers because education imparts vocationally useful skills that are in scarce supply (Blaug, 1992). Schooling provides marketable skills and abilities relevant to job performance (Bills, 2003). According to human capital theory, the skills and knowledge acquired during an educational experience make the more highly schooled applicants more valuable to employers, thus raising their incomes and their opportunities for securing jobs (Becker, 1962, 1964; Mincer, 1958, 1989).

To capture the essence of the link between education and earnings, one of the original proponents of human capital theory and member of the ‘Chicago school of economics’, Jacob Mincer, created what is known as the Mincer earnings equation (Mincer, 1974). In the most widely used version of this equation, log earnings are modelled as the sum of a linear function of years of education and a quadratic function of years of potential experience (Lumieux, 2006, p. 128). The result is the equation below:

$$\log y = \log y_0 + rS + \beta_1 X + \beta_2 X^2,$$

where y is earnings (y_0 is the level of earnings of an individual with no education and no experience), S is years of schooling, and X is years of potential labour

market experience. The parameters r and β refer to the returns on education and labour market experience, respectively.

This equation describes the correlation between schooling, labour market experience and earnings. The more years of schooling an individual completes, the more likely they are to earn higher wages. The Mincer equation shows the rate of increase in earnings is highest in the years following completion of formal schooling, before plateauing and gradually declining as an individual approaches retirement. Applying this equation over a population results in a graph that can, with general accuracy, map the relationship between the amount an individual earns and how many years of schooling they have completed. Using the Mincer equation, economists have quantified the returns to education across various jurisdictions. Psacharopoulos and Patrinos (2018) show that based on 705 estimates between 1950 and 2014, the worldwide average rate of return per year of schooling is 8.8 %.

Figure 2 shows the general shape of the Mincer earnings equation using 2016 median earnings by qualification level in the United States (Ma *et al.*, 2016). The graph shows the logarithmic shape of the relationship between age, earnings and years of schooling. The rate of growth in earnings is highest in the years following formal education before plateauing and gradually declining as individuals exit the workforce. Those with more years of schooling, on average, will earn more than those with fewer years of schooling. Highlighted in Figure 2 is the difference in median earnings between those who hold an associate degree (14 years of schooling) and a bachelor's degree (16 years of schooling). Human capital theorists posit that the difference in earnings is attributable to the concept of human capital, a position justified on the basis "it is reasonable to assume that the more education a worker has, the more human capital he or she has" (Romer, 2012, p. 152).

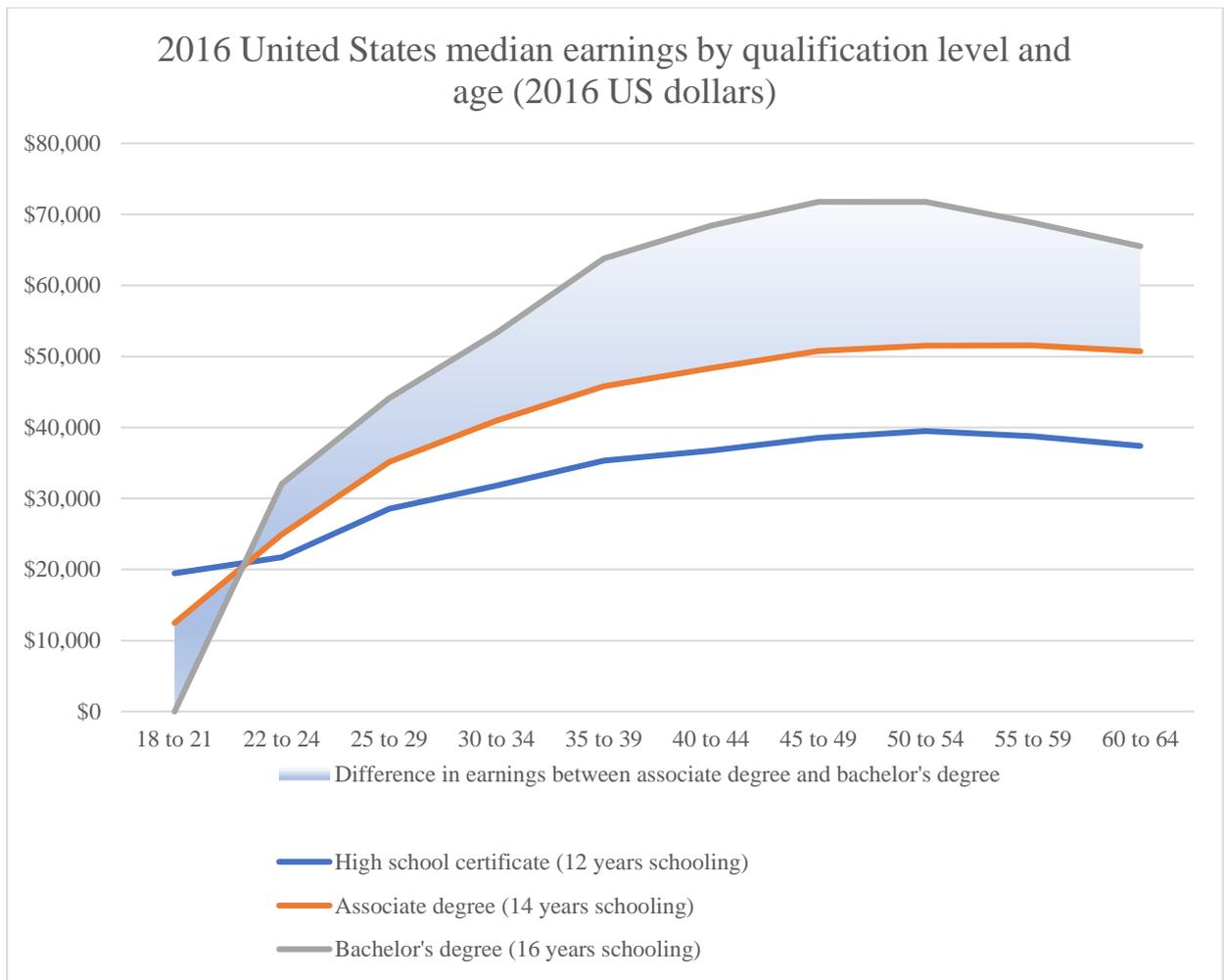


Figure 2: 2016 United States median earnings by qualification level and age (Ma et al., 2016).

It is important to note that human capital theory treats expressions of value in education as a type of constant. The S of schooling in the Mincer earning equation represents the skills and knowledge that an individual acquires using years of schooling as a proxy. In the Mincer earnings equation, the variable of years of schooling once substituted is held to be constant so that the same type of value is having an effect on income earnings regardless of the age of the individual. The nature of expressions of value in education consequently becomes fixed and largely static because once completed an individual's years of schooling will represent the value of their educational experience regardless of what occurs post-study. This means that

representations of educational value take on features that are other than the human qualities of learning and skills acquisition. These features are commodity-like because they are uniform, durable and largely fungible (interchangeable). This stands in contrast to positions associated with social closure that would suggest the S of schooling in the Mincer earnings function does not necessarily represent the skills and knowledge of an individual, but more likely reified credit relations that take commodity-like form.

To illustrate this point, the example of medical graduate incomes in Australia is useful. There is significant evidence that shows medical doctors will earn more across their lifetime when compared to those without a university degree. Norton *et al.* (2018) estimate that the average medical graduate will earn over their lifetime between AU\$3.55 million and AU\$4.16 million in 2016 dollars (approx. US\$2.44 million and US\$2.86 million). This figure is approximately two and a half times greater than what an individual whose highest qualification is a secondary school certificate earns on average over their lifetime. Daly *et al.* (2015) calculate the private return on investment for a university medical degree at approximately 15%.

The underpinning assumption with human capital theory is that the reason medical graduates earn more than others is attributable to the skills and knowledge they acquire during their educational experience. That is, there is something intrinsic to the educational experience in the form of human capital that is the cause of the correlation between higher earnings and those with medical degrees. However, a position that emphasises the credit-based nature of expressions of value in education would suggest that it is the credit relations associated with certain qualifications that more likely result in higher socioeconomic attainment for medical graduates, not necessarily the learning that occurs. Consequently, the reason medical graduates earn more than other disciplines is primarily due to the social structures that reward the profession and

restrict entry into medicine (Collins, 1979; Freidson, 1986, 1994). Higher levels of earnings are therefore not a function of learning, but primarily the social relations associated with certain qualifications. Consequently, the Mincer earnings equation does not plot the effect of the acquisition of skills and knowledge over a lifetime but rather the relative strength of the credit relations associated with certain types of educational attainment using years of schooling as a proxy. In justification of the position that expressions of value in education specify individual productivity, Mincer writes:

The role of education as a cause [of increased productivity], however, is evident from the micro-economic findings that the relation between education of persons and their own future income is strong and largely unaffected by parental income, even though parents' income does affect the amount of education their children receive. (Mincer, 1984, p. 200)

However, the occurrence that Mincer observes in the statement above could instead refer to the relative strength of the credit relations associated with certain educational experiences. This means an individual can access the credit associated with educational attainment, and the benefits this credit bestows, regardless of their parents' income, even though parental income does affect the ability of individuals to access this credit in the first place. Using the example of medicine to illustrate this point, the ability for medical graduates to earn higher wages will occur regardless of their parents' income, though it is usually the children of high-income parents who gain entry into medical degrees.

There are many critiques of human capital in the wider literature. Bills (2003) points out that the emphasis on the financial returns to education are not matched by any empirical evidence on how formal education enhances productivity. Consequently, the fact an individual has more years of formal education does not necessarily mean the individual possesses a greater quantity and quality of skills that make them more

valuable in the workforce. The approach taken by human capital theory makes it difficult to distinguish between different types of educational experiences and their relative value. This is to the extent that human capital theory measures the value of education by the blunt measure of years of education, as if all years of education are equal (Bills, 2003; Brown, 2001). Hansen (2011) writes that human capital theory “treats a year of education as a uniform good, with little acknowledgement of vast differences among national systems of education” (p. 47).

Another related but slightly different critique is that knowledge and skills acquired by an individual do not operate according to the same principles as commodities. For instance, it is reasonable to expect the knowledge and skills learnt in a formal education context will change. An individual may forget the learning acquired in an educational environment or replace it with other types of knowledge. An asset or a commodity, however, essentially stays the same. In the Mincer equation, because the value attributable to years of schooling is held to be constant, what is the subject of measurement is the same thing five years, ten years or twenty years after its completion. Brown (2001) notes that this approach to educational attainment as a constant affords great utility because the value of educational attainment “is held to persist over time, so that substantive inquiry about the retention of knowledge” (p. 26) can be put aside.

Some theorists have noted that the legitimacy of education’s treatment as a constant relies on a series of social processes to transform education into the objective and meritocratic value that human capitalists purport to describe. For instance, Bourdieu (1986) writes how “institutionalised capital” such as academic qualifications can communicate value to third parties regardless of whether or not the holder of the qualification possesses any specific skill or attribute:

With the academic qualification, a certificate of cultural competence which confers on its holder a conventional, constant, legally guaranteed value with respect to culture, social alchemy produces a form of cultural capital which has a relative autonomy vis-à-vis its bearer and even vis-à-vis the cultural capital he effectively possesses at a given moment in time. It institutes cultural capital by collective magic (Bourdieu, 1986, p. 20).

The French philosopher Foucault (1991) describes the role of ritual in the process of creating fixed representations of educational value that become intertwined with an individual. For Foucault (1991, p. 181), the “ritual of the examination” makes it “possible to qualify [and] to classify” and establish “over individuals a visibility through which one differentiates them”. The examined person is held in a “mechanism of objectification” (Foucault, 1991, p. 187), where they are knowable and ordered. Foucault writes how the examination is always highly ritualised and accompanied with a ceremony of power to legitimise the transformation of a social relation into something fixed and ostensibly objective. It is possible to identify the mobilisation of rites and observances in education systems with examples such as honorifics, post-nominals, and education’s own somewhat Latinate naming conventions. Other examples include testamurs and transcripts, where social customs such as a graduation ceremony produce a token that purports to represent some fixed form of value embodied within an individual, a value validated by mottos, insignias, endorsements and the use of security features and special paper.

All the power and ritual that surround the creation of educational attainment may obscure the assumptions that go into the transformation of an educational experience into something that has commodity-like features with a constant value. The use of complex “Mincerian semi-log wage models” and “nationally representative and appropriately weighted datasets” (Bills, 2003, p. 441) when examining the link between

socioeconomic attainment and educational attainment can lead one away from the simple point that people change. While the memory remains fixed in the form of years of schooling or in a qualification, the individual's engagement with whatever occurred during that educational experience never stays the same. It may be possible to imbue the memory of schooling and its representation in token form with commodity-like qualities, but this transformation necessarily involves a break with the qualities of learning. Indeed, an alternative interpretation of the value that human capital theorists describe is that the capital may be better understood as a credit that takes the form of a commodity, a credit that can maintain the illusion it has the same qualities as other types of commodities through what Bourdieu (1986, p. 20) describes as "magic" and "social alchemy", or what Foucault (1991, pp. 181-187) attributes to "power", "ceremony" and "ritual".

These critiques of human capital are not to deny the enormous value that this body of work brings to understandings of expressions of value in education. The continued uses of human capital theory in a plethora of contexts from research to policy, and across academic domains, is a testament to its utility and its relevance. Moreover, human capital theory attempts to capture the value of learning, particularly in a labour market context, in a way that other bodies of work do not. The quantifying aspects of human capital theory open up enormous possibilities such as the measurement of the relative benefits of educational attainment, the labour market returns on different educational experiences and also comparisons between the education systems of different countries (Hanushek, 2013; Psacharopoulos & Patrinos, 2018). However, there are a number of assumptions regarding expressions of value that do appear in the human capital tradition and it is these assumptions that are the subject of further interrogation. For instance, Hanushek (2013, p. 206) uses an expression of educational value, PISA

results, as a “direct measure of skill” in more recent continuation of the human capital tradition and the full implications of this approach are unclear. The expressions that education systems produce enable their deployment in a range of contexts, including as variables in economic models. The critiques of human capital theory outlined above suggest that some caution is required when utilising expressions of educational value this way, as well as a need to better understand the nature of the various expressions that education systems produce.

Screening and signalling

While human capital theory remains prominent in wider public discourse and in the economics literature, there are other areas of the economics of education literature that utilise a different understanding of expressions of value in education. Two such areas are the theories of signalling and sorting. Theories of screening and signalling arose in the 1970s to challenge many of the perceived failings of human capital to adequately describe the use of educational qualifications and their link to higher levels of socioeconomic attainment (Blaug, 1992; Spence, 1973, 2002; Stiglitz, 1975). While primarily concerned with occupational selection, the concepts play a larger role in economics, sociology and biology. Actors are depicted as sending signals and using screens when establishing a relationship in a variety of situations, such as insurance or consumer loans, or between employers and jobseekers (Bills, 2003). Researchers have used screening and signalling to describe an enormous range of behaviours. The result can be the description of all sorts of relationships in economic terms. For instance, some researchers have applied these theories to explain the courtship rituals of animals (Pomiankowski, 1987; Seymour & Sozou, 2009). Seymour and Sozou (2009) describe how certain animals “invest” in a set of signals and screens that involve “participation costs” in order to enable them to gain trust in the other party.

Screening and signalling are two different concepts, but they are closely related. Essentially, an employer screens and an employee signals; or, in the case of FQR in Australia's skilled migration program, governments screen and migrant applicants signal. Signalling and screening are concepts that attempt to explain how two parties select each other when the qualities of each party are important but information about these qualities is uncertain or difficult to ascertain.

Bills (2003, p. 445) describes screening as "a mechanism by which markets react to imperfect information about the qualities of individuals". Stiglitz (1975) argues screening is a way to understand the process of ranking and sorting certain commodities, including individuals:

One of the most important kinds of information concerns the *qualities* of a factor or a commodity. We know that there are important differences among individuals, among bonds, among equities, among brands of automobiles. The identification of these qualities we call *screening*, and devices that sort our *commodities* (individuals) according to their qualities we call *screening devices*. (p. 283, emphasis in original).

In an educational context, the example used with screening is usually that of an employer. Faced with a need to hire, employers seek ways to screen applicants. Because there is significant uncertainty in their decision-making process, uncertainty that is impractical to fully overcome, employers rely on trusted measures in the selection process. Employers use qualifications as a screening device to screen and sort a large pool of applicants for the qualities they wish to acquire.

Signalling is similar to screening but works from the other side of the employer/employee relationship. Whereas employers screen; potential employees signal. The signalling position is most closely associated with Spence (1973, 2002) who conceptualised hiring as an investment undertaken when there is uncertainty (Bills,

2003). Students and employees invest in ways to signal to potential employers the attributes that make them attractive. Education and educational qualifications are examples of signals. Employers hire qualified jobseekers if they believe, and receive confirmation through experience, that education qualifications signal greater productive capabilities (Hansen, 2011).

An interesting feature of screening and signalling theories is they largely downplay the importance of the content of an educational experience. Whereas human capital theory assumes that expressions of value are representations of skills and abilities, screening and signalling theory can be silent because it is the signal itself that imparts the value. What is important is the quality of the signal as a screening device. Indeed, a qualification or one's grades are not the only form of signal. Anything that is relatively scarce or considered valuable can have the necessary qualities to act as a signal. It is for this reason that entrance to high status institutions, as opposed to completion, can also act as a signal (Carey, 2015).

Both screening and signalling conceive of expressions of value in education as a sign or a label and in doing so decouple the representation from directly representing technical capability. They are theories that conceptualise the representations used to signify the value of educational experiences as a type of currency that facilitate a range of transactions, particularly in hiring situations. Unlike human capital theories, the origins of this value are exogenous and relational because it is not the content of an educational experience that establishes value. Instead, expressions of value in education are primarily valuable because they are used to communicate qualities or information to third parties in order to facilitate the establishment of a relationship. Using the example of medical graduates, evidence of completing a medicine degree acts as a screening device that regulators use to sort and screen which individuals can obtain a medical

licence. The educational attainment acts as a signal to third parties such as patients or potential employers that the individual is trustworthy, and one can engage in a type of relationship with them. The strength of the signal relies on the social relations that underpin the evidence of educational attainment. In the case of medical graduates, the credit relations are supported by a licensing regime and highly competitive selection mechanisms into the medicine degree that maintain exclusivity. For industries where no licensing regime exists, employers can use other features of educational attainment to screen individuals, such as grades or the relative status of the awarding institution. For instance, an individual from a prestigious university like the University of Oxford or Harvard University may possess a stronger signal than the individual who holds a bachelor's degree from a regional polytechnic college because of the difference in the relative prestige of the awarding institutions. Consequently, individuals attempt to maximise the value of the information they can communicate to future third parties by seeking to invest in the signals that have the greatest prospect of delivering a reward, a phenomenon essentially distinct from learning acquisition or accumulation of human capital.

In general, screening and signalling can have broad alignment to a position that emphasises the nature of expressions of value in education as a form of credit. This is because the essential nature of the screening devices and signals described by Stiglitz (1975) and Spence (1973, 2002) are credits whose possession enables the holder to access a benefit based on the trust the evidence of educational attainment facilitates between parties. However, screening and signalling positions can still support an argument that expressions of value in education signify some intrinsic, embodied value. In both screening and signalling the validity of the expression of value as a valuable thing comes from identifying "ability" in an individual (Spence, 2002, p. 443; Stiglitz,

1975, p. 284). Because acquiring the signal requires “opportunity costs” (Spence, 2002, p. 449), those that are most able to meet the demands of the education system end up with the signal. According to Spence and Stiglitz, these “opportunity costs” include some innate ability or intelligence. Therefore, while there is no need to reference some technical skill, signalling and sorting theories can still consider educational attainment as a fixed, largely neutral device that identifies some intrinsic, economically productive value within an individual. However, there are many sections of the wider literature that would dispute the neutrality of expressions of value in education. In these positions access to the signal and the subsequent credit that educational attainment affords is always subject to a range of forces within society and does not necessarily reference some innate or intrinsic ‘ability’. To explore these issues further it is necessary to examine other parts of the research literature, particularly theories such as credentialism and control theory. These theories offer a better viewpoint with which to examine some of the non-economic forms of value that expressions of value in education may signify.

Credentialism

Credentialism emerged in the 1970s with Berg’s work *The Great Training Robbery* (1973) and Collins’ *The Credential Society* (1979) and eschews the idea that schools and education institutions are meritocratic organisations that sort individuals based on the teaching and certification of technical skills. Instead, credentialism emphasises the use of certification in various times and places as legitimating advantages that certain degree holders have in occupational and organisational recruitment (Brown, 2001). Whereas human capital, screening and signalling theory concern themselves with the economic basis of certification, credentialism also concerns itself with certification’s cultural, social and political dimensions.

Credentialism emphasises the power of the highly schooled elite to control entrance to sought-after occupational positions, particularly those occupations that deliver the highest rewards (Hansen, 2011). Collins (1979, p. 9) wrote that, “education is an artificial device for monopolizing access to lucrative occupations” and dismisses the idea that technical capability lies at the core of certification. Similarly, credentialism questions whether the role of educational institutions is simply to impart vocationally relevant skills and knowledge. This is not to say that there is no value in the learning involved in formal education. Credentialism is not a theory that posits “that education and productivity are unrelated” but only “that the ratio between education and productivity is smaller than that between productivity and rewards” (Bills, 2003, p. 452). Using the example of medical students to illustrate this point, credentialism theory suggests formal education restricts entry into elite medical professions and therefore acts as a type of social closure. As many of the technical skills learnt during medical school are not relevant to the day-to-day work of doctors, a considerable amount of skills development occurs post-study and during employment. This means that what someone learns during their medicine degree may be valuable in its own right, but the primary source of value comes from access to the membership of a closed and lucrative profession.

According to Brown (2001) there are four key elements of credentialist theory. The first is that content and occupational significance of qualifications are more cultural and exclusionary than technical and efficacious (Brown, 2001). A qualification may be important because it confers on the holder a benefit that is not available to others, not for the technical skills it represents. It is a scarce instrument whose attainment is as much about granting individuals entrance to privileged positions as it is about excluding

others. Brown (2001) argues that this function is more important than the demonstration of technical competence, which a qualification may or may not represent.

The second element is that the information in the degree itself is “an abstraction from the actual substantive knowledge of degree holders that delimits which authorities may question the substantive competence of degree holders” (Brown, 2001, p. 20). Expressions of value in education are the result of a process of abstraction that enables certain actors to decide what constitutes approved knowledge and who can represent this knowledge. Furthermore, the abstraction can obscure. Degrees direct people to accept the abstraction as a representation of something else, such as substantive knowledge or skill, and thus degree holders “hold power over non-degree holders on the basis of a formal claim to competence or trustworthiness” (Brown, 2001, p. 26). What seems like a meritorious act of recognition and award masks a series of power relationships.

The third element of credentialism refers to the monopolisation of qualifications and their use to establish trust. Brown (2001) argues that qualifications are “monopolized by competing occupational status groups as exclusionary, cultural entry barriers to positions and ... used by hiring parties as measures of candidates’ trustworthiness in positions that embody discretionary powers” (p. 20). Freidson’s (1986) study on the practices of professional associations also fits this description. Again, the purpose of education is less the acquisition of skill and more monopolisation and exclusion.

The fourth element refers to a theory associated with qualification inflation, or credential inflation. Some credentialists have argued that the emphasis on qualifications results in an inflation of occupational entry requirements, and ultimately this can lead to a collapse of the social, cultural and political functions of formal education (Collins,

1979, 1981). Too many qualifications threaten their status as a scarce instrument, and also result in a diminished capacity for education to enable access into restricted and finite elite positions. Furthermore, qualification inflation causes an increase in the costs associated with education as people forgo earnings and spend large sums of money to obtain higher and higher levels of qualifications of questionable relevance in order to meet the rising thresholds for admission into elite professions.

Of the four certification theories explored in this chapter, it is the body of literature associated with credentialism that most closely aligns with credit-based positions. While there is significant diversity in the literature associated with credentialism, what is common is the description of expressions of value in education as aligned to the social relations of credit associated with certain educational experience. The nature of these expressions is also relational because it is factors external to a learning experience that are the primary cause for the association between socioeconomic attainment and educational attainment. Indeed, credentialism is the most explicit of certification theories in detailing the irrelevance of the link between the content of an educational experience and future productivity. Parts of the literature associated with credentialism even argue that in certain instances there is a negative correlation between education and productivity so that education can actually make people less productive (Berg, 1973).

Control theory

Like credentialism, what has been described by Bills (2003) as control theory ventures into the social as well as the economic life of education and certification regimes. Control theory emanates from a Marxist perspective that suggests the “capitalist class” uses education to instil discipline into the working class (Hansen, 2011, p. 47). A central tenet of Marxist analyses is that education involves learning

experiences that create docility in the working classes “by structuring social interactions and individual rewards to replicate the environment of the workplace” (Bowles & Gintis, 2002, p. 1). Control theory also makes a critique of the human capital perspective regarding the link between socioeconomic attainment and educational attainment where “economic success” is explained by “the cognitive skills learned in school” (Bowles & Gintis, 2002, p. 1). “One gets the uneasy feeling”, write Bowles and Gintis (1975, p. 74) of human capital explanations for the association between socioeconomic attainment and educational attainment, “that the operation was successful, but the patient vanished!” For control theorists, the use of proxies such as years of schooling leads to a series of conclusions that effaces the actual experience of the individual and does not adequately account for the complex social, political and economic forces that are in play.

It has been noted above that the nature of expressions of value in education is such that it can acquire commodity-like features and the Marxist tradition contains many precedents that describe how social processes can acquire commodity-like forms. Georg Lukács (1971 [1923], p. 83) writes how through a process of reification a social relation takes on “the character of a thing and thus acquires a ‘phantom objectivity’, an autonomy that seems so strictly rational and all-embracing as to conceal every trace of its fundamental nature”. Educational outcomes as objective representations of meritocratic attainment meet this description. Marxist concepts of use-value and exchange-value are also relevant. The use-value of education becomes displaced by the properties of the commodity that preference its exchange-value (Nilsson & Wihlborg, 2011). Where purely credit-based positions may diverge from a Marxist perspective is in the description of the essential nature of commodity-like representations in education. Marx (2013 [1867], p. 6) describes the links between commodities and labour by

writing that, “as exchange-values, all commodities are merely definite quantities of congealed labour time”. This study takes a slightly different approach and explores the essential nature of expressions of value in education as a type of credit as opposed to “congealed labour time”. There are certainly similarities to be found in the Marxist tradition to a position that emphasises the role of credit in constructions of educational value. For instance, similar to the process of reification that Lukács (1971 [1923], p. 83) describes, education systems imbue educational experience with the “character of a thing” that has “phantom objectivity” through a process of reification. In doing so, various representations of educational value take on commodity-like forms that answer to a set of properties and qualities that are different to learning. However, there is a slightly different focus in this study because the emphasis is on role of credit, as opposed to class conflict, though it is important to point out that there is overlap between the two.

	Human Capital	Signalling	Credentialism	Control theory
Overview	A theory emerging in the 1950s to explain the relationship between educational attainment and socioeconomic attainment (Becker, 1962, 1964; Mincer, 1958, 1974; Schultz, 1961, 1963).	Economic theory that describes the role of education in enabling third parties like employers to differentiate between individuals when there is uncertainty or not enough information (Spence, 1973, 2002).	A sociological theory that emphasises the role of education in social stratification (Berg, 1973; Brown, 2001; Collins, 1979, 1981).	A Marxist theory that describes the role that education plays in preparing the working class for lower level jobs and perpetuating class divisions (Bowles & Gintis, 1975, 2002).
Position on the value of education	Views education as an investment. Associated with the conventional view that approaches education as a legitimate, merit-based device for assigning positions within society (Bills, 2003).	Emphasises education's role in signalling to potential employers the relative position of an individual compared to others.	Views education as part of the conflict between status groups and critiques positions that assume education functions as an objective, meritocratic sorting device.	Views education as part of wider struggles between classes.
A thing of intrinsic worth?	Education is valuable because it imparts vocationally relevant skills and knowledge that employers will pay a higher price to acquire. Generally "considers [education] certificates to be more-or-less accurate indicators of the knowledge and skills they ostensibly verify" (Hansen, 2011, p. 32).	Largely silent on the issue but assumes that educational attainment has validity as a signal or screening device because it communicates something intrinsically valuable about an individual.	Describes the value of education as coming from external to the content of what is taught.	Describes the value of education as coming from something endogenous to an education experience, however, this value is not in the form of technical ability, but rather from the inculcation of traits that instils docility and compliance.

Table 1: Overview of certification theories and their position on the nature of value in education

Certification theories and FQR in Australia's skilled migration program

Certification theories have been enormously influential in education policy and the example of FQR in Australia's skilled migration program is no exception. It is economic certification theories, and human capital theory in particular, that embed themselves in the policy rationale for using educational outcomes as a means to select migrants. Human capital theory has become enmeshed in a wider migration discourse where the imperative is to identify the migrants "who have the most to offer Australia" (DIAC, 2012, p. 10). As Ayelet and Ran (2013) state, "governments in high-income countries and emerging economies ... subscribe to the view that in order to secure a position in the pantheon of excellence, it is the ability to draw human capital, to become an 'IQ magnet', that counts" (p. 71). As part of the search for human capital, governments implement migration regimes that identify and sort migrants based on a set of characteristics. Within the literature these regimes are known as Migration Management. Migration Management refers to a set of practices that determine who can participate in the migration process and "who can count as a subject and who does not" (Oelgemöller, 2017, p. 12). Migration Management casts all forms of human mobility into categories and seeks to control how individuals within these categories move across borders.

In Australia, human capital theory embeds itself in the wider Migration Management discourse and is particularly important to policies associated with skilled migration. Australia's skilled migration program was established with the identification of human capital as a central pillar. According to Hugo (2014a, p. 875), the purpose of Australia's wider migration program changed in the 1990s and became "seen as a way to increase the national stock of human capital and enhance national productivity and competitiveness". This change of purpose has had a massive impact on Australia's

wider migration program. Not only have selection methods for Australia's migration program changed, so too have discussions of the characteristics of migrants. For instance, Cobb-Clark (2006) writes the following to describe the changes in Australia's migration program using the term "human capital endowment" to portray the characteristics of migrants:

The increased emphasis on productive skills in the procedures Australia used to select new immigrants in the late 1990s led to striking differences in the human capital endowments of new arrivals. Though the demographic composition ... of immigrants remained much the same, individuals entering Australia in 1999–2000 had more education, better English language skills and more pre-migration labour market experience skills than did their predecessors (pp. 20–21).

In this description of human capital endowment, the value of migrants becomes represented by certain expressions such as their education level and their relative English language ability. In this instance, expressions of value in education take on a fixed value with commodity-like features, similar to the S of schooling in the Mincer earnings equation. As something that is uniform and fungible, the value of disparate educational experiences of individuals become replaced by a common and interchangeable representation in the form of a qualification. As something that is durable, educational attainment represents the value of an individual's educational experience regardless of the individual's retention of the subject matter the qualification purports to represent. Like human capital theory, the Australian Government adopts a position that views expression of value in education as referencing something intrinsically valuable in the form of some skills, knowledge or ability embodied by an individual.

Other certification theories have also been influential in the use of FQR in Australia's skilled migration program. For instance, signalling and sorting theories can

describe the nature of selection mechanisms used by the Australian Government. The migration process is a system where there are a number of actors and the qualities of these actors are ostensibly unknown. The Australian Government seeks to identify which migrants it wishes to engage in a type of relationship with and uses educational qualifications as a screening device. Migrants acquire educational qualifications as signals to enable them to differentiate themselves from other migrants and to show the Australian Government “that they have the skills and attributes necessary to succeed in the Australian labour market” (DIAC, 2012, p. 22). Hugo (2014b, p. 383) notes that recently there “has been a shift away from the more generic identification of human capital ... to an approach which focuses more on employers selecting people with the specific skills which they require”. This shift in policy represents a move towards the principles of signalling and sorting theories because the employer plays a greater role in the selection of migrants. However, this shift should not be viewed as an abandonment by the Australian Government of human capital perspectives. The Australian skilled migration program is a complex set of policies and procedures that constantly changes “on the basis of empirical evidence to achieve better economic outcomes” (Hugo, 2014b, p. 374). The movement towards employers selecting migrants is a shift based on the idea that employers are better placed to identify the “human capital endowment” (Cobb-Clark, 2006, p. 20) of individuals as evidenced by the “better economic outcomes” (Hugo, 2014b, p. 374) employer-selected migrants attain.

In the wider literature there are relatively few critiques of FQR in Australia’s skilled migration program that challenge the dominant perspective on the nature of expressions of value adopted by the Australian Government. For instance, there is a significant literature that details the economic consequences of poor FQR arrangements and the effect that inadequate recognition arrangements have on individuals (Aydemir

& Skuterud, 2005; Hawthorne, 2007; Morissette & Galarneau, 2004; Picot & Sweetman, 2012; Sweetman, 2004; Wanner, 2001). This area of research often examines the ‘underutilisation’ of migrants’ foreign qualifications and describes how migrants acquire occupational positions below the level that their educational attainment suggest they should achieve. For instance, one government-commissioned report used longitudinal survey data to show “that 15.8% of migrants and refugees were overeducated relative to others in their job, compared to 9.2% of those born in Australia” (Deloitte Access Economics, 2018, p. 11). Implicit in critiques such as this is an adoption of the same approach to the expressions of value in education taken by human capital theorists and the Australian Government. That is, in describing the suboptimal labour market outcomes of migrants and the inadequacy of FQR arrangements there is an implicit assumption that a qualification represents some intrinsic worth within an individual. These critiques, while describing an important problem, seem to miss the vital role that credit plays in the construction of value in FQR in Australia’s skilled migration program.

Where there are non-economic critiques of FQR in Australia’s skilled migration program, many authors focus on the social justice aspects of recognition arrangements for migrants. For instance, Wagner and Childs (2006, p. 50) write that:

In multicultural Australia it is commonplace for an Australian to know someone from overseas who is qualified and trained in a profession but cannot practice because their qualifications are not recognized. Optometrists become taxi drivers, social workers become hospital cleaners, teachers become clerical assistants and environmental engineers stack supermarket shelves.

Papadopoulos (2017, p. 221) uses Bourdieu’s concept of cultural capital to describe how FQR is a process that “expands the field of possible transaction of the cultural capital acquired, from local contexts to international ones”. Focusing on the case of

social workers, Papadopoulos finds that the process of FQR in Australia's skilled migration program can be an exclusionary process that discounts certain types of knowledge and experiences, and thus results in the non-recognition of certain individuals' cultural capital. These types of critiques emphasise the societal aspects of phenomena like qualifications and do not begin from a point which views qualifications as signifying some asocial value embodied by an individual. They describe the exogenous factors, embedded in social relations, that impact on individuals who participate in FQR in Australia's skilled migration program.

Despite their applicability, certification theories such as credentialism and control theory have not appeared in the wider literature as part of critiques of FQR in Australia's skilled migration program. This is somewhat disappointing because they offer useful tools to critique the process. Credentialism, in particular, offers the potential for a sharp critique. The four elements of credentialism outlined above fundamentally challenge the policy rationale of the Australian Government. The central tenet of credentialism that education institutions are not meritocratic institutions that sort individuals based on the teaching and certification of skills means that FQR is not the objective assessment of skills and knowledge that the policy rationale suggests it is. Rather, the use of educational qualifications has the appearance of meritocracy and objectivity but, in reality, masks a series of complex power relations.

Similarly, a Marxist perspective offers an interesting critique of FQR in Australia's skilled migration program because of the importance it places on the education system's role in perpetuating the relatively low status of certain occupational positions. As a process designed to unashamedly attract migrants "who have the most to offer Australia" (DIAC, 2012, p. 10), those deemed to have the most to offer are invariably those at the higher echelons of the occupational status hierarchy. Indeed, the

most advanced FQR arrangements are usually associated with occupations that traditionally have strong professional associations and have been able to reap the rewards of a higher occupational status, like doctors and engineers (Iredale, 2009; Mitchell, 1990). In Australia's skilled migration program, there is an exclusion of the lower-working classes from the opportunities offered through migration. The process of FQR shows them up for lacking the necessary documentation to substantiate any claim to the possession of something of worth that the Australian Government may be willing to recognise.

Overall, however, there are two main areas where there are gaps in the literature concerning certification theories and FQR in Australia's skilled migration program. The first is a comprehensive and explicit exploration of the role of credit in understanding expressions of value in education. All certification theories implicitly deal with the role of credit. Indeed, in many ways certification theories are in fact theories of how social relations of credit manifest themselves in formal education systems. The centrality of credit is also present in the policy rationale for Australia's skilled migration program. When the Australian Government states migrants "need to show that they have the skills and attributes necessary to succeed in the Australian labour market" (DIAC, 2012, p. 22), this points to some awareness that educational attainment acts as a form of credit that establishes trust. What would advance current understandings of certification theories and the example of FQR in Australia's skilled migration program, is a more thorough understanding of how social relations of credit manifest themselves in expressions of value in education.

The second area where there are gaps in the literature is an explicit exploration of how expressions of value in education come to acquire the properties and functions necessary to operate as they do in society. For instance, they have properties that enable

them to function as variables on different scales of measurement. These measurement variables can be nominal, ordinal, interval or ratio measurements. The *S* of schooling is a ratio measurement in the sense that it represents a quantity that indicates amounts of difference and has an absolute zero, where zero years of schooling represents an absence of schooling. Qualifications can be both nominal, in that they indicate difference, and ordinal, in that they indicate a direction of difference such as a master's degree being at a higher level than a bachelor's degree. Assessment regimes, such as university entrance exams like the American Scholastic Aptitude Test (SAT) scores, can be interval in the sense that they create an order of value where the difference between quantities is ostensibly meaningful in some way.

The attribution of qualities to expressions of value in education imbues them with certain characteristics that invariably influence their use. For instance, human capital theory takes a position that implies they directly represent some form of value that has similar qualities as other commodities because education is a commodity, and the nature of the expression is essentially the same as the nature of value embodied by an individual. This section of the literature can elide the fact that the human qualities of learning and skills acquisition answer to a different set of properties from a nominal, ordinal, interval or ratio scale of measurement. That is, human qualities such as learning and skills acquisition are not inherently nominal, ordinal, interval or a ratio and the ascription of these measurement qualities occurs as part of a different set of processes to something like learning or skills acquisition. Theories such as signalling and sorting can overcome this problem because they implicitly locate the nature of expressions of value in relational factors, such as the establishment of trust in situations of uncertainty. The signal and the sorting device are socially constructed phenomena and as such they are open to a more fixed existence. Similarly, the sociology literature is much more able to

accommodate the notion that expressions of value in education take on fixed forms as representations by differentiating between the qualities of the expression and the qualities the expression purports to signify.

Conclusion

From a policy and praxis perspective, the existence of expressions of value in education as holding the same qualities as scales of measurement affords enormous utility. In the case of FQR in Australia's skilled migration program, educational outcomes are part of a regime used to rank and sort migrants. Consequently, education outcomes become able to fulfil a policy imperative to find ways to rank and sort migrants based on some perceived notion of skill. However, it is again unclear how skills, knowledge or ability come to have qualities like a variable on a scale of measurement that enables them to fulfil these sorting and ranking functions.

In order to explore these gaps in the literature further, this study will introduce monetary theories and use money as an archetype of an expression of value. The literature on monetary theories is much more advanced than the education literature in examining how certain expressions of value function in society, the origins of their value and the specificity that certain ones describe. Moreover, monetary theories enable access to a range of terms and concepts that can help fill some of the gaps in the education literature regarding expressions of value in education. The next section of this study will focus on describing the major strands of monetary theory, and then applying them to the education literature and the case of FQR in Australia's skilled migration program. It will also use monetary theories to target responses to the research questions of this study.

Chapter Three: Using monetary theories to position the research

Introduction

Writing about a social theory of value and money, the American historian and philosopher of economic thought Philip Mirowski (1991) describes the identity of commodities as one that is largely unquestioned in the economics literature “since it has simply been assumed that the categorical identity of any commodity was immediately transparently obvious to everyone and determined by external natural attributes” (p. 567). However, the identity and measurement of commodities has been the subject of reinterpretation throughout history, as have the methods of measurements used to describe the quantities and qualities of different objects (Kula, 1986). Mirowski (1991, p. 566) describes how the social nature of value and expressions of value have become concealed behind a belief in the character of the commodity as “natural” where “the social structures of the economy [are] invested with the determinancy and lawlike character of things”. As a consequence, problems relating to value, its origins and its specificity, like other “things”, became separate from human-made characteristics. Put in another way, the identity of commodities as “natural” and having “lawlike character” means the nature of expressions of value becomes the province of physics and subject to the laws of the physical world, as opposed to one which is a problem grounded in representation, rooted in social institutions and structures, and more aligned to the area of “abstract algebra” (Mirowski, 1991, p. 566).

The previous chapter identified the categorical nature of expressions of value in education as an aspect of the literature where there are divergent, and often irreconcilable, perspectives. For instance, human capital theory takes a perspective where certain representations produced by education systems function as they do because they reference some kind of physical or intrinsic quality possessed by an

individual. More broadly, certain aspects of education research and education policy can rely on a perspective that views them as also referencing some form of embodied, actual value. FQR in Australia's skilled migration program is an example of such a policy where the rationale adopted by policymakers relies on a perspective where representations produced by education systems signify "skills and attributes necessary to succeed in the Australian labour market" (DIAC, 2012, p. 22). However, as the previous chapter on certification theories has shown, there is a significant body of literature that can challenge these assumptions and emphasises the societal and relational factors involved in constructions of educational value. Moreover, it is unclear how these expressions of value come to acquire the features that enable disparate and individual experiences to be grouped under the same label, such as a qualification, and to have features like those of variables on a scale of measurement.

The categorical identity of expressions of value is central to the three research questions of this study; what are the functions of expressions of value in education; what are the origins of their value; and what is the specificity of expressions of value in education? Different parts of the literature interpret the identity of these expressions of value in different ways. For instance, human capital theory, signalling and credentialism all mobilise the phenomenon of qualifications differently when examining the link between socioeconomic attainment and educational attainment. Despite its importance to education research and policy, the nature of expressions of value in education remains in dispute, or largely ignored as a site of research, the latter occurring especially in the economics literature.

In order to explore their nature and to further position the research, this chapter introduces relevant aspects of monetary theory and applies them to the topic of this study. This chapter will explore the relevance of monetary theories in four sections.

First, there is an outline of the similarities between the physical manifestations of value produced by education systems in the form of qualifications, and physical manifestations of money in the form of banknotes. This helps establish the nature of some of the similarities between money and expressions of value in education. Second, there is an outline of the major divisions of monetary theory. This helps establish the relevant parts of the literature on monetary theories to this study. The third section of this chapter applies these divisions to the three research questions in order to examine how monetary theories help further understandings of educational value and to focus responses to the research questions. The fourth section of this chapter uses monetary theories to examine FQR in Australia's skilled migration program. This establishes the relevance of monetary theories in praxis and also provides a foundation for the detailed exploration of the case of FQR in Australia's skilled migration that occurs in later chapters.

A key issue in the education literature also revolves around the categorical split that Mirowski describes – between an approach that views expressions of value as some natural or asocial phenomenon versus one where meaning and value arise through social mechanisms. That is, is the nature of expressions of value in education objective and referencing something of 'real' and actual value, or is it better understood as abstract value embedded in social relations? This is an important distinction and one that is the subject of continued exploration throughout the study.

Expressions of value in education as currency

Characterisations of expressions of value in education as a type of currency already exist within the research literature and these characterisations often occur as part of a discussion concerning the value of educational experiences and how educational value is communicated (Brown, 2004; Brown *et al.*, 2011; Brown & Souto-

Otero, 2020; CEDEFOP, 2010; Collins, 1979). In this context, currency can describe the “overall value” (CEDEFOP, 2010, p. 2) of an educational experience and there is a close association of the term with exchange, particularly when describing the interaction between the education sector and labour markets. In certain parts of the literature there is a distinction made between ‘soft currencies’ and ‘hard currencies’ in education, where ‘soft currencies’ refer to personal skills and attributes, and ‘hard currencies’ take tangible forms such as qualifications. For instance, Figure 3 is from a report reviewing qualifications policies and practices published by the European Union agency, CEDEFOP, and it shows how ‘soft currencies’ and ‘hard currencies’ stand between an individual and the communication of some form of value, which in this instance takes the form of ‘employability’. In this diagram, it is through ‘soft’ and ‘hard currencies’ that the value of the ‘self’ becomes known and communicated to third parties such as potential employers.

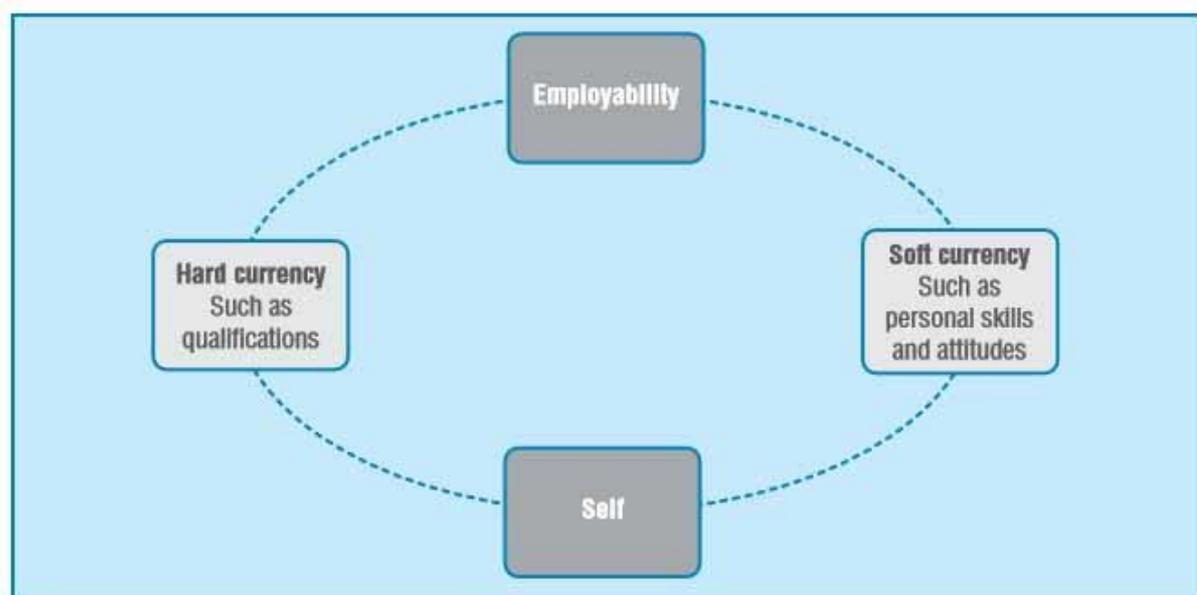


Figure 3: Figure from a report by the European Centre for the Development of Vocational Training (CEDEFOP). Reprinted from CEDEFOP (2010, p. 76) with permission.

The applicability of the metaphor of currency to expressions of value in education is also found in the shared features of the expressions produced by

monetary systems and education systems. For instance, both monetary systems and education systems produce physical tokens as portable representations of value. By placing qualifications and banknotes next to each other, many similarities become apparent. Figure 4, Figure 5, Figure 6, Figure 7 show two examples of paper money alongside two award certificates, or testamurs. The two examples of money are a 1938 £100 banknote from the Bank of England (Figure 4) and a 1929 \$20 note from the US Federal Reserve (Figure 5). The testamurs are a Master of Arts in Education from Antioch University, United States (Figure 6) and a Bachelor of Arts from the University of Oxford, United Kingdom (Figure 7). Each document has several common features as indicated by a number.



Figure 4: 1938 Bank of England one-hundred-pound note.



Figure 5: 1929 Federal Reserve Bank of Chicago, twenty dollar note.



Figure 6: Master of Arts in Education awarded by Antioch University, reprinted under Creative Commons License, CC BY 4.0 (Ujaama, 2016).



Figure 7 Bachelor of Arts awarded by the University of Oxford, reprinted under Creative Commons License, CC BY 4.0 (Nechleba, 2017).

First, both the banknotes and the testamurs display the name of an issuing authority. In the case of banknotes, this is usually a national reserve bank or other designated body. The issuing authority listed on the testamurs is usually the institution where the student studied. However, there are instances where the issuing authority of a qualification can be a government or regulatory body such as a government department of education or an examination authority, as is often the case with secondary school certificates. The issuing authority is important because they bestow the value that the paper represents with a form of validity. If there were no issuing authority listed, then a crucial component required to determine the legitimacy of the document would be missing.

Second, both the banknotes and testamurs have logos, crests, insignias or other emblems printed on the paper. Often accompanying this iconography is ornate font, elaborate language or Latin mottos. These embellishments imbue the documents with a sense of power and prestige. They also establish the special qualities of the token and amplify the importance of the value that the token purports to represent.

Third, appearing on the face of the document is the signature or signatures of those responsible for issuing the banknote or the testamur. The signatures are of those who hold senior roles in the issuing authority and are responsible for ensuring the integrity of the information displayed on the token. In the case of banknotes, this is usually the chairperson or governor of a reserve bank. With educational qualifications, this is the role of the registrar, as appears on the University of Oxford testamur, or other authorised persons such as a chancellor and senior university staff as appears on the Antioch University testamur. The signature functions in a similar manner to a signature on a cheque because it acts as an endorsement and an authorisation.

Fourth, there is a display of the denomination of value. This is a very important feature because it communicates the value of the token. In the case of the banknote, this denomination is known by the synonymous terms of a unit of account or a measure of value. A unit of account plays a very important function in society because it enables the measurement of monetary value. As a metre is to length, and a gram is to weight, a unit of account is to monetary value. The measure enables the comparison of the value of different things, such as goods, services, liabilities, labour, income and expenses. A unit of account also lends meaning to the concepts of profits, liability, losses and assets. In the Bank of England example, the denomination uses pounds as the unit of account, with the value of £100.

The testamurs refer to a denomination of value using a nomenclature specific to an education system. In the higher education sector, the denomination of value usually appears in the form of titles of degrees such as bachelor, master and doctor. In the two examples provided here, the value of the qualification is listed as a Bachelor of Arts in the award from the University of Oxford and a Master of Arts in Education in the award from Antioch University.

There are other similar physical features of both banknotes and testamurs. For instance, both money and qualifications often have in-built security features such as watermarks, and the use of special paper. Indeed, for a period of time the material used by a number of Australian universities for their academic transcripts was the same polymer material used in Australian banknotes. Some universities in Vietnam also used the polymer material for their award certificates (RBA, 2005).

While these tokens help demonstrate some of the similarities between money and representations of educational value, they do not explain their existence or the structures that enable these tokens to acquire validity as expressions of value. As

Grierson (1977, p. 6) writes, “money lies behind coinage” and it is a statement that points to the fact that while we have physical representations of value in the form of banknotes and coins, they are only representations and they require a series of structures in order for them to have legitimacy as currency. Similarly, expressions of value in education require a series of structures that makes them intelligible, so that, for instance, the denomination of bachelor’s degree or master’s degree communicates some form of meaning. In the monetary literature these issues are the domain of the ontology of money and the next section explores some basic arguments concerning the ontology of money before applying these arguments to the research questions.

The ontology of money

Despite its centrality in our modern lives, money remains somewhat of a mystery. One of the most famous economists of the 20th century, John Maynard Keynes, commented that, “I know of only three people who really understand money. A professor at another university; one of my students; and a rather junior clerk at the Bank of England” (as cited in Lietaer, 2000, p. 33). Another famous 20th century economist, Joseph Schumpeter, described the difficulties that economic theorists had with properly accounting for the existence of money. “There is no denying,” wrote Schumpeter (1994 [1954], p. 289), “that views on money are as difficult to describe as shifting clouds.” These difficulties and disagreements have manifested themselves in a large and contentious literature associated with debates involving the nature of money (Ingham, 2004c, 2006, 2007, 2013a; Innes, 1913; Keynes, 1958 [1930]; Wray & Innes, 2004). Nevertheless, it is possible to ascribe two main schools of thought to monetary theory (Wray, 2014). The first is a commodity theory and the second is a credit or, alternatively, claim theory. As Schumpeter writes, “there are only two theories of money which deserve the name ... the commodity theory and the claim [or credit]

theory. From their very nature they are incompatible” (as cited in Ingham, 2004b, p. 21). There are other positions concerning the ontology of money that do not fit neatly with the dichotomy between commodity and credit positions and there have also been efforts to reconcile the two positions (Lawson, 2016). However, for the purposes of this study, the focus is on commodity and credit positions and their fundamentally different ontological approaches.

A commodity theory of money refers to the position that money is essentially a commodity and, importantly, money acts as a neutral symbol of other commodities. In this position, the ultimate source of the value of money comes from its attachment to a designated commodity, which acts as a standard upon which to base all other forms of value. In commodity theories, money has inherent worth. Metallism is an example of a commodity-based theory. In the metallism perspective, the reason why a gold coin is valuable is because of the precious metal that constitutes the coin. In this theory, money is valuable because of its reference to some form of intrinsic worth and it is because of the inherent value of the commodity that the value of money becomes accepted and stable, and transactions, price lists and the drawing up of debt contracts can occur.

According to (Ingham, 2004c, p. 15), the “theorists who established the methodology of modern economics held to one version or another of the commodity theory of money”. Associated with commodity theories of money are classical or orthodox perspectives on money from economists like Adam Smith and Arthur Pigou. Commodity theories are also evident in the thinking of others such as Karl Marx (Ingham, 2004c). Overall, the consequence of this position is that money and the existence of money are largely unimportant when determining and decoding the nature of monetary value. “Monetary facts ... have no direct significance for economic welfare” writes Pigou (1949, p. 24), as “it does not comprise any of the essentials of

economic life”. It is possible to identify a similar position in Milton Friedman’s famous remarks about helicopter money, that economics may as well assume that money is dropped by helicopter and then proceed with the analysis of the effects of different quantities on price levels (Friedman, 1969).

Theories aligned to the commodity position describe the specificity of expressions of value as something ‘real’ where ‘real’ analysis refers to “the principle that all the essential phenomena of economic life are capable of being described in terms of goods and services, of decisions about them and of relations between them” (Schumpeter, 1994 [1954], p. 277). Ultimately, commodity theories take a position where money plays a largely neutral role in describing value and there is little difference between the symbol of money and what value the symbol represents. In commodity theories, “as a symbol, [money] can *directly* represent real commodities” (Ingham, 2004c, p. 17, emphasis in original). The nature of money is, therefore, as a neutral indicator of real worth.

In contrast, credit theories of money argue that the essential nature of the value of money exists as a credit and that the value of money is entirely abstract. Associated with credit theories are economists such as Innes (1913, 1914) and Keynes (1958 [1930], 1963 [1933]) and they are sometimes referred to as the heterodox position. More recently, researchers have re-examined credit theories of money particularly in the work of Geoffrey Ingham (2004c, 2006, 2007, 2013a), a sociologist based at Cambridge University, and Modern Monetary Theorists such as the American economist Randall Wray (2004). In this school of thought, there is no need for money to have reference to any standard commodity for its value to exist. Instead, “money is socially constructed abstract value which is measured by its own scale of value” (Ingham, 2007, p. 268). Money is a “‘claim’ or ‘credit’ that is constituted by social relations that exist

independently of the production and exchange of commodities” (Ingham, 2004b, p. 26). Like the aligned state and chartalist theories (Knapp, 1924), where money is “a creature of the state” (Lerner, 1947, p. 312), money acquires and maintains its value through the status of certain authorities. It is not the content of the token’s manufacture that establishes value, but rather “the name or distinguishing mark of the issuer, which is never absent” (Innes, 1913, p. 382).

The broad fault lines between these two branches of thought have significant implications to our understanding of value in all aspects of society. They help position the research of this study because of their ability to advance an understanding of expressions of value in education. The split between these two schools of monetary theories comes from fundamentally different, and irreconcilable, positions on exactly what type of value monetary systems make calculable and the mechanisms by which this occurs. A central component of this study involves applying these same broad fault lines to constructions of educational value. Indeed, it is possible to trace a split in parts of the education literature along commodity and credit theory lines. For instance, in the explanations for the link between socioeconomic attainment and educational attainment, it is possible to discern two similar schools of thought. In the first school, expressions of value in education directly represent some commodity-like, real value in an individual and this is why those with higher levels of educational attainment will end up with higher levels of socioeconomic attainment. In the second school of thought, they are expressions of *abstract* value and it is in factors exogenous to the educational experience that lies the primary nature of value in education. In order to explore the application of commodity and credit theories to this study, the next section applies the underpinning logic of monetary theories in order to focus responses to the research questions of this study.

What are the functions of expressions of value in education?

Applying the literature on monetary theories to this study suggests there is a set of discernible functions that expressions of value in education perform. The literature on money outlines three basic functions of money. These are usually listed in economic textbooks as a measure of value, as a store of value and as a medium of exchange (Mankiw, 2016).

A measure of value refers to the ability for money to measure the relative worth of different things. Money is a ratio variable, which means that proportions of two different quantities have a meaningful relationship making division and multiplication possible. Money's function as a measure of value makes the relative worth of different commodities intelligible and calculable.

A store of value refers to the ability for money to hold its value across space and time so that it can be stored and transported to another place and retain its value. This is a similar property of any asset. As a store of value, money is a form of purchasing power that can be retrieved at a later date.

A medium of exchange is an intermediary instrument used to facilitate an exchange. This is most noticeable every time we pay for something such as purchasing a good or service at a store. These three functions are fundamental to our daily lives and without them our societies would cease to function as we know them.

The certification theories discussed in the previous chapter all have alignment with these three functions. For instance, in human capital theory, the S of schooling is a measure of value using years of schooling as the denomination. The years of schooling refer to some store of value in an individual that has productive and income-producing capacity. As a medium of exchange, the Mincer earnings equation plots the exchange of the measure and store for a financial benefit across an individual's lifetime.

A theory such as signalling suggests that education systems produce various measures of value that act as signals of some store of value within an individual. However, unlike human capital theory, signalling is agnostic about the education system's role in producing this store of value so that the measure could simply refer to some pre-existing characteristic or set of characteristics.

Credentialism also takes a position that disputes the role of the education system in producing a store of value in the form of technical skills or ability. In credentialism, the store of value may take a denomination in the form of a body of knowledge or some technical capability, such as a skill or a task, but the primary nature of the measure and store relates to credit. For instance, Brown (2001, p. 24) writes of the credentialist perspective of the education system's primary concern "with the accumulation of cultural capital and social exclusion, rather than with meritocratic competition for school taught technical skills that are 'needed' in jobs". Consequently, what expressions of value in education facilitate as a medium of exchange is not the exchange of "skills" but rather "cultural credit" (Brown, 2001, p. 24).

These conflicting accounts suggest that while monetary theories can help clarify the functions that the expressions produced by education systems perform, identifying the functions themselves does not resolve existing debates in the literature. In order to investigate further, it is necessary to explore the nature of these expressions as a currency and the value that these expressions specify.

What are the origins of expressions of value in education as a form of currency?

As a form of currency, a central topic of debate with certification theories "concerns the content and meaning" (Brown, 2001, pp. 24-25) of the various representations that education systems produce to signify value. According to Brown

(2001, pp. 24-25), on the one side is a position that assumes the “singular significance” of phenomena such as qualifications which suggests the origins of their value as a currency largely lies in the content that they describe. This stands in contrast to a differing perspective which “accords independent significance to the economic, cultural, and political dimensions of degrees that vary across national and historical contexts” (Brown, 2001, p. 25). The second research question responds to this divergence by examining the origins of expressions of value in education as a form of currency.

Monetary theories help frame responses to the second research question in two ways. First, they provide access to a language and a set of theories that furthers understanding of how the value of an educational experience becomes intelligible, calculable and communicable. Within the education literature there remains dispute regarding the categorical nature of expressions of value so that some aspects of the literature view them as referencing some intrinsic worth, while others emphasise extrinsic factors. Monetary theories directly concern themselves with this issue and they provide a framework to explore the exogeneity or endogeneity of expressions of value in education.

Second, monetary theories offer a way to understand how expressions of value in education come to acquire the qualities that enable them to act as a variable on a scale of measurement. Currently, one of the major gaps in the literature is an understanding of the mechanisms that transform educational experiences into the various expressions that make them able to function as they do in society. Understanding these mechanisms is crucial because they strongly influence positions regarding whether representations such as qualifications reference some intrinsic worth or whether they rely on extrinsic factors. In applying monetary theories to the education sphere, a focus is on using these

theories to elaborate how educational experiences acquire the properties necessary to function as a form of currency and what this suggests about their essential nature.

What is the specificity of expressions of value in education?

The third research question of this study refers to the specific quality or type of value that expressions of value in education describe. This research question examines their categorical identity in order to determine the specific qualities that differentiate them from other phenomena, such as learning. Monetary theories suggest that there is a split between two positions regarding the specificity of expressions of value: commodity-based versus credit-based positions.

Examining certification theories, commodity-based positions can be found in technical-functionalist accounts such as human capital theory which “emphasise the ‘certifying’ role” (Brown & Souto-Otero, 2020, p. 97) of expressions such as qualifications so that they are a representation of real, actual value usually conceived of in the form of technical skills or ability. Such a position is also associated with the idea that they are “seen to reflect merit” (Brown & Souto-Otero, 2020, p. 99) because ultimately the higher socioeconomic status associated with these expressions is a function of the technical skills that expressions of value certify. The categorical identity expressions of value specify is not only commodity-like but also largely separate from the influence of social, political and cultural factors which has the effect of “ideologically naturalizing” (Ingham, 2004a, p. 179) them. Consequently, representations such as qualifications or years of schooling answer to a similar set of rules and act according to a similar set of principles as any other commodity. From an education perspective, this means phenomena such as qualification level and grades represent actual quantities and qualities and the ratios that these expressions enable refer to real relativity between individuals or groups of individuals. Such a perspective can be

found in the Mincer earnings equation where the S of schooling is a ratio variable that refers to actual embodied value and where proportions between constants, such as sixteen years of schooling versus fifteen years of schooling, is meaningful and a higher quantity represents more value.

A credit perspective, however, emphasises that the nature of expressions of value is abstract and embedded in social relations. In the education literature, Spence's (1973, 2002) concept of the signal acts according to similar principles as a credit because the representation, in whatever form it takes, is a socially scarce instrument whose acquisition affords the individual some form of trust in situations of uncertainty, such as the hiring process. Arguments associated with social closure, such as credentialism and control theory, also align to a credit perspective where the meaning of expressions of value in education emanates from social, political and cultural factors.

Credit theories of money also emphasise the nature of money as a social relation that uses a socially constructed measure, such as a dollar or pound, where designation using the measure separates the categorical identity of money from all other manifestations of value. Applying this to the education sphere, this suggests that the measure of value, such as a bachelor's degree, is a socially constructed and regulated measure that makes educational value distinct from any other type of phenomena, such as learning. Moreover, the specificity of any expressions that use this measure is such that while they use a denomination such as a curriculum, a body of knowledge, or a unit of competency, their value is embedded in credit relations. Consequently, as Ingham writes of money, expressions of value in education are "*assignable* trust" (Ingham, 2004c, p. 74, emphasis in original), their value abstract, and their meaning emanates from social, political and cultural factors that give the various measures validity and currency.

In using monetary theories to frame responses to the third research question, the emphasis is on exploring the specificity of expressions of value in order to determine whether their essential nature is best characterised as a type of commodity or a form of credit, and the mechanisms that enable the expression to exist in this form.

Using monetary theories to explore the case of FQR in Australia's skilled migration program

This final section uses the monetary theories outlined above and the research questions to explore the case of FQR in Australia's skilled migration program. Australia's migration program is a complex set of policies that is constantly evolving and an area with a complicated and contested history. The use of educational qualifications to determine migration outcomes in Australia is a relatively new occurrence. Indeed, even the use of some notion of skills as a means to select migrants only became prominent in the late 1990s (Hugo, 2014b). Prior to this, there were various selection regimes based on country of birth and age. These historical selection mechanisms have been controversial, particularly with the existence of the White Australia Policy. The White Australia Policy was a set of historical practices used to exclude people of non-European origin from Australia. The policies initially gave migrants of British origin preference and the Australian Government later extended the practice to cover European migrants. It was not until the 1970s that the Australian Government dismantled the White Australia Policy and established explicit rules that barred using race as a factor for selecting migrants (DIMIA, 2001; Lopez, 2000). These policy changes have occurred during a sustained increase in the proportion of migrants in Australia's population. Figures from the Australian Bureau of Statistics (2016) show the percentage of the Australian population born overseas has grown from 9.8% in 1947 to 28.2% in 2015.

Following the dismantling of the White Australia Policy, there was a need to find new migration selection regimes. Skilled migrants became viewed as the most attractive migrants because of their potential to contribute to the economy (JSCM, 2006). However, the methods to identify the skills of migrants were often underdeveloped and unclear (CIROQ, 1983). Moreover, many of the skills recognition procedures were heavily weighted towards favouring individuals who had educational qualifications from the United Kingdom or other Commonwealth countries (Iredale, 1987, 1992). The Australian Government investigated and supported new methods and organisations to undertake FQR as part of a wider effort to promote the integration and labour outcomes of migrants, particularly after migrants arrived in Australia. These efforts came to serve as the basis for a move by the Australian Government in the 1990s where it made “skills assessments”, which is a version of foreign qualification recognition, largely mandatory for any skilled migration application and gave certain authorities the role of undertaking the assessments (Hugo, 2014a).

The policy rationale for using FQR in Australia’s skill migration program relies on the premise that a skills assessment assesses skill. Moreover, the Australian Government takes a position where expressions of value in education are a neutral, meritocratic method to select migrants, particularly when compared to previous selection regimes. For instance, the Australian Department of Immigration states:

The current skills assessment arrangements evolved from a need to determine the quality and comparability of skills and qualifications obtained in countries outside the traditionally accepted British education and vocational training systems. The arrangements ... have been recognised as world’s best practise. They ensure that only those people who have the necessary qualifications and skills required to work in their nominated occupation are successful. (JSCM, 2006, p. 75)

This statement shows how the Australian Government uses a commodity-aligned perspective regarding expressions of value in education where representations such as qualifications are asocial and reference some intrinsic capability within an individual. FQR is a process that can “determine the quality and comparability of skills and qualifications” and identifies individuals who have the necessary “skills required to work in their nominated occupation”.

However, it remains uncertain whether the nature of the expressions of value produced by education systems supports the Australian Government’s policy rationale for the use of FQR in Australia’s skilled migration program. While the Australian Government uses expressions of value in education as a currency that identifies skill, the divisions outlined above using monetary theories suggest that the value that FQR facilitates may instead be relational and embedded in credit relations. This means that rather than identifying some embodied skills or ability, the process of FQR may be better suited to a description identifying relative credit. Moreover, there is a lack of research that outlines the assessment process itself. While the rhetoric from the Australian Government is that foreign qualifications identify some real, commodity-like attribute in an individual, there is a lack of research that supports this claim.

In examining FQR in Australia’s skilled migration, the emphasis is on using the research questions to guide an exploration of expressions of value in education. First, as a type of currency it is expected there is evidence that foreign qualifications are utilised as a measure of value, as a store of value and as a medium of exchange.

Second, as a type of currency, the focus of the study is on whether FQR recognises factors intrinsic to the individual or whether it relies on extrinsic factors. This focus will help determine whether the nature of expressions of value in the case of

FQR in Australia's skilled migration program are endogenous or exogenous to the individual.

Third, in terms of the specificity of expressions of value, the focus of the study is determining the type of value that FQR recognises and whether this value is better characterised as something real and actual, or abstract and as a type of credit. Moreover, in exploring the specificity of expressions of value, a focus is on understanding how certain representations produced by education systems function as variables on a scale of measurement. FQR in Australia's skilled migration program offers a unique insight into this issue because the process essentially examines the categorical identity of different expressions such as the qualifications shown in Figure 6 and Figure 7. Consequently, the features that are the subject of assessment in FQR can help reveal the various mechanisms used in education systems that transform an educational experience into an expression that has commodity-like features and functions as a type of currency.

Conclusion

The literature concerning money and expressions of value in education show that while we can imbue these expressions with the same properties as other commodities such as gold or grain, and indeed doing so affords enormous utility, this does not necessarily mean that they have the same essential nature as these commodities. In the case of education, this distinction is important because ultimately the interpretation of the nature of the expressions of value produced by education systems influences the various functions we ask them to perform. A further gap in the literature concerns how educational experiences come to acquire the properties that enable them to function as variables with qualities similar to scales of measurement. Monetary theories, with their focus on the mechanisms that make value intelligible, calculable and communicable, offer a unique model with which to explore these areas.

This study will continue the use of monetary theories to explore expressions of value in education by outlining a conceptual framework that uses money to understand their nature. This conceptual framework will form the basis of an exploration of expressions of value in education using the case of FQR in Australia's skilled migration. This exploration will focus on the functions that they perform, the origins of their value as a form of currency, and their specificity in order to advance issues that remain contested within the wider education literature and to understand how expressions of value in education operate as they do in society.

**Part III: Conceptual framework, research methods and
research methodology**

Chapter Four: Conceptual framework: towards a credit theory of certification

Introduction

Part III of this study outlines the conceptual framework, the research methodology and the research methods used in this study. This chapter focuses on outlining the conceptual framework by using monetary theories as the underlying “system of concepts, assumptions, expectations, beliefs, and theories that supports and informs” research (Maxwell, 2013, p. 39). Economic textbooks generally describe the three main functions of money as a measure of value, as a store of value and as a medium of exchange (Mankiw, 2016). This chapter will outline how each of these functions relates to the nature of expressions of value in education. Education systems create measures and stores of value, of which a qualification is an expression. An individual uses these expressions to facilitate an exchange such as a job, a licence or further study. Building upon certain monetary theories, this study identifies the creation of measures of value as the “primary concept” (Keynes, 1958 [1930], p. 3) of a theory concerning the nature of expressions of value in education. This is because measures of value create the pre-conditions for all other functions that formal education systems perform that pertain to value. Moreover, the measure of value imbues expressions of value in education with the qualities necessary to function as a variable with features like those on a scale of measurement.

The conceptual framework outlined here takes an ontological approach that differs from certain perspectives concerning the nature of expressions produced by education systems, particularly human capital theory. This difference refers to the approach which views expressions of value in education, like qualifications, as “more-or-less accurate indicators of the knowledge and skills they ostensibly verify” (Hansen,

2011, p. 32). To illustrate this difference in ontological approaches, this chapter will adapt an aspect of the literature on monetary theories known as the neutral veil. Some monetary theories argue that money is not a neutral veil and that classical perspectives regarding the neutrality of money do not adequately account for the social, political and cultural dimensions of money (Ingham, 2004c; Keynes, 1963 [1933]; Wray, 2014). Similarly, it is suggested here that viewing expressions of value in education as objective signifiers of embodied value does not adequately account for the various social, political and cultural elements that embed themselves in education systems.

Finally, this chapter will outline how the conceptual framework applies to the case of FQR in Australia's skilled migration program. The expectation is that using the conceptual framework outlined in this chapter, the collected evidence will show that FQR is not a recognition of some neutral value in the form of skills, knowledge or capabilities. Instead, FQR will likely recognise the social relations of credit that underpin certain qualifications. In this way, it is the strength of certain credit relations that determines a migration outcome in Australia's skilled migration program, not whether a person possesses an objective set of skills, knowledge or capabilities.

Using monetary theories as a basis for a conceptual framework

The previous chapter outlined two broad areas of monetary theory, which are commodity-based positions and credit-based positions. These positions have fundamentally different approaches to the nature of money and, consequently, it is necessary here to select one on which to base the conceptual framework. This study uses the literature associated with credit-based theories of money for several interconnected reasons.

First, credit-based theories are more readily able to account for the nature of expressions of value in education as a socially constructed phenomenon. The literature

associated with commodity-based theories of money largely downplays the importance of the ontology of money in constructions of value. This is because these theories emanate from a position that ultimately views money as “neutral” and its value signifying the real worth of commodities (Wray, 2014). As this study explores value beyond economic forms of value, credit-based theories offer a better framework to understand the nature of expressions of value in education and the various social, political and cultural forces that shape their creation and use.

Second, credit-based theories of money contain a much more detailed examination of the mechanisms that enable money to function as it does in society and this provides a rich source of material to adapt when exploring the topic of this study. Orthodox perspectives can largely view the ontological existence of money as “immediately transparently obvious to everyone and determined by external natural attributes” (Mirowski, 1991, p. 567) and, overall, do not explore the content and meaning of money beyond characterising money as an instrument which allows the representation of real value. In contrast, credit-based theories concern themselves with the mechanisms of how money comes to exist in society, and also how money comes to play its important roles in society.

Third, the literature associated with certification theories suggests that credit-based theories of money more readily apply to the areas of the education literature that support a critical examination of the case of FQR in Australia’s skilled migration program. This is because, with the exception of human capital theory and technical-functional accounts, credit-based theories of money have resonance with the wider education research literature. Economic theories such as signalling and sorting emphasise the nature of expressions of value in education as a form of credit, as do many parts of the literature associated with the sociology of education.

To construct a conceptual framework based on credit theories of money, this chapter will use the functions of money as a guide. These functions are as a measure of value, as a store of value and as a medium of exchange (Mankiw, 2016). It will outline each function and how these functions relate to the topic of this study. Examples are also given that illustrate how these three functions apply to expressions produced by education systems with a focus on exploring how they help frame responses to the three research questions; what are the functions of expressions of value in education; what are the origins of their value; and what is the specificity of expressions of value in education?

Measure of value

A measure of value is referred to synonymously with the terms ‘unit of account’ and ‘money of account’. In monetary systems, a measure of value concerns the measurement of value using a specific currency. For instance, dollars, yen, rand, euros and pounds are each a measure of value and official units of account in different countries. Measures of value perform vital functions in all modern societies. An agreed measure of value “makes possible prices and debt contracts” (Ingham, 2004c, p. 6) and establishes the relative worth of every aspect of society that uses a monetary system to express value, such as goods, labour, services, assets, income, expenses and liabilities. A measure of value is a very important concept in any exploration of the nature of value in money, and it will be argued here that the same importance also exists in the exploration of the nature of educational value.

Keynes recognised the primary importance of measures of value to monetary theory. He wrote in the first sentence of his work *A Treatise on Money* (1958 [1930], p. 3, emphasis in original) that “money-of-account, namely that in which Debts and Prices and General Purchasing Power are *expressed*, is the primary concept of a Theory of

Money”. Keynes arrived at this conclusion after a period of significant deliberation and what he referred to as his “Babylonian madness” (Ingham, 2000). During the 1920s, Keynes studied the metrology and numismatics of civilisations that were over 5000 years old in search of the historical and logical origins of money. Keynes wrote in letters to his fiancée how he had become “absorbed to the point of frenzy” (Keynes as cited in Ingham, 2000, p. 16) by the way certain ancient civilisations measured value. For instance, Babylonians had no circulating forms of money such as coins. Yet the Babylonian civilisation had sophisticated ways to calculate debts and prices using an agreed measure of value. In Babylonian society it was possible to engage in credit relations and settle debt using a monetary system based on the relationship between certain commodities such as barley and silver. This relationship between commodities was fixed by an authority and took the form of a *shekel*, though the *shekel* was an abstract concept because it did not originally have a physical form (Ingham, 2000). Keynes recognised how these societies had a monetary system without having any notes or coins. For Keynes this meant that the very existence of money comes about through its relationship to an agreed measure of value. As Keynes (1958 [1930], p. 3) writes:

Money itself, namely that by delivery of which debt-contracts and price contracts are discharged, and in the shape of which a store of General Purchasing Power is held, derives its character from its relationship to the Money-of-Account, since the debts and prices must first have been expressed in terms of the latter.

This statement shows Keynes’ belief that measures of value are the essence of the character of money because all other functions of money are reliant on the measure for valid expressions of value to occur. Other theorists have expanded on the primacy of measures of value by associating them with “the very *idea* of money” which is “*logically anterior*” (Ingham, 2004c, p. 25, emphasis in original) to all other functions.

That is, before any other feature of a monetary system can exist, and the vital functions that money performs in society can occur, it is necessary for there first to be an agreed measure of value.

A measure of value establishes two very important qualities. The first is validity. Validity is the quality of being acceptable or legally binding. One of the main differences between credit theories of money and other types of monetary theories is that credit theories emphasise the role of an authority in establishing the validity of monetary value. For instance, in Knapp's (1924) argument that money is "a creature of the state" (Lerner, 1947, p. 312) it is an authority such as a government that establishes the validity of money. Innes (1913, p. 382) makes a similar point when he writes that what bestows validity on money is "the name or distinguishing mark of the issuer, which is never absent". It is important here to distinguish between validity and value because they are related but they are not the same thing. In this context, validity is a precondition for value, but it is not value itself. In monetary systems something must be considered a valid *expression* of value before it can perform its various functions pertaining to value and it is through its "relationship to the Money-of-Account" (Keynes, 1958 [1930], p. 3) that this expression becomes possible.

The second vital quality that a measure of value establishes is relativity. The German philosopher Georg Simmel wrote at the turn of the 20th century that:

One of the greatest advances by mankind – the discovery of a new world out of the old – is to establish a proportion between quantities, not by direct comparison, but in terms of the fact that each of them relates to a third quantity and that these two relations are either equal or unequal. (Simmel, 1978 [1900], p. 146)

This quote from Simmel describes the importance of a measure of value in any construction of monetary value. It becomes possible to measure the value of disparate

and fundamentally different things through their attachment to a third quantity that acts as a meter. It is through an attachment to this agreed common meter that relative value becomes possible. Because of an agreed measure of value, equivalence and the possibility to rank and sort the value of commodities becomes possible.

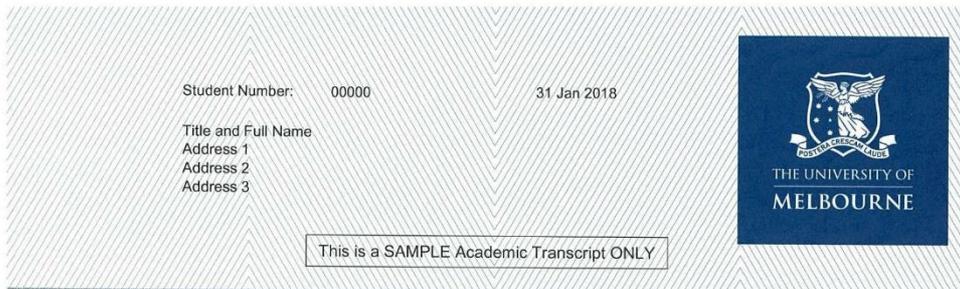
Measures of value exist in all formal education systems. Prominent examples include grades for assignments and subjects, and levels of courses. Other examples include tertiary entrance scores and mass testing regimes like PISA and TIMSS. A phenomenon such as a national curriculum is also a measure of value, though it may be better described using the synonymous term unit of account. A national curriculum establishes what does and does not count as valid expressions of educational value. For instance, in schooling systems with a national curriculum, it is only through a connection to the national curriculum that valid expressions of educational value in these schooling systems can be created. Competency standards perform a similar function as it is through a connection to agreed standards that valid expressions of certain forms of educational value can occur.

In order to demonstrate how measures of value apply to expressions of value in education it is useful to use the example of higher education degrees. Courses such as a bachelor's degree, master's degree and a doctoral degree are all measures of value that enable valid expressions of educational value in higher education systems. Each student has their own unique experience while enrolled at a higher education institution, and it is through the assignation of a term such as a bachelor's degree, master's degree and doctoral degree that these fundamentally unique experiences become valid formal educational experiences. These degree titles also establish relativity and make the level of courses comparable, functioning as ordinal variables. For instance, a doctorate is considered to be at a higher level than a bachelor's degree.

Measures of value exist in a range of other forms in higher education. Figure 8 shows some of these measures using a sample academic transcript from The University of Melbourne. These measures include a system of marks and grades that enables the ranking of student performance. Subject codes can also constitute a measure of value by identifying whether a subject is first year, second year and so on. The University of Melbourne transcript in Figure 8 shows subject codes that begin with four letters to describe the area of study and then a series of numbers, the first of which refers to the year level of the unit. The unit code ACCT90002 refers to an accounting unit, and the number 9 denotes that the unit is at graduate coursework level. A first-year accounting unit may be written in the form of ACCT10001 where the first number in the code refers to the year level of the subject.

Other ways of measuring value in higher education include credit point systems that enable a quantification of value. In Figure 8, the transcript shows a credit point system where 100 points is the equivalent of one year of full-time academic study. A total of 200 credit points listed on the sample transcript suggests that the course requires two years of full-time academic study.

Another notable example of a credit point system is the European Credit Transfer System (ECTS) that seeks to create a common measure of value throughout European higher education systems using a standardised unit of account in the form of ECTS credits. In the ECTS system, one year of full-time academic study is considered to be the equivalent of 60 ECTS credits, and “one credit corresponds to 25 to 30 hours of work” (European Commission, 2015, p. 10).



ACADEMIC TRANSCRIPT

Completion and Conferral Summary:

1 Master of Finance
Completed 9 Jan 2018. Conferred 10 Mar 2018

Master of Finance

Year	Code	Title	Points	Mark	Grade	
2016	ACCT90002	Financial Statement Analysis	12.50	068	H3	
	ECON90033	Quantitative Analysis of Finance I	12.50	070	H2B	
	ECON90034	Economics of Finance	12.50	063	P	
	5 FNCE90016	International Financial Management	12.50	069	H3	
	FNCE90045	Financial Spreadsheets	12.50	069	H3	
	FNCE90047	Financial Markets and Instruments	12.50	068	H3	
	FNCE90064	Emerging Markets Finance	12.50	075	H2A	
	FNCE90014	Public Sector Financial Management	12.50	076	H2A	
2017	ECON90010	Quantitative Analysis of Finance II	12.50	062	P	
	FNCE90012	Mergers and Value Enhancing Strategies	12.50	075	H2A	
	FNCE90013	Case Studies in Finance	12.50	080	H1	
	FNCE90032	Technical Analysis and Trading	6.25	068	H3	
	FNCE90033	Financial Engineering	6.25	056	P	
	FNCE90051	Fundamentals of Portfolio Management	12.50	066	H3	
	FNCE90063	Financial Crises: A Critical Analysis	12.50	055	P	
	MGMT90146	Strategic Management	12.50	075	H2A	
	FNCE90038	Financial Planning and Advising	6.25	070	H2B	
	FNCE90036	Bank Lending Practices and Techniques	6.25	050	P	
	Weighted Average Mark for this course 68.312			6		

2 **3**

4

- Legend:
- Degree level
 - Credit points
 - Mark
 - Subject

End Of Transcript

Neil Robinson
Academic Registrar



Figure 8 Sample transcript from The University of Melbourne. Copyright © The University of Melbourne 1994 – 2017.

One major difference between money and expressions of value in education is that measures of value in monetary systems are ratio variables, whereas the measures in education can be nominal, ordinal, interval and ratio variables. There is a multiplicity of different measures in education systems that Figure 8 can help demonstrate. On this

transcript there are nominal measures in the form of labels for areas of study (accounting), there are ordinal measures in the form of course titles and grades, there are interval measures in the form of marks and GPA, and there are ratio measures in the form of credit points. What is important to point out here is that it is the creation and assignation of measures that makes these expressions of value possible.

Measures of value exist in all parts of a formal education system and perform vital functions. Similar to monetary systems, these measures of value create valid expressions of educational value and also enable relativity between different forms of educational value. These measures of value create the preconditions for all other functions of formal education systems as they pertain to value. Without measures of value it would be impossible for the value of an educational experience to be intelligible, calculable and communicable, and, consequently, measurers of value perform very important roles in society.

Stores of value

A store of value refers to the ability of an asset to hold its value over a period of time so that it can be retrieved at a later date. Money is not the only store of value. Commodities such as gold and grain can all act as stores of value, as can land, pieces of art or sports memorabilia. However, money has unique properties that enable it to be a preferred store of value.

Keynes described some of these unique properties in the concept of the liquidity preference which he first outlined in his famous work *The General Theory of Employment, Interest and Money* (1936). Keynes wrote that money has high liquidity because it is the most readily convertible asset. There is a preference for money over other forms of assets, particularly in times of crisis, because it is possible to exchange money with relative ease and without a compromise to its value. For example, a one-

million-dollar house and one million dollars are both assets that ostensibly have the same value. However, a house has relatively low liquidity because it is an asset that can be difficult to offload, whereas money is much more readily tradeable for something else.

Credit theorists of money make several important points concerning money's function as a store of value that are relevant to this study on expressions of value in education. Credit theorists dispute the idea that money's function as a store of value comes from its linkage to a designated commodity. To substantiate this point, Innes in his essay *What is Money?* (1913) outlines various times throughout history when a coin with the same face value contained different quantities of precious metal. In Ancient Greece, for example, coins with the same face value:

contain more than 60 per cent of gold, others known to be of the same origin contain more than 60 per cent of silver, and between these extremes, there is every degree of alloy, so that they could not possibly have a fixed intrinsic value. (Innes, 1913, p. 379)

Innes also points out that Ancient Roman coinage contained vastly different quantities of precious metal and were often "heavily alloyed with lead" (Innes, 1913, p. 380) instead of more precious copper. Ingham (1998) describes the practice of clipping which involved the shaving off of the outer edges of coins for profit. Figure 9 shows two examples of *siliqua* which were Roman coins produced after the fourth century A.D. The first coin is unclipped while the second has had its outer edges shaved to collect the silver. While clipping was a serious crime, the clipped coins could still circulate with the same face value as other coins.



Figure 9: An unclipped and clipped siliqua (British Museum, 2010).

For credit theorists of money, these inconsistencies in the content of coinage are further evidence that precious metals, or other commodities, do not represent the intrinsic value of money. Instead, money is a store of *abstract* value and money enables the storing and transportation of this abstract value. Because all money is essentially credit (Ingham, 2004c; Innes, 1914), the abstract value that is the subject of storing and transportation is the social relations of credit, denominated in an accepted measure of value. This is why, for instance, clipping or different weights of precious metals may not affect the value of individual coins. What is clipped is the metal and not the credit. So long as the coin maintains some form of general acceptance as a token, so too do the social relations of credit that the coin represents. As Innes writes; “The Credit Theory is this: that a sale and purchase is the exchange of a commodity for credit” (Innes, 1914, p. 152). In other words, every time that we make a transaction using money, we are using stores of credit denominated in an agreed measure of value to facilitate an exchange and purchase.

Applying these perspectives to expressions of value in education results in a number of important insights. First, formal education systems create stores of value using an accepted measure of value. For instance, a higher education degree represents a store of value using the measure of value known as bachelor's degree, master's degree or doctoral degree. These stores of value enable the value of education to become durable and transportable. An individual can complete a course in one place and take evidence of completion to another place at a later time and the value of this education experience retains the prospect of being honoured. There are limits to the ability for formal educational experiences to act as stores of value, which the case of FQR in Australia's skilled migration program illustrates. A potential migrant with a foreign qualification possesses a store of value that is not readily transportable into a different country. The process of FQR is one that ostensibly facilitates the conversion of this store of value so that its value can exist in another country.

Second, there are many ways to describe stores of value in formal education systems. For instance, in Figure 8 the store of value comes under the heading of 'Master of Finance' which uses a nomenclature that has remained largely unchanged since its creation in medieval universities (Harriman, 1935). Often reforms of education systems can involve a process that seeks to clarify what the stores of value represent by more closely aligning the store of value with the measure of value. Competency-based training and units of competency are a prominent example of this. Competency-based training focuses on the outcomes of an education experience and is associated with learning certain vocational skills. A unit of competency often describes a task that an individual can perform in the workplace. For instance, Australia uses a competency-based system in its vocational education and training (VET) sector. An individual who finishes a commercial cookery apprenticeship would be certified as 'competent' in a

unit called *SITHCCC301 – Produce poultry dishes*. This unit functions as both a measure of value and a store of value. As a measure, it denotes a valid expression of educational value in a unit deemed to be at level 3 of the Australian Qualifications Framework (AQF), as indicated by the first number in the unit code. As a store of value, the education system certifies that the individual who holds this unit can ‘produce poultry dishes’ as part of an employment arrangement as a commercial cook. The education institution would produce a transcript that attests to the achievement of a unit of competency and bind this measure of value and store of value to an individual by listing their name on the transcript.

Third, credit theories of money suggest the nature of the abstract value produced by formal education systems exists as a credit. Formal education systems create a token in the form of a qualification or transcript whose fundamental role is to communicate a form of credit between an individual and a future third party such as a regulator or an employer. As Spence (1973) argues, formal education acts a signal, a signal which this study suggests is a type of credit. As a type of credit, the stores of value produced by educational systems answer to a different set of rules and act according to a different set of properties from the qualities of learning. Like the description by Innes (1913, 1914) of Ancient Greek and Roman coins that contained completely different quantities of precious metal, two unique educational experiences can have the same face value even if they represent completely different experiences. Formal education systems create a form of reified credit that has a designated face value expressed through an agreed measure of value.

Fourth, expressions of value in education have far less liquidity than money. Money is a highly negotiable instrument, meaning that ownership is easily transferable. The stores of value created by education systems, however, have very low liquidity

because the store of value never leaves the person. Whereas it is possible to transfer money between accounts, the store of value produced by education systems is always attached to an individual. Any document that represents the store of value in formal education systems will always list the name of the individual to which the store refers. In this way, the expressions of value in education are intertwined with the person. Consequently, whatever one does to an education outcome, one also does to the individual. This includes the example of FQR in Australia's skilled migration program where a migrant presents a qualification as evidence of some form of store of value. The process of FQR assesses the store to determine its relative worth in Australia, comparable to the process of currency conversion. If the store of value is rejected, then so too is the individual. If the store of value is accepted, the FQR process enables an individual to migrate to another country.

Medium of exchange

A medium of exchange refers to an intermediary instrument used to facilitate the transfer of goods, products or services between parties. Any asset can act as a medium of exchange, but money has the most widespread acceptance as a medium of exchange. Money is a form of purchasing power that uses a measure of value and a store of value to denote its value. As a medium of exchange the transferral of ownership of this purchasing power enables payment between parties.

Some writers describe how money relies on a form of trust to enable its function as a medium of exchange to occur. These writers describe how money changes the nature of any transaction between two parties, so that it includes another party which regulates the accepted medium of exchange. Simmel (1978 [1900], p. 177) writes:

the pivotal point in the interaction between the two parties recedes from the direct line of contact between them, and moves to the relationship which each of them ...

has with the economic community that accepts money. This is the core of the truth that money is only a claim on society. Money appears so to speak as a bill of exchange from which the drawee is lacking.

Ingham (2004c, p. 74) describes how “money is a promise and the production of a promise involves trust”, but the sheer size of even basic market systems means that generating trust between individuals to facilitate economic trade is difficult. According to Ingham (2004c, p. 74, emphasis in original):

money’s significance lies in the fact that it resolves this problem in large impersonal markets where interpersonal trust *cannot* be generated. Money is *assignable* trust. In the face of real world radical uncertainty, self-fulfilling long term trust is rooted in a social and political legitimacy where potentially personally untrustworthy strangers are able to participate in complex multilateral relationships.

According to Ingham (2004c, pp. 74-75), the “assignability of the monetary promise involves a three-cornered interdependence between the issuer of the money, and between the users”. In other words, the issuer of money provides a guarantee to the value of money that actors use to engage in complex multilateral relationships that require trust in order to exist.

There are many examples of educational outcomes acting as a medium of exchange. Individuals use formal educational outcomes as a medium to exchange with a regulatory body for a licence. Jobseekers use educational outcomes in the job market in order to facilitate an employment contract with an employer. In the example of Australia’s skilled migration program, the Australian Government establishes a regime where the foreign qualifications are media used by individuals to facilitate an exchange for a migration outcome.

Similar to the process Ingham describes, the argument advanced here is that education systems create a type of three-pointed guarantee between an authority, an individual and a future third party. This three-pointed arrangement allows the establishment of relationships between “potentially untrustworthy strangers” in “large impersonal markets where interpersonal trust *cannot* be generated” (Ingham, 2004c, p. 74, emphasis in original). The initial relationship is between an authority and an individual, such as between a school and a student. Following the completion of this relationship a token is produced to attest to the acquisition of a measure of value and a store of value. The token acts as a claim that awaits future use with a third party. The individual presents the token to a future third party as part of the claim.

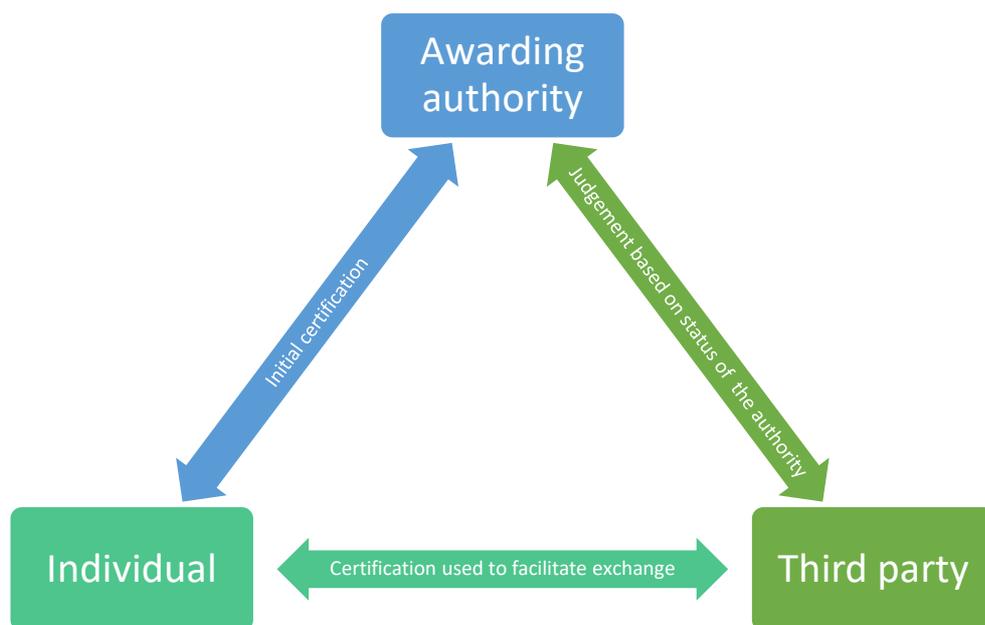


Figure 10: Model of the three-pointed guarantee created by the certification of education.

In this way, certification regimes create both a memory and a promise. As a memory, the expression is a fixed representation of a past occurrence that enables the value of an educational experience to exist across space and time. The expression of value confirms the provenance and authenticity of the promise and is expressed as a

measure of value and as a store of value. As a promise, the expression is a testimonial with a future use. It is a verification, evidence of worth and creditworthiness, that facilitates some exchange between an individual and a future third party.

Importantly, the third party makes a judgement on the individual based on the strength of the guarantee provided by the certification. An authority confers validity on an individual's claim to the possession of some form of educational value. The role of the authority as a guarantor is seen in the use of the word 'testamur' as the name given to the certificate that an individual receives when they graduate, such as those in Figure 6 and Figure 7. Testamur comes from the Latin testis, meaning witness, as in to testify, and has an interesting etymology. The conventional etymology for the word 'testify' comes from its relationship to the word three, as in a third person who bears witness to something. The Latin testis, however, is also linked to the same root as the word for testes and testicles. Katz (1998) in his article *Testimonia-ritus-Italici: Male genitalia, solemn declarations, and a new Latin sound law* traced the connection of the word to old customs whereby a man holds his or someone else's testicles and swears a solemn oath. One example is in the Book of Genesis where a servant pledges an undertaking to Abraham: "the servant put his hand under the thigh of Abraham his master, and swore to him" (Genesis 24:2). In another part of the Book of Genesis Jacob, nearing death in Egypt, asks Joseph to "put your hand under my thigh" (Genesis 47:29) and swear an oath not to bury him in Egypt, where the word 'thigh' in both instances is used as a substitute for testicles. Regardless of the exact origins of the word testamur, its use shows how educational outcomes symbolically represent a truth whose veracity is testified to, and guaranteed by, the authority that issues the certificate. The authority testifies to the creditworthiness of any claim by the individual whose name appears on

the document to the possession of educational value as part of a three-pointed arrangement.

Importantly, because it is based in credit, the value of the memory and the promise does not act according to the same principles as learning. The guarantee provided by the authority is durable because the type of value conferred is extrinsic to the individual. The potential value of an educational experience exists provided that the credit relations that underpin the educational experience also remain. In this way, an individual can present evidence of attainment from a school or a university to a third party ten, twenty or fifty years after completion and the value of this educational experience retains the prospect of being honoured, even though the learning that ostensibly constituted the degree has been forgotten or replaced with other types of skills, knowledge or ability.

Education and the neutral veil

There is one further aspect of theories of money that this study adapts in the exploration of expressions of value in education. This aspect concerns the issue of whether money is a ‘neutral veil’ and is the subject of significant debate. Positions on whether money is a neutral veil act as a proxy for different ontological approaches to the nature of money.

The position aligned to classical economic theories is that money is neutral, meaning that, at least in the long run, money has insignificant effects on the real economy (Ingham, 2004c; Wray, 2004). Arguments supporting the neutrality of money have a very long lineage traceable at least to David Hume in his 1752 essay *On Money* where he writes, “money is not, properly speaking, one of the objects of commerce, but only an instrument ... It is none of the wheels of trade: It is the oil which renders the motion of the wheels smooth and easy” (Hume as cited in Ingham, 2004c, p. 18;

Patinkin & Steiger, 1989). Pigou, the classical economist who was one of the first economists to use the phrase ‘human capital’, was an early proponent of the neutrality of money. Pigou (1949, p. 14) wrote that, “monetary facts ... have no direct significance for economic welfare. In this sense money clearly is a veil. It does not comprise any of the essentials of economic life.” Pigou quotes metaphors used by other economists to describe the neutral position such as, “‘Money is a wrapper in which goods come to you’; ‘money is the garment draped around the body of economic life’; ‘money is a veil behind which the action of real economic forces is concealed’” (Pigou, 1949, p. 18). Wray (2004, p. 233) describes how these orthodox perceptions rely on a conception of money as natural and distinct from human intervention: “the orthodox economists turn money into a ‘natural’ phenomenon free from essential social relationships”.

Keynes described the idea that money is a neutral veil as a “nonsense notion” (Keynes as cited in Patinkin & Steiger, 1989, p. 137). He critiqued the classical position where money is “regarded as a mere link between cloth and wheat” that is little more than “an instrument of great convenience but transitory and neutral in its effect” (Keynes, 1963 [1933], p. 7). Writing during the Great Depression, Keynes was attempting to understand the origins of pressing economic problems and wrote that an inadequate understanding of monetary theory is “in my opinion the main reason why the Problem of Crises is unsolved” (Keynes, 1963 [1933], p. 7). This issue of the neutrality of money was very important to Keynes because positions aligned to the neutral veil of money “results in a machinery of thought ... [that] has equipt the minds of practitioners in the world of affairs, and also economists themselves ... [and] led in practice to many erroneous conclusions and policies” (Keynes, 1963 [1933], p. 9).

The concept of the neutral veil is relevant to this study because it helps frame ontological positions regarding the expressions produced by education systems. Certain perspectives in the education literature take an approach that view the certification of education as a type of neutral veil. For instance, embedded in human capital theory is an approach to various representations of educational value that make them indistinguishable from the value that they purport to represent. In this position, the certification of education plays a largely unimportant role because it is “a wrapper in which goods” such as skills, knowledge and abilities of individuals come to employers. Using a quote from the Austrian economist Schumpeter and replacing the word “money” with the words “certification of education”, and the words “economic process” with “value of education”, we get an understanding of the position aligned to positions such as human capital theory when discussing the value of education:

The *certification of education* enters the picture only in the modest role of a technical device that has been adopted in order to facilitate transactions ... so long as it functions normally it does not affect the *value of education* ... this *certification of education* has been called a ‘garb’ or a ‘veil’ of the things that really matter ... Not only can it be discarded whenever we are analysing the fundamental features of the *value of education* but it must be discarded just as a veil must be drawn aside if we are to see the face behind it (adapted from Schumpeter, 1994 [1954], p. 277).

Ingham’s critique of classical perspectives on money is also applicable to orthodox approaches regarding the certification of education when he writes “as a symbol, it can *directly* represent real commodities” (Ingham, 2004c, p. 17, emphasis in original).

The problem with “neutering” (Wray, 2005, p. 7) expressions of value in education is that they become asocial representations of value that are stripped of their human characteristics. The social relations that underpin various expressions of value in education are denied in favour of a position that views their nature as “‘natural’, innate,

intrinsic” and “free from any hierarchical relations or social symbolism” (Wray, 2004, p. 232). As Wray (2004, p. 234) writes about money in a statement that is just as applicable to educational value, “thus, the orthodox economist (as well as most of the rest of society) ‘forgets’ that money is a social creation where social relations are hidden under a veil”. In this way, the underlying social relations that constitute the nature of value in education are “collectively ‘forgotten about’” (Carruthers & Babb, 1996, p. 1559).

The conceptual framework adopted in this study suggests that positions that implicitly emphasise the neutrality of expressions of value in education are flawed. This is because they do not take into account the nature of these expressions as a representation and an abstraction and consequently operationalise them as the distilled value of what is taught and learnt. Assuming such a position is, as Keynes (1983, p. 402) writes, “like confusing a theatre ticket with the performance”.

The conceptual framework used in this study suggests that the nature of expressions of value in education comes as a form of “*assignable* trust” (Ingham, 2004c, p. 74, emphasis in original). What creates the validity of any claim to value is not necessarily the content of education’s manufacture, but rather “the name or distinguishing mark of the issuer, which is never absent” (Innes, 1913, p. 382). The nature of these expressions is therefore abstract and “a claim upon society” (Simmel, 1978 [1900], p. 177) that is part of a complex system used to assign and identify certain forms of value whose realisation is based in credit relations.

The conceptual framework used here suggests that the nature of expressions of value in education is both relational and exists as a credit. Education systems enable the value of education to be calculable which becomes fixed in the certification process. The stores and measures produced by education systems have commodity-like

properties that act as a symbol that purports to represent some underlying value. However, the veil that distinguishes the symbol from some underlying value is not neutral. Therefore, just because education systems produce something that purports to signify some intrinsic value, it does not mean that it is in something intrinsic to the individual that the nature of value in education lies. Instead, the value is constituted through social relations and consequently all the inequities, the privilege, the stratified and racial elements, the power, the class conflict, and any other aspect of societal relations, have the potential to be abstracted, reified and embedded in the expressions of value that formal education systems produce.

Conceptual framework and FQR in Australia's skilled migration program

A purpose of a conceptual framework is to outline the “expectations” (Maxwell, 2013, p. 39) of the research and how the results from the data analysis may strengthen the central arguments made in a study. This study uses credit theories of money as a conceptual framework that has been adapted to explore expressions of value in education. The subsequent chapters will apply the conceptual framework outlined above to the example of FQR in Australia's skilled migration program. Based on the conceptual framework there are three expectations regarding responses to the research questions for this study.

First, there is an expectation the evidence may reveal that the three functions of money are also present in the functions of FQR in Australia's skilled migration program. Foreign qualifications should be used as a measure of value, as a store of value and as a medium of exchange. As a measure of value, the recognition process should enable the comparison and ranking of different forms of educational value, as represented by a qualification. There should be evidence that the process uses certain meters to enable measures of value to exist. These measures should establish what

constitutes valid expressions of education value. Foreign qualifications that do not have an attachment to an accepted measure of value will likely be viewed as invalid and therefore not accepted. Those foreign qualifications that do have an attachment to an accepted measure of value will then be ranked and sorted to determine relative worth. As a store of value, it is expected that the recognition process will use qualifications as a proxy for the identification of some value held by an individual. The store of value will act according to a different set of principles than learning, will be relatively illiquid and intertwined with an individual. As a medium of exchange, the qualification will facilitate an exchange between the Australian Government and the potential migrant. The qualification will act as a signal (Spence, 1973) that the Australian Government uses to establish trust in the individual who wishes to migrate. As part of the exchange the individual will receive a migration outcome and the Australian Government will receive an individual it believes is economically productive. There may also be other exchanges that the process of FQR facilitates such as a licence with a regulatory body.

Second, the evidence may suggest that the nature of value that FQR recognises is exogenous to the individual. The foreign qualification will be part of a three-pointed arrangement where the Australian Government uses the strength of the guarantee provided by the awarding authority to verify the claim to the possession of educational value in the potential migrant. What will be important to verifying the authenticity of the claim are features external to an individual. For instance, these features may include the accreditation status or prestige of the institution, the length or final grades of a course, or judgements concerning the quality of the education system in which an education institution operates.

Third, the expectation is that the nature of value in education may exist as a type of credit and that the process of FQR in Australia's skilled migration program will

possibly recognise the credit relations associated with certain educational experiences. The qualification will likely act as both a memory and a promise that enables the provenance of the individual's claim to the possession of educational value to be known. As certification regimes intertwine measures and stores of value with an individual, determining the provenance of the qualification also allows the determination of the provenance of the individual. As a credit, the nature of value in FQR in Australia's skilled migration program will exist as a constant allowing "substantive inquiry about the retention of knowledge" (Brown, 2001, p. 36) to be put aside. The evidence collected should also show that the Australian Government adopts a position that views foreign qualifications as a type of neutral veil. That is, the perspectives that embed themselves in the policy rationale for the use of FQR in Australia's skilled migration program will view education certification, if functioning properly, as largely unimportant. The central role of credit will be obscured by a belief that qualifications directly represent the skills and knowledge of an individual. The conceptual framework used in this study suggests that such a rationale is flawed. Instead, the evidence should show that qualifications are a form of "*assignable trust*" (Ingham, 2004c, emphasis in original) which are essentially expressions of social relations of credit. These social relations of credit will use agreed measures of value to express relative worth. The process of FQR will be one that seeks to translate these measures to determine their validity in a new context. Consequently, rather than being a process that recognises skill, FQR in Australia's skilled migration will extend the validity of certain social relations of credit into a different country.

Conclusion

Maxwell (2013, p. 33, emphasis in original) writes of a conceptual framework that:

The most important thing to understand about your conceptual framework is that it is primarily a conception or model of what is out there that you plan to study, and of what is going on with these things and why—a *tentative* theory of the phenomena that you are investigating.

The conceptual framework in this chapter builds on current certification theories and combines them with credit theories of money. It is a conceptual framework that has broad applicability to any phenomenon that involves expressions of value in education. This study will apply the “*tentative theory*” (Maxwell, 2013, p. 33, emphasis in original) to the example of FQR in Australia’s skilled migration program. There are many possible forms of evidence that can assist in achieving this application and there are many different approaches to analysing this evidence. In the next chapter, the reasons for selecting certain types of research methods and research methodology are discussed. Following this, the study will employ the conceptual framework to examine the case of FQR in Australia’s skilled migration program. In so doing, there is an exploration of the three research questions of this study, which are: what are the functions of expressions of value in education; what are the origins of their value; and what is the specificity of expressions of value in education?

Chapter Five: Research methods and research methodology

Introduction

This chapter will outline the research methods and methodology used in the study. This study examines expressions of value in education using the case of FQR in Australia's skilled migration program. There are three research questions used for this study, which are: what are the functions of expressions of value in education; what are the origins of their value as a form of currency; and what is the specificity of expressions of value in education? Outlined in the previous chapter was a conceptual framework that uses credit theories of money to focus responses to the research questions. Based on the conceptual framework, the focus of the research questions is on three domains of inquiry. The first relates to expressions of value in education as an empirical phenomenon that has the same three functions as money. The second relates to whether the nature of these expressions is endogenous or exogenous to an individual's educational experience. The third relates to the issue of whether expressions of value in education exist primarily as a credit.

In exploring the research questions, this study uses qualitative research methods. Qualitative research refers to the meanings, concepts, characteristics, definitions, symbols, metaphors, and description of things and not necessarily to their counts or measures (Lune, 2017). If the study sought in some way to quantify a problem, a quantitative approach may be more appropriate. However, this study seeks to understand the nature of a phenomenon instead of quantifying a problem. Indeed, an aspect of this study is to examine how expressions of value in education become quantifiable in the first place. As a qualitative study, the aim is to understand the mechanisms that enable these expressions to have the qualities necessary to function as they do in society. Because of the varied domains of enquiry, this study uses two different, but related, research methods.

The first method is a discourse analysis of policy documents. The conceptual framework suggests that expressions of value in education have the same three functions as money and as such these functions should be present in policy discussions concerning FQR in Australia's skilled migration program. Using a discourse analysis, there is an examination of policy documents to investigate if expressions of value in education have the same three functions as money and also to explore the origins of their value as a form of currency. The policy documents are selected from Australian Government inquiries into FQR and are discussed below.

The second method used is a case study of an organisation that undertakes recognition of foreign qualifications for the purposes of skilled migration. The results from the case study will outline the assessment process used at the organisation. This method is more appropriate when analysing the mechanics of FQR. In the case study method, there is an exploration of two areas. The first concerns the origins of expressions of value as a form of currency to determine whether it is factors intrinsic or extrinsic to an individual and their educational experience that are the subject of assessment. The second is whether the specificity of these expressions exists as a form of credit or whether it exists as a representation of some form of objective and embodied value.

This chapter will examine considerations relevant to the research methodology. It will outline the reasoning behind the selection of the documents for the discourse analysis and the details of the organisation involved in the case study. The approaches to the collection and recording of data for both methods are described. There is a discussion of some of the methodological assumptions as they are understood for this study, as well as potential limitations of the data and ways to establish credibility in the findings. Ethical considerations are important for all forms of research, and while the relevant ethics body has classified this research as 'low-risk', there is a need to demonstrate how the study adheres to ethical

principles and requirements. Finally, this chapter will summarise the way the research methodology and methods assist with exploring expressions of value in education using the example of FQR in Australia's skilled migration program.

Method 1: Policy discourse analysis

Gee (2011) describes a discourse analysis as “the study of language-in-use” (p. 8). A discourse analysis looks at how the use of language produces our understanding of the world and the creation of meaning. It is a method that approaches the use of language as both structured and relational: structured in the sense that a discourse produces a field of intelligibility, the possibility of understanding, and relational in the sense that it is a structure with “no fixity, centre, or permanence” (Dunn & Dunn, 2016, p. 3). A discourse does not so much explain the world as much as produce it (Gee, 2011). Individuals and different political, governmental and social actors use discourses to make sense of the world and their place within it.

There are many different ways to approach a discourse analysis. For this study, the instrument used for the discourse analysis is the “what’s the problem represented to be?” or the WPR approach. WPR is an approach formulated by Carol Bacchi (2009, 2012) and is appropriate for any situation that involves a close analysis of policies and the discourses that inform their creation. As the name suggests, the nature of the policy problem is the primary focus of analysis. Bacchi (2012, p. 22) writes that a policy document:

... starts from the premise that what one proposes to do about something reveals what one thinks is problematic (needs to change). Following this thinking, policies and policy proposals contain implicit representations of what is considered to be the “problem” (“problem representations”).

Bacchi (2012, pp. 23, emphasis in original) also states that, “in this account policy is not the government’s best effort to *solve* ‘problems’; rather, policies *produce* ‘problems’ with particular meanings that affect what gets done or not done”.

Bacchi proposes six main questions when approaching an analysis of policy documents. These questions are:

1. What’s the “problem” represented to be?
2. What presumptions or assumptions underlie these representations of the “problem”?
3. How has this representation of the “problem” come about?
4. What is left unproblematic in this problem representation?
5. What effects are produced by this representation of the “problem”?
6. How/where has this representation of the “problem” been produced, disseminated and defended, and how could it be questioned, disrupted and replaced? (Bacchi, 2009, 2012)

These questions guide the policy discourse analysis. The data collected will be analysed using these questions to interrogate the underpinning logic, assumptions and deployment of expressions of value in education as they appear in the policy documents.

One strength of the WPR approach for this study is that it allows an exploration of the research questions by focusing on ‘problems’. For instance, in terms of the first research question, what are the functions of expressions of value in education, the government reports will involve discussions regarding the functions of FQR in Australia’s skilled migration program. The conceptual framework outlined in the previous chapter suggests that these functions should align to the same three functions as money. This means that each report should contain evidence that demonstrates a conceptualisation of foreign qualifications as a measure of value, as a store of value and as a medium of exchange. Where there are

‘problems’ associated with FQR in Australia’s skilled migration program, there should be evidence that these problems align to the same three functions as money.

In terms of the second research question, what are the origins of expressions of value as a form of currency, a discourse analysis enables an examination of the policy rationale that informs the use of FQR in Australia’s skilled migration program. The reports should contain assumptions that describe the value of qualifications as based on factors that are intrinsic or extrinsic to an individual and their educational experience.

In terms of the third research question, what is the specificity of expressions of value in education, the policy documents may contain evidence that shows how the expressions produced by education systems come to exist as legitimate representations of some form of value. By focusing on problems and problem representations, it may be possible to discern what is impeding the legitimacy of qualifications as valid representations as well as how the policy documents suggest these problems can be overcome. For instance, if the specificity of expressions of value in education exists as a credit it is likely there will be evidence of policy recommendations that focus on qualifications as “*assignable trust*” (Ingham, 2004c, p. 74, emphasis in original) that facilitates the establishment of some form of relationship.

It is important to point out that problem representations in the reports will emanate from a particular perspective based in policy, as opposed to FQR in praxis. This means that the reports themselves may *assume* certain characteristics concerning expressions of value in education. For instance, the policy documents may assume that they function as a type of currency because they reference endogenous factors, such as some set of skills possessed by an individual, even though the problems that are described may more readily lend themselves to a description as based in exogenous factors, such as the status of awarding institutions, or the relative standing of a country’s education system. Consequently, it will be important to

contrast these assumptions with the evidence collected in the case study site to illustrate how expressions of value in education can work in both policy and in praxis.

Selection of data for Method 1

FQR has been the subject of various reports, and its existence as a phenomenon pre-dates formal government inquiries. However, in Australia more formal attention has been given to the issue of FQR since the 1980s beginning with the report *The Recognition of Overseas Qualifications in Australia* (CIROQ, 1983). Following this report, there have been numerous government-sponsored reports that deal either directly or indirectly with the issue of FQR, such as the 1996 report *Fair Go For All* (HRSCCA, 1996), the 2006 report *Negotiating the Maze* (JSCM, 2006), the 2012 report into the recognition of overseas trained medical professionals, *Lost in the Labyrinth* (HRSCHA, 2012), and the 2013 report *Inquiry into Multicultural Australia* (JSCM, 2013).

Three government inquiries into FQR have been selected as the primary sources for the discourse analysis. The main criterion for selecting a report for use in the discourse analysis was their relevance to the topic of FQR and Australia's skilled migration program. The aim was to gather a broad cross-section and a sample that was as representative as possible. Accordingly, the basis for selection were reports that covered a range of years, with the aim of including at least one report that had a general focus and one that had an occupation specific focus. For these reasons, the following reports have been selected.

The first is the 1983 report entitled *Recognition of Overseas Qualifications in Australia*. It is the first comprehensive overview of FQR in Australia. It deals with a range of occupational areas and includes descriptions of the role of FQR in the migration process. The second is the 2006 report *Negotiating the Maze*. This report reviews arrangements for overseas skills recognition, upgrading and licensing for migrants. It is a report with a general occupational focus and includes a strong emphasis on analysing various aspects of the

migration program, particularly skilled migration. The final report used in the discourse analysis is the 2012 report *Lost in the Labyrinth*. This report focuses on the experience of overseas trained doctors and the various problems they face in gaining a licence to practise. This report was selected because of its specific occupational focus and also because it is relatively recent. The next chapter, outlining the results of the discourse analysis, includes further descriptions of the reports.

Data collection and recording for Method 1

Generating the research data from the government reports was a process involving close evaluation of the documents. The first step was an initial reading of all three reports. Following this, a second reading occurred using the lens of the conceptual framework outlined in the previous chapter and the WPR approach. Several themes are relevant to this research and they formed the basis for the coding of data. The themes for coding were stores of value, measures of value, mediums of exchange, commensurability, fungibility and credit. These codes were selected because of their relevance to the conceptual framework and the application of monetary theories to expressions of value in education. The second reading of the documents identified statements within the reports and aligned these statements to the codes. Each report has a significant number of attachments such as interview transcripts from public hearings and submissions from interested parties. There are many quotes from the submissions and interviews within the body of the reports. Where an interview or submission referenced the topics of credit, measures of value, stores of value, and mediums of exchange, these submissions were also subject to a review using the same coding framework as outlined above. All statements and the identifying codes (each statement could have more than one code) were entered into a spreadsheet to enable comparison and sorting. The result was approximately 100 statements across the three reports that were coded according to the themes listed above. To enable the synthesis of the documents, each statement was then

aligned to the six questions as outlined in Bacchi's WPR approach. These data formed the basis for responses to the questions and the results outlined in the next chapter.

Method 2: Case study

According to Yin (2018) a case study is the study of a "contemporary phenomenon in its real-life context" (p. 73). Sturman (1997, p. 61) writes that a "case study is a general term for the exploration of an individual, group or phenomenon". A case study is a comprehensive description of an individual case and its analysis including the characterisation of the case and what was involved in the case study (Sturman, 1997). It is described by Yin (2018) as the best approach for researchers who want to understand real-life phenomena in depth while taking context into account. As a method, a case study is appropriate because it enables the study of theoretical ideas in real-life situations by examining how something works in practice. As a complement to a policy discourse analysis, a case study also enables a point of comparison between theory and praxis. A case study at an organisation that undertakes FQR in Australia's skilled migration program provides evidence that can contrast with the policy rhetoric of FQR.

The main reason for selecting a case study approach as a method for this study is to explore the mechanics of the assessment process itself. FQR in Australia's skilled migration program is also known as a skills assessment and similar case study-based research into individuals migrating as social workers found that "the assessment process is not a *skills assessment*, but rather an educational comparison" (Papadopoulos, 2017, pp. 229, emphasis in original). This study will also examine the assessment process to determine whether it is an assessment of skill or an assessment of some other set of characteristics. Moreover, if as Papadopoulos (2017) describes that the process is an "educational comparison", the case

study will also examine what an educational comparison assesses, which is an exploration that is largely missing from the literature.

The case study approach will enable a particular focus on the second and third research questions, what are the origins of expressions of value in education as a form of currency, and what is the specificity of expressions of value in education? This is because the case study will examine the mechanics of the assessment process in order to determine the features and characteristics that are the subject of assessment. For instance, in the conceptual framework outlined in the previous chapter, measures of value were described as a central component that enables expressions of value in education to acquire validity and relativity. Consequently, by examining the assessment process, and what a “qualification comparison” involves, it should be possible to discern the role of measures of value in the assessment process. Moreover, it should also be possible to discern whether the process recognises some intrinsic capability in an individual or whether it recognises the credit relations associated with certain expressions of value produced by education systems.

Selection of site for Method 2

FQR in Australia’s skilled migration program is a process undertaken by a range of authorities gazetted by the Australian Government. There are approximately forty such assessing authorities and they are usually professional associations or organisations with expertise in the area of foreign qualification assessment (JSCM, 2006). These organisations vary in size and scope. Many are government regulatory bodies such as the Civil Aviation Safety Authority (CASA) and the Medical Board of Australia. Others are independent, non-government professional bodies such as the Australian Pharmacy Council and the Institute of Public Accountants.

There were several possible approaches for selecting a case study for use in this study. For instance, there is a possibility of selecting either one organisation or multiple

organisations. Multiple organisations would yield more data. Multiple organisations also provide more opportunity to triangulate data and increase the credibility of the findings. However, multiple organisations are also harder to manage and can be less suited to a deeper examination of an issue. A case study using a single organisation has the benefit of being easier to manage and enabling a more thorough exploration of how the evidence collected helps frame responses to the three research questions. For these reasons, this study uses a single organisation for the case study.

To acquire participants for the study, several possible case study sites were identified. The main criteria for selection were that the assessing authority assessed a number of occupations for the purpose of skilled migration to Australia. There are over 500 possible occupations available for assessment and, therefore, many assessing authorities assess more than one occupation. A site with multiple occupations was preferred because they are generally larger organisations and they can cover a broader range of occupations. Some assessing organisations are very specialised, such as the Speech Pathology Association of Australia or the Australian Institute of Quantity Surveyors, and this means that their assessment process may be overly specific to an occupation and make it difficult to establish applicability to other sites where FQR occurs. Government organisations were also excluded because government organisations can have stricter requirements concerning participation in research studies. Based on the criteria, four possible sites were selected at random and were sent a letter requesting participation in the study. One site was ultimately selected based on the replies to the requests for participation. Part of the agreement to participate in the study involved maintaining anonymity of the site and as such, defining features of the site, such as size or area of expertise, have not been included. Moreover, to maintain anonymity, the site of the case study will be identified as the ‘Assessing Organisation’.

Data collection and data recording for Method 2

It is important to clarify the type of data collected at the case study site. The aim of the case study is to collect data to allow an analysis of the assessment process, and how this assessment process assists in answering the research questions. This can be achieved through a collection of many different forms of evidence, such as documents that outline the assessment process, internal guidelines, publicly available material such as submissions to inquiries and website information, and interviews with staff. The purpose of the evidence collection was not necessarily to understand the behaviour or the experience of staff who undertake assessments, only if this was relevant to outlining the assessment process itself. Similarly, the aim of the data collection was not to understand the experience of individuals who underwent FQR in Australia's skilled migration program. The individual lived experience of FQR in Australia's skilled migration program is an important area, but it lies outside of the scope of this study. The purpose of the case study is largely to outline the assessment procedure and how expressions of value produced by education systems are mobilised as part of the FQR process. In order to do this, several forms of evidence were collected at the case study site.

The first source of data was publicly available information on the Assessing Organisation such as their website, policy documents and brochures. The Assessing Organisation outlines the requirements for their assessment in publicly available documents and this formed the first tranche of information.

The second source of data were semi-structured interviews with employees involved in the assessment of foreign qualifications at the Assessing Organisation. Interviews were chosen, as opposed to focus groups, because they enable a more detailed exploration of the assessment process with individual staff. The interviews explored the assessment process at the Assessing Organisation in a way that allowed the interviewees to explain their

understanding of the process. The staff members were asked to outline the process and to outline how they undertook their role. They were also asked to outline examples of assessments that were considered difficult or involved them having to interpret guidelines independently. This was done in order to understand the process as it is normally applied, and also to understand situations where the assessment outcome may not be clear in order to understand what features or characteristics of qualifications they used to arrive at an assessment outcome. The Assessing Organisation selected the employees for interview based on their proximity to the assessment process. The interviews occurred with three different staff and each staff member was interviewed once. Participating staff members were assured of their anonymity to ensure they felt comfortable with the process and explaining their understanding of the assessment process. The conversations were recorded and transcribed. In order to maintain anonymity, identifying details of the staff members are not provided and, where quoted, staff members are referred to by the pseudonyms 'Interviewee 1', 'Interviewee 2', and 'Interviewee 3'.

The third source of data were documents used in the assessment process and referenced in publicly available information and in the semi-structured interviews. These documents include guidelines, known as Country Education Profiles (CEPs), published by the Australian Department of Education. Country Education Profiles are important documents and feature prominently in FQR in Australia's skilled migration program. They outline the comparability of foreign qualifications to the Australian education system and are used widely by assessing organisations (JSCM, 2006). They set national standards for qualification comparisons and are discussed in detail when outlining the assessment process.

Once collected, all sources of data were analysed to extract information about the assessment process. The extracted information was sorted according to steps in the assessment process. These steps form the basis for the results chapter concerning the case

study. These steps were then aligned to the research questions to determine whether it is intrinsic factors or extrinsic factors that are the subject of assessment, and whether the assessment process recognises the credit relations associated with qualifications or whether it recognises some real, embodied aspect of an individual.

Credibility

Credibility in qualitative research is comparable to an internal validity and is linked to the term ‘authenticity’ (Chilisa, 2012; Liamputtong, 2013). Credibility and authenticity are “used to determine whether the research is genuine, reliable, or authoritative” (Liamputtong, 2013, p. 25). Several strategies have been employed to ensure the credibility and authenticity of the research.

The first is the selection of the type of participants used in the data collection process. There has been a purposeful selection of both the reports for the discourse analysis and the site for the case study based on their proximity to the subject of FQR and Australia’s skilled migration program. They represent authoritative, but by no means definitive, sources on the subject.

The second involves triangulation, described as “the most powerful means for strengthening credibility in qualitative research” (Liamputtong, 2013, p. 30). Triangulation is a concept borrowed from navigational and land surveying techniques where it refers to determining a single point in space by using the convergence from two other distinct points. Triangulation is a way of verifying the accuracy of data by examining its position relative to other forms of evidence.

This study uses a form of methodological triangulation and data triangulation to support the credibility of the findings. Methodological triangulation refers to the use of several methods in one study (Liamputtong, 2013) and this study utilises both a discourse analysis and a case study in its research methodology. Data triangulation occurs through the

collection of multiple types of evidence, and by making comparisons between them to establish the validity and reliability of findings. The use of multiple forms of data is particularly important with the case study. Because only one organisation is the subject of the case study, and there are over forty organisations that undertake FQR in Australia's skilled migration program, the credibility of the findings increases if there is a way to establish the applicability of the Assessing Organisation's assessment process to different contexts. In order to achieve this, documents such as government publications and information from the discourse analysis form part of the evidence when outlining the findings of the case study. Moreover, the results include a comparison of the findings from the case study to other organisations that undertake FQR in Australia's skilled migration program. If, as Gerring (2004, p. 342) writes, that the purpose of a case study is the "study of a single unit for the purpose of understanding a larger class of (similar) units", then a comparison of the Assessing Organisation's assessment process to other organisations strengthens the applicability of the findings regarding the use of FQR in Australia's skilled migration program.

Limitations

All research methods and methodologies have limitations and, while efforts have been made to ensure the credibility and authenticity of the research, it is important to outline some limitations of the research methods and methodology. First, this study looks at the FQR process through a case study approach, which means that aspects of the findings will be specific to one site. As outlined above, there are further investigations to determine the wider applicability of the findings, however, there remains a need for further analysis at other sites to more conclusively establish the applicability of findings to other instances of foreign qualification recognition.

Second, as a qualitative study, much of the data requires interpretation and this interpretation may differ between researchers. For instance, the discourse analysis requires the coding of statements and the results of the coding may differ between researchers. The interpretation of the significance of certain statements within the policy documents may also differ. These issues are somewhat attenuated by the use of the WPR approach which provides a common set of tools and questions to guide analysis. Moreover, the WPR approach takes a post-structural perspective and as such does not seek to uncover a single or fixed truth. Instead, the WPR approach emanates from a perspective where meaning is based in context and where “the realities we live are contingent, open to challenge and change” (Bacchi & Goodwin, 2016, p. 4). Indeed, one of the great strengths of the WPR approach for this study is that it examines the various means that concepts, subjects and policies come to exist as “things” which can be utilised in policy discussions. As this study examines the nature of expressions of value in education and how they come to exist as “things” that have various functions in society, this is a powerful tool of analysis. However, it is noted that many of the methods and methodologies here require interpretation on behalf of the researcher. This can result in limitations, even though there has been ‘triangulation’ of methods and data to increase the credibility and authenticity of the findings.

Reflexivity

Reflexivity is the awareness of your role in the research and the various positions that you bring with you that may influence the research process. Begoray and Banister (2010, p. 788) define reflexivity as “a researcher’s ongoing critique and critical reflection of his or her own biases and assumptions and how these have influenced all stages of the research process”. It is particularly important to this research because the author of this study has some experience working in the area of FQR and Australia’s skilled migration program. Some of the interviewees were known to the researcher, although a period of ten years had passed

since there was any substantial involvement between the researcher and the interviewees. This previous experience presents both strengths and weaknesses.

In terms of strengths, prior knowledge of the area means the researcher can better target the methods and methodology to ensure they are relevant to the study. This is because prior knowledge enables easier navigation of the system, a solid foundation on which to base further inquiry, and easier identification of important issues and existing research. For instance, there was an awareness of the applicability of money and currency exchange as a metaphor for FQR, and it was this awareness that prompted an exploration of the literature concerning money and monetary theories.

In terms of weaknesses, prior experience can also bring preconceptions and the possibility of prejudging the findings of the research. Moreover, knowledge of some participants in the study may impact the data collection process as evidence collected by the researcher, particularly as part of the interview process, may be shaped by prior knowledge or a desire by the interviewee to produce responses to satisfy the researcher.

Reflexivity is “an issue in establishing the quality/validity/trustworthiness of findings, in ethics, and in addressing power imbalances” (Begoray & Banister, 2010, p. 789). To ensure appropriate disclosure it is important to declare previous experience in the research area, to both readers and participants in the study. In terms of the evidence collection process, issues concerning reflexivity were attenuated by focusing on the assessment process itself, which is less impacted by individual perceptions of the topic compared to a focus on experiential or behavioural phenomena. Multiple sources of evidence were collected to minimise the prospect of researcher bias. Individuals participating in the semi-structured interviews were encouraged to describe their understanding of the process and questions in the semi-structured interviews focused on eliciting information in a way that assumed no prior knowledge of the process.

It is also important to note that while the researcher has some experience in the area of FQR in Australia's skilled migration program, the use of money and the literature concerning money as the basis for the conceptual framework is unique to this research. The incorporation of monetary theories as a basis to explore FQR in Australia's skilled migration program came as part of the initial literature review phase of the study and at the commencement of the research process. Indeed, it may be possible to use monetary theories in a range of other education issues and this is the subject of further discussion in later chapters.

Ethics

Ethical considerations are an important part of all research, particularly those that involve human subjects. There are a number of ethical approaches that are important to incorporate into the research design and reporting of results. These include minimising risk, accurate reporting of results, protecting privacy, informed consent, voluntary participation and stating conflicts of interest.

In terms of maintaining an ethical approach, this study was undertaken under the auspices of a University Ethics Committee to ensure that high ethical standards have been met. The protection of privacy was an important aspect of this study and information has been rendered anonymous to ensure that there is no identification of research participants. Pseudonyms are used such as Assessing Organisation and Interviewee One, Interviewee Two and Interviewee Three. Where an individual spoke to the researcher for the study, participation was voluntary and details of how the information would be used was provided and consent was sought and recorded. Only information that is publicly available and does not easily identify individuals or the organisation is included in the referencing and citations. Pro-forma interview templates and consent forms were provided to the University Ethics Committee for approval. Some changes have been made in the presentation of data to maintain anonymity. For instance, the areas of study for some qualifications and the

occupations referred to in the chapter concerning the case study have been altered so as not to identify the Assessing Organisation. In terms of quoting publicly available data as part of the results, this is done in a way that cannot directly identify the Assessing Organisation or the interviewees. For instance, when quoting information that relates to the Assessing Organisation's documents, there is a preference for shorter quotations instead of long quotations to minimise the risk that the quotations can be used to identify the Assessing Organisation. Ethical principles also call for minimising harm and certain research methods have been selected in order to help meet this imperative. For instance, publicly available data, such as government reports, have been used where possible. The focus on the assessment process itself, as opposed to a social-behavioural study, also enables a minimisation of ethical concerns and the construction of an approach that meets the high ethical standards as required by the relevant Ethics Committee overseeing the study.

Research question	Methods and methodology	Methods to establish credibility and of findings	Limitations
What are the functions of expressions of value in education?	Policy discourse analysis focusing on understanding the functions of expressions of value as they appear in policy documents.	<ul style="list-style-type: none"> • Use of two methods to explore research questions. The first in the form of a policy discourse analysis which examines expressions of value in education in a policy context. The second is the exploration of the recognition of certain expressions of value in education in praxis. • Use of multiple sources of data. In the policy discourse analysis, three government reports are used. In the case study, multiple forms of evidence are collected, such as assessment guidelines, interviews with staff and publicly available documents. • Use of triangulation to increase credibility of findings. This is achieved through a further analysis of FQR in Australia's skilled migration program at sites other than the case study using publicly available information. There is also an examination of FQR in an international context. 	<ul style="list-style-type: none"> • A policy discourse analysis is a rich source of data but is only one aspect of how expressions of value in education are operationalised. Moreover, policy discourse analyses are more open to interpretation between researches than other methods which can impact the reproducibility of results. • A main source of data is a case study site which is one example of the use of expressions of value in education. To establish the transferability of findings it will be necessary to apply a similar lens to other instances of expressions of value in education. • A major limitation is that this study examines one aspect of expressions of value in education in a migration context. As a form of language, expressions of value are used in all situations that involve a discussion of value in education. There is a need for further investigations in a variety of contexts which is examined or further mentioned as when discussing the findings.
What are the origins of expressions of value as a form of currency?	Case study of FQR assessment process at site which undertakes FQR assessments to determine the features of expressions of value in education that are the subject of assessment.		
What is the specificity of expressions of value in education?	<p>Policy discourse analysis to determine whether expressions of value in education represent some real, embodied value or whether they exist as a form of credit.</p> <p>Case study of FQR assessment process to determine whether the specificity of expressions of value in education is derived from the measure of value and exists as a form of credit, or whether the assessment process recognises some embodied form of skills and knowledge.</p>		

Conclusion

Research methods and methodologies are vital aspects of any study and it is important to ensure their appropriate selection. This study uses two main methods, a policy discourse analysis and a case study of an organisation that undertakes FQR assessments for the purposes of skilled migration. These two methods have been selected because they allow an exploration of expressions of value in education as well as the collection of evidence with which to answer the research questions of this study. Multiple methods and sources of evidence also assist in strengthening the credibility and authenticity of the results. There remain important limitations and these include the need for further research to establish the applicability of the findings in other situations that involve both expressions of value in education and the recognition of foreign qualifications. The next chapter will outline the results of the policy discourse analysis and the following chapter will outline the results of the case study. The results will then be summarised before discussing the wider implications and the impact on other debates that involve expressions of value in education.

Part IV: Results

Chapter Six: Policy discourse analysis

Introduction

This chapter undertakes a discourse analysis of three Australian Government reports into FQR in order to explore it as well as expressions of value in education. The discourse analysis examines the alignment with the conceptual framework used in this study and, in particular, the first and second research questions. That is, do expressions of value in education have the same three functions as money and what are the origins of their value as a form of currency? Another important area of examination is the extent to which problems concerning FQR become intertwined with wider debates and discourses. For instance, earlier reports into FQR can emphasise its social justice and integrative aspects, a focus that gives way to the economic consequences of poor FQR arrangements in later reports.

To analyse the reports, the discourse analysis uses the tools laid out in Bacchi's approach known as "what's the problem represented to be?" or WPR approach (Bacchi, 2009, 2012). A brief outlining of the WPR approach along with salient points from the conceptual framework is provided below before proceeding to the findings of the discourse analysis. The chapter finishes with some more general points about the underpinning assumptions from the reports and how the framing of problems reflects certain positions concerning the nature of expressions of value in education.

Bacchi and What is the Problem Represented to Be?

Bacchi's "what is the problem represented to be?" (WPR) approach uses the concept of problematisation to ground the analysis of policy documents. The WPR approach proposes that in order to understand how we are governed, we need to examine the problem representations "that lodge within policies and policy proposals"

(Bacchi, 2009, p. xii). The aim is to interrogate how a problem comes about and how these problems are thought about. As Bacchi (2009) states, “the goal is to probe the premises that underpin particular problem representations” (p. xiv). The research questions and conceptual framework of this study align the underpinning problem representations in FQR and Australia’s skilled migration program to the same functions of money. Moreover, the conceptual framework suggests that problem representations concerning FQR in Australia’s skilled migration program may rely on several interconnected assumptions. These assumptions include, first, that expressions of educational value such as a qualification may indicate some intrinsic value within an individual, acting as a type of neutral veil. And second, that FQR is a process that recognises some real or actual value within a person characterised in the form of skills. The conceptual framework used in this study suggests that these assumptions may be flawed, and do not adequately account for the role of credit in expressions of value in education.

Bacchi proposes six main questions when approaching an analysis of policy documents. These questions are listed in Table 2 below. This chapter will analyse each report individually followed by a discussion of the context of each report and findings of the discourse analysis. The first question, “what’s the ‘problem’ represented to be?” will be the primary focus when analysing individual reports. This will be analysed in light of the first and second research questions, what are the functions of expressions of value in education and what are the origins of their value as a form of currency? The discourse analysis will examine how representations of the ‘problem’ in each report may be traceable to the functions of education as a form of currency. That is, where there is a problem with FQR in Australia’s skilled migration program, it is because there is a perception that education does not properly perform its functions as a measure of

value, as a store of value and as a medium of exchange. Following the discussion of individual reports, questions two through to six in Table 2 below are discussed. The aim is to demonstrate how the conceptual framework helps explain the construction of FQR in Australia’s skilled migration program as a problem.

WPR question	Goal of question
1. What’s the “problem” represented to be?	Identify implied problem representations in specific policies or policy proposals
2. What presumptions or assumptions underlie these representations of the “problem”?	Identify and analyse the conceptual logics that underpin specific problem representations
3. How has this representation of the “problem” come about?	Highlight the conditions that allow a particular problem representation to take shape and assume dominance
4. What is left unproblematic in this problem representation?	Raise for reflection and consideration issues and perspective silenced in identified problem representations
5. What effects are produced by this representation of the “problem”?	Identify the effects of specific problem representations
6. How/where has this representation of the “problem” been produced, disseminated and defended, and how could it be questioned, disrupted and replaced?	To explore the means through which some problem representations become dominant and also the possibility of challenging problem representations that are judged to be harmful

Table 2: Overview and the goal of WPR questions. (Bacchi, 2009, 2012)

Conceptual framework, the neutral veil and the discourse analysis

It is important to restate some of the arguments advanced in the conceptual framework regarding monetary theories and the specificity of expressions of value in education. As the Austrian economist Joseph Schumpeter stated, “there are only two theories of money which deserve the name ... the commodity theory and the claim [or credit] theory. From their very nature they are incompatible” (as cited in Ingham, 2004b, p. 21). This divide in monetary theories is encapsulated by arguments over whether or not money is a type of neutral veil. Arguments concerning the neutral veil can act as proxies for differing ontological understandings of expressions of value.

This study has identified two similar branches of thought in approaches to expressions of value in education. The first branch sees expressions of value in education, such as qualifications, as a “technical device” (Schumpeter, 1994 [1954], p. 277) and a representation of some asocial, objective and real value. This study aligns such perspectives with certain aspects of the education literature , such as those taken in human capital theory.

This study aligns itself with a different branch of monetary theory where expressions of value in education represent abstract value in the form of credit. Using credit theories of money as a conceptual framework, this study suggests that expressions of value in education are a type of “*assignable* trust” (Ingham, 2004c, p. 74, emphasis in original) which are used as part of a three-cornered arrangement between an individual, an authority and a third party. In the case of FQR in Australia’s skilled migration program, foreign qualifications would therefore be used to establish trust between “potentially untrustworthy strangers” in “large impersonal markets where interpersonal trust *cannot* be generated” (Ingham, 2004c, p. 74, emphasis in original). The distinction between real value and abstract value is important because the policy rationale for FQR in Australia’s skilled migration program suggests that qualifications are a neutral signifier of some intrinsic worth held by an individual. However, the conceptual framework adopted in this study suggests that such a perspective strips representations such as qualifications of their political, economic, social and cultural origins in favour of a perspectives that views them as objective and meritocratic representations of some vocationally deployable skills and knowledge.

The WPR approach suggests that when undertaking an analysis of policy there is a need to think about what lies behind problem representations. Using the research questions as a guide, there are three main areas concerning representations of FQR and

Australia's skilled migration program that are the subject of examination. The first is a conception of expressions of value in education that conforms to the same three functions as money. The second examines assumptions whether their origins as a form of currency is due to endogenous or exogenous factors. The third area looks for evidence as to whether the primary nature of expressions of value in education lies in credit relations or whether they represent some embodied quality in the form of skills, knowledge or ability.

Report 1 – 1983 Committee of Inquiry

The 1983 report by the Committee of Inquiry, *The recognition of overseas qualifications in Australia*, marks the first major federal government investigation into the issue of FQR in Australia (Hawthorne, 2015). FQR as a phenomenon preceded the report as had efforts to improve FQR's efficacy. For instance, in 1969 the Australian Government established a committee within the Department of Immigration to provide centralised guidance to governments and industry on the equivalence of overseas qualifications (Iredale, 1992). In the 1970s, Australia became a signatory to the UNESCO Conventions on the Recognition of Higher Education that attempted to create a formal process for foreign qualification recognition. However, concerns regarding FQR remained and, with increasing numbers of migrants entering Australia, the Minister for Immigration and Ethnic Affairs commissioned the inquiry. The inquiry consisted of representatives from Federal and State Governments, trade unions, professional associations and multicultural bodies. The inquiry commenced investigations in 1981 and published its final report in 1983.

There were several major findings of the report (CIROQ, 1983). First, the report identified problems with consistency in the standards for assessment across occupational areas, noting the preference given to those with qualifications from

English-speaking Commonwealth countries. Second, within many occupational groups there was a lack of adherence to the principle of procedural fairness. Third, the system for recognition was disparate and inconsistently applied across various states and professional bodies. Fourth, there was a lack of clear information about what constituted a valid standard as the basis for qualification recognition. The report made a series of recommendations to remedy the failings of FQR including improved organisation between government bodies and professional associations, the establishment of coordinating authorities to oversee FQR, and the creation of nationally consistent occupational standards.

It is important to note several features of the context in which the 1983 report occurred. Compared to later years, skilled migration was a much smaller feature of Australia's migration program. In 1983–84, 9800 migrated under the skilled migration stream, or about 14.3% of the total migration intake. By 2012, the date of the last report used in this discourse analysis, 128,973 people migrated under the auspices of the skilled migration program, or 61.4% of the total intake (DIBP, 2016). This report was published about ten years after the White Australia Policy was fully abandoned in preference for immigration policies that emphasised multiculturalism (Lopez, 2000). Consequently, the status and integration of certain ethnic groups was a prominent feature of migration discourses. The focus on inclusion and a form of ethnic pluralism manifests itself in a strong focus on equity. For instance, the report states, “wherever feasible, occupational assessments should be carried out for refugees overseas as a matter of priority” (CIROQ, 1983, p. 10). The overt concern with groups who face disadvantage, particularly refugees, is much less prominent in later investigations into FQR.

Conceptual framework and Committee of Inquiry into Overseas Qualifications

This next section discusses the 1983 report's relevance to the conceptual framework. The report describes the formation of the Committee of Inquiry in the following way:

The Hon. Ian MacPhee, the former Minister for Immigration and Ethnic Affairs stated ... when the Committee of Inquiry was set up, that he had been “concerned about the problems faced by migrants in Australia who have qualifications which are not recognised by the relevant State or Professional body in Australia and who therefore are unable to work at the jobs for which they originally trained”.

(CIROQ, 1983, p. 1)

This statement concerning the reasons behind the establishment of the Committee of Inquiry shows a problem representation with close alignment with the same three functions as money. First, as a store of value, migrants possess a set of skills and knowledge in “which they originally trained”. Second, as a measure of value, there is an assumption that their original training is of sufficient quantity or worth to entitle them to work within their profession. As a medium of exchange, a qualification entitles a person for recognition by the relevant “State or Professional body” and exchange for a licence or other form of benefit where they can work in jobs commensurate with their level of training. Moreover, a qualification acts as a form of credit because its purpose is to facilitate a relationship between an individual and another body in exchange for some form of benefit. The problem, as stated from the outset in this report, is that those with legitimate claims to some form of value, as represented by a qualification, are unable to have this claim recognised for a form of benefit.

Problem representations aligned to the three functions of money are repeated throughout the report. The following statement reiterates the problem as it is represented to be:

Among persons now resident in Australia, a number of research reports and other survey material indicate an appreciable incidence of cases where settlers have been unable to re-enter the occupations in which they originally qualified overseas. (CIROQ, 1983, p. 56)

As a store of value, migrants hold evidence of attainment in which they “originally qualified overseas”. The use of the word “qualified” suggests that the store of value that the person possesses is of an appropriate level or quantity to make their claim to “re-enter” an occupation valid. That they have been unable to do so points to a fault in education’s function as a medium of exchange. This lack of re-entrance into an occupation represents a loss to capitalise on the stores of value held by the migrant and attested to by their qualification.

The consequences of loss

Because FQR is a problem associated with value, the consequences of FQR’s inadequacies are often represented as a loss. This study proposes that as a currency, a function of education as it pertains to value is to create measures and stores of value, and it is these functions that make any representation of loss or gain associated with FQR possible. However, in describing the consequences of loss, it is important to situate the problem representations in the prevailing discourse. The focus on the negative impacts of FQR in this report is often on individuals and migrant communities. This focus aligns with the priorities associated with multiculturalism, which characterises diversity and pluralism as a source of wider value. Moreover, there is an exploration of the consequences of loss that extends beyond economic considerations. For instance, the report states that on an individual level, “the situation of immigrants with recognition problems, the question can be raised as to how far such immigrants have ‘equal opportunity to realise their full potential’” (CIROQ, 1983, p. 77). The report

also raises concerns about the impact on the welfare of individuals because “evidence suggests that the inability of immigrants to enter a trade or profession for which they are trained results in many instances in a high level of dissatisfaction” (CIROQ, 1983, p. 131).

There is similar attention given to the loss incurred by ethnic communities because of poor FQR processes. The report states that, “the status and self-image of an ethnic group are adversely affected by the absence of educated and qualified people among its members” (CIROQ, 1983, p. 70). This loss is to the extent that, “it may well be that professionals from certain cultural backgrounds should be given some additional assistance to enable them to achieve recognition and so become available to serve their communities” (CIROQ, 1983, p. 39). These statements show how the type of value under consideration is not just economic because poor FQR results in a loss of “status and self-image”. In these problem representations, education’s function as a medium of exchange extends beyond its use for an individual to gain an economic reward related to the labour market. A community and an individual can use the value of education as an exchange for an increase in its relative status. Moreover, within the discourse of multiculturalism, this is a legitimate function.

Three-cornered arrangement

The conceptual framework proposed that expressions of value in education are part of a three-cornered arrangement between an individual, an authority and a future third party. The initial relationship exists between an individual and authority, such as between a student and school or university. Often education systems produce a token as part of this relationship in the form of a qualification. A future third party judges an individual’s claim to the possession of some form of educational value by an individual based on the strength of the guarantee provided by the authority. In the case of FQR in

Australia's skilled migration program, the third party is the Australian Government, an Australian employer, an assessing authority or an Australian professional body.

It is possible to locate this three-cornered arrangement in comments referring to the preference given to qualifications from certain countries. The following statement outlines the inconsistencies in recognition arrangements for qualifications from different countries:

The acceptance of all accredited qualifications from some countries and rejection of all others from other countries (usually non-English speaking) tends to be characteristic of less highly developed occupational groups without resources to make more sophisticated assessments. However, paradoxically the practice of accepting all qualifications from the United Kingdom is still retained ... The disadvantages of this practice are that it is clearly discriminatory and takes no account of variations in study or training courses amongst institutions or variations in the competence of individuals. On the other hand it may be argued that the institutions and occupations in the United Kingdom are so similar to those in Australia that it would be wasteful to examine all qualifications separately. (CIROQ, 1983, p. 96)

The above statement shows how a qualification awarded in the United Kingdom generates higher rates of acceptance than qualifications from other countries, particularly non-English speaking countries. The problem representation is that the preference for some qualifications over others is "clearly discriminatory and takes no account of variations in study or training institutions or variations in the competence of individuals". However, in the terms of this study, such a position occurs because certain "occupational groups" bestow higher levels of credit in the outcomes produced in countries such as the United Kingdom. There is a judgement of the claim made by the individual based on the strength of the certification provided by the awarding authority. The report shows how authorities that emanate from the United Kingdom have relatively stronger credit, while those from non-English speaking countries are

subjected to higher rates of rejection. Such judgements demonstrate that it is the credit generated by qualifications from authorities based in certain countries that is the focus of recognition, rather than the substantive knowledge held by an individual at any given time. That is, it is not necessarily the content of a course, or an individual's demonstrable competence, it is the status of the awarding authority that is the subject of recognition in FQR.

This statement also suggests it is a core problem that certain occupational groups are not treating expressions of educational value as if they are objective and neutral signifiers of some real value held by an individual. Instead, the report shows how the FQR process is subject to a range of biases and influences. Such an occurrence is antithetical to the position that qualifications act as neutral veils that indicate some intrinsic worth held by an individual. In the report, the awareness of the subjective nature of recognition arrangements encourages the recommendation of corrective action. The authors of the report argue that the recognition of the value of education should be a decision based on a form of objective criteria:

While recognising that there are arguments both for and against reciprocity, the Committee believes that Australia should move towards a system whereby, in this matter, all countries would be treated on an equal basis. (CIROQ, 1983, p. 42)

This statement highlights how the problem representation refers to a need to treat all qualifications on “an equal basis”, unbound by judgements on the relative worth of a country's education system. The report explores how this can occur by focusing on measures of value as a tool of reform.

Measures of value

One of the strongest recommendations of the 1983 report was the creation of clearer standards on which to base FQR decisions:

The task of assessing overseas qualifications would be facilitated by a clear definition of the standards of practice applicable in each occupation provided by those responsible for controlling entry. It would be desirable for entry requirements and standards of practice to be established on a national basis so that approved qualifications are fully portable in all States and Territories. (CIROQ, 1983, p. 102)

The problem above, as it is represented to be, aligns to the function of education as a measure of value. The conceptual framework outlines how measures of value play a vital role in establishing what constitutes valid representations of value in education. It is through an attachment to an agreed measure that expressions of value can occur and become commensurable. The statement above describes how one problem is the lack of an agreed measure across Australia which establishes what constitutes a “standard of practice”. As Simmel (1978 [1900], p. 146) writes of money, a standard performs the function of enabling the value of disparate and essentially unique entities to become comparable by establishing “a proportion between quantities, not by direct comparison, but in terms of the fact that each of them relates to a third quantity and that these two relations are either equal or unequal”. In recommending “a clear definition of the standards and practice” for each occupation, the report seeks to establish a measure of value on “a national basis” so that qualifications can have recognition throughout the country. Moreover, as a solution to the problem, the measure of value creates the possibility of neutrality and objectivity where “bodies authorised to carry out the assessment of overseas qualifications” can be “as objective as possible in carrying out their task” (CIROQ, 1983, p. 100).

Another manifestation of the search for an objective measure of value is found in comments approving the creation and use of statistical measures to delineate occupational roles:

The Department of Employment and Industrial Relations and the Australian Bureau of Statistics are jointly developing a system known as the Australian Standard Classification of Occupations (ASCO) which will provide information on the entry requirements for each of the occupations listed. The system will be computer based and will be updated at regular intervals. The development of such a system would be of further assistance to immigrants to Australia and to Australian Immigration Officers overseas who advise prospective immigrants of the entry conditions and the work involved in a particular occupation. (CIROQ, 1983, p. 86)

The report goes on to say that the ASCO “could form the basis for an examination of the current standards applying and credentials demanded, and of the bodies involved in setting and assessing such standards” (CIROQ, 1983, p. 94).

These statements further point to the problem as it is represented to be in this report that expressions of value in education, such as qualifications, are not acting as a type of neutral veil. Consequently, measures of value in the form of occupational standards are sought to correct and align expressions of educational value with some notion of skill, or occupational standard. The focus on an objective measure of value offers the possibility of moving away from a situation where the basis of recognition decisions are features that are extrinsic to the individual, such as the awarding country of a qualification. It is a pursuit that reflects an orthodox approach to the nature of value of education, where the primary source of value in education originates from what an institution teaches and what an individual learns. However, a suggestion of this study is that the measures of value in education are essentially a measure of abstract value, denominated in various forms such as occupational standards, and that the realisation of this abstract value is embedded in credit relations. While the establishment of standards may assist in removing inconsistencies and blatantly discriminatory practices, they will not remove the primacy of credit in the nature of expressions of value produced by

education systems. Even if standards are clearer and more consistent, the claim that a person has to a possession of those standards must still be trusted before they can be used as a medium to facilitate any exchange.

Report 2 – 2006 Joint Standing Committee on Migration Report

Unlike the 1983 report, the 2006 Joint Standing Committee on Migration (JSCM) report *Negotiating the maze: review of arrangements for overseas skills recognition, upgrading and licensing* was the result of the federal parliamentary inquiry system. Consequently, its membership consisted of members of parliament instead of members of the community. It is a report that examined “the structural barriers that hamper the effective recognition of skills of those trained overseas” (JSCM, 2006, p. x). The report studied the various FQR processes and licensing arrangements with a particular focus on standards, the barriers to FQR, and the deleterious effects these barriers cause.

By the time of this report, skilled migration had become the major stream of Australia’s migration intake. Figure 11 shows the intake of migrants into Australia according to different streams from 1983/84 to 2016/2017. It shows that from 1983 to 2000, the family stream was the largest component of the Australian migration program. However, from 2001 onwards the skilled stream of the migration program had become the largest component of the migration program. This increase was due to a policy change by the Australian Government which gave preference to migrants who could demonstrate that they were “skilled” (Hugo, 2014b).

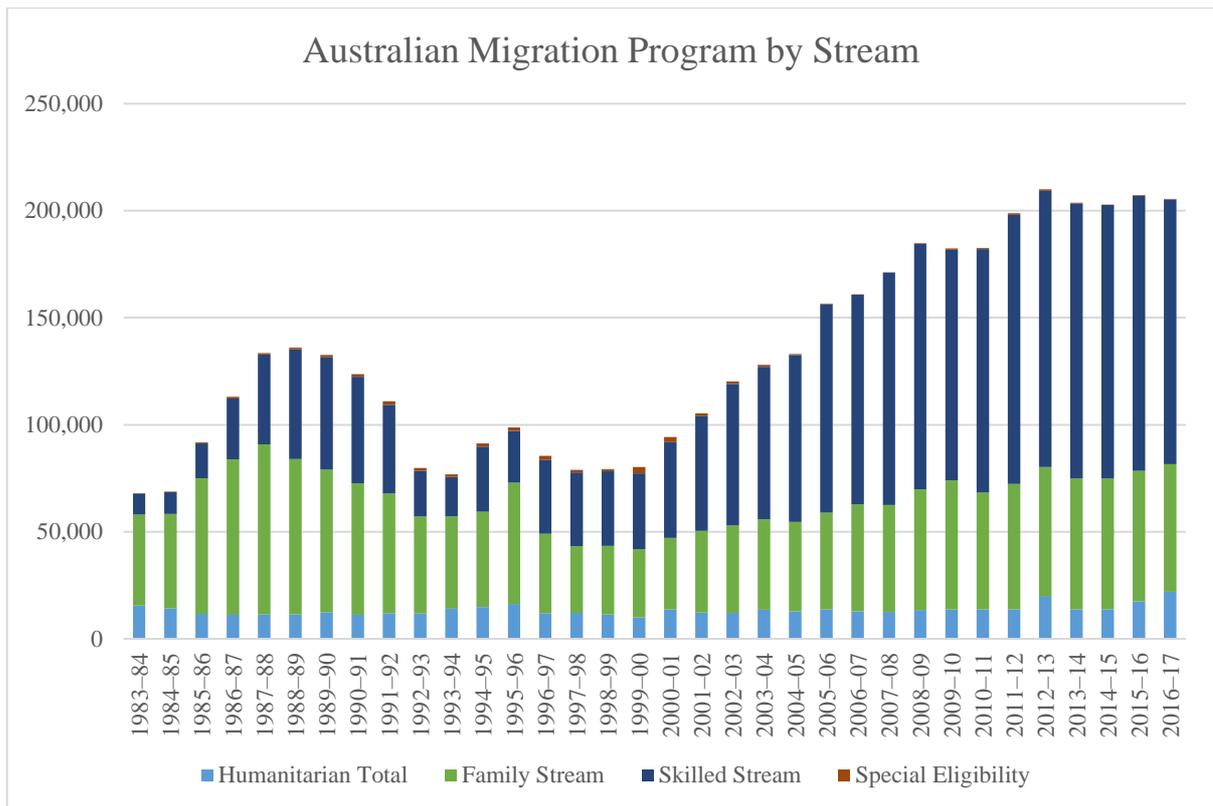


Figure 11: Australia Migration Intake by Stream, 1983 – 2016. Adapted from Historical Migration Statistics (2016). Department of Immigration and Border Protection. © Commonwealth of Australia

FQR had also become a central feature of the majority of migration applications. The report explains that in the 1990s a change in immigration policy occurred that made assessment of pre-application skills mandatory for a skilled migration application. This effectively meant that almost every person submitting a migration application under the skilled stream needed to present documents to a designated assessing authority which assessed their qualifications. According to a submission from the Department of Immigration, this feature has “been recognised as world’s best practice” and ensures “that only those people who have the necessary qualifications and skills required to work in their nominated occupation are successful” (JSCM, 2006, p. 75).

The report also shows how a wider economic imperative comes to displace the discourse of multiculturalism. The change in discourse means a move away from references to the status of ethnic communities that is found in the 1983 report, towards a

discourse that emphasises how the “migration of skilled personnel to Australia enhances the Australian labour force and contributes greatly to the Australian economy” (JSCM, 2006, p. ix). This shift manifests itself with problem representations that focus on the needs of industry and the impact of poor FQR on commerce. For instance, this report was undertaken during the mining boom in Australia and the threat of skills shortages was represented as “having a serious impact on plans for a number of major mining ventures” (JSCM, 2006, p. ix).

The report made fifty-five recommendations aimed at reducing complexity and increasing the efficiency of recognition arrangements. Key recommendations included: improved policy coordination; ongoing research on the use of foreign qualifications in the workplace; the provision of clearer information on occupation-specific requirements; and the minimisation of red tape and process duplication (Hawthorne, 2015; JSCM, 2006).

The conceptual framework and 2006 report

The 2006 JSCM report shows how the problem as it is represented to be aligns to the same three functions as money. As a consequence of the problem, the report details barriers to the realisation of the potential value held by skilled migrants. The following statement illustrates the concern:

The migration of skilled personnel to Australia enhances the Australian labour force and contributes greatly to the Australian economy. However, an overly bureaucratic system that impedes the timely arrival of much needed skilled labour does not assist industry in providing economic growth for Australia. (JSCM, 2006, p. ix)

In this statement, migrants hold stores of value as indicated by their status as skilled. The store of value enhances “the Australian labour force and contributes greatly to the

Australian economy”. A central problem, as it is represented in this statement, refers to impediments to education’s function as a medium of exchange. The result of “an overly bureaucratic system” is an inability for the token of a qualification to properly perform its function as a medium of exchange, which is detrimental to an individual and also “does not assist industry in providing economic growth”.

Other statements reiterate problem representations that show an alignment with the same three functions of money:

skills recognition processes play a crucial role in facilitating the engagement of migrants and overseas trained Australians in employment commensurate with their ability, thereby maximising their productive potential and contribution to the Australian economy. (JSCM, 2006, p. 1)

The role of the “skills recognition processes” (FQR) is to use qualifications (stores of value) to facilitate and engage “migrants and overseas trained Australians in employment” (medium of exchange) that is “commensurate with their ability” (measure of value). When FQR cannot properly perform these functions, it is a threat to the purpose of maximising an individual’s “productive potential and contribution to the Australia economy”.

In the following statement the same problem is represented:

reports have identified the problem of lost productivity due to various barriers to timely recognition of skills, occupational licensing and employment of overseas trained individuals. The problem is compounded by the current shortage of skilled labour in Australia. (JSCM, 2006, p. 2)

The “lost productivity due to various barriers to timely recognition” is a problem that refers to the function of education as a medium of exchange. Poor recognition procedures mean individuals cannot gain occupational licensing or employment. FQR’s role is to assist in the facilitation of an arrangement between an individual and third

parties. The failure of this function of education as it pertains to value is a threat to wider economic prosperity made more pressing by the “current shortage of skilled labour in Australia”.

Consequences of loss

In the 2006 report, the apparent skills shortage occurring during the period of this report is the source of repeated concern. Indeed, it is seen as a major threat to the functioning of the wider economy. Whereas the 1983 report concerned itself with the consequences of lost value as it affected migrant communities and equity groups, such as refugees, the major concern of the 2006 report is the loss of value in the wider economy:

Any difficulties being experienced ... in skills recognition, upgrading and licensing could have a significant economic and social impact, given the migration numbers involved. This represents a potential “wastage of skills” for the individual and the Australian community as a whole. (JSCM, 2006, p. 4)

It is the notion of human capital that is mobilised in order to explain the loss. For instance, the report details how the Department of Immigration provided:

... empirical research evidence of the extent of underutilisation of the human capital already delivered and to be delivered through the migration program. Given that at present 25% of the workforce is comprised of migrants, and the fact that migration alone will keep Australia’s working age population growing past the end of the next decade, it would be reasonable to assume that the extent to which Australia maximises the use and realises the productive potential part of its diverse workforce would impact on its economic growth and competitiveness in the global market. (JSCM, 2006, p. 5)

As a concept, human capital first emerged in the 1950s to explain the economic returns on investment in education (Becker, 1962; Mincer, 1958). It has since expanded beyond

this conception and is now associated with a position regarding expressions of value in education where these expressions represent a set of skills and knowledge an individual acquires during their educational experience. The problem representations in the above statement rely on a conception of expressions of educational value as a type of neutral veil. That is, the reports base problem representations on the idea that expressions of educational value directly represent some objective and neutral intrinsic worth held by a person. Consequently, poor FQR results in the loss of some “productive potential” directly referenced by a qualification.

The association of qualifications with some real store of value within an individual can also be found in the following statement:

a number of skilled migrants are in jobs that do not match their qualifications or in jobs that do not recognise their qualifications. The data indicate that, for example, 20 per cent of skilled independent migrants and their migrating spouses do not use their qualifications in Australia, compared to only eight per cent not using their qualifications in their home countries. (JSCM, 2006, p. 16)

The problem represented in this statement refers to the underutilisation of qualifications in the workforce. The migrant holds qualifications (stores of value) that are of a certain standard (measures of value) that do not match their jobs (medium of exchange). When the report indicates that 20% of migrants and their spouses do not use their qualifications compared to 8% in their home countries, the concern is there is a loss of value directly referenced by the qualification, and this loss affects the wider economy. In this problem representation, a qualification functions like any other commodity where it is possible to exchange a commodity for some income, much in the same way any other commodity can be exchanged for financial benefit. However, the suggestion of this study is that while a qualification does take commodity-like form, the primary source of its value comes in the establishment of credit relations. A qualification is a

form of “*assignable* trust” (Ingham, 2004c, p. 74, emphasis in original) and the underutilisation of foreign qualifications commensurate with their apparent face value is a failure of expressions of value in education to properly perform their function as a type of credit. When it is stated that there is a difference of 20% of migrants not using their qualification in Australia “compared to only eight per cent not using their qualifications in their home countries”, this difference measures the relative use of qualifications as a form of credit between two cohorts. The problem as it is represented to be in the report does not recognise the role of credit and instead locates educational value as some form of intrinsic worth held by a person, denominated in a measure indicated by the qualification. In this way, an underutilisation of a qualification becomes much the same as wheat left in a silo or another commodity that has not been capitalised upon. It is important to point out that the inability for migrants to attain employment commensurate with the level of non-migrants is an issue of deep concern. However, the report seems to misunderstands the nature of expressions of value in education and instead of locating this value as a type of abstract value embedded in credit relations, it instead conceptualises the problem as an underutilisation of some neutral, objective form of value usually conceived of in the form of “skills”.

What is meant by value?

One of the main disagreements in monetary theories relates to the type of value that money represents. Orthodox positions describe money as symbols that “*directly* represent real commodities” (Ingham, 2004c, p. 17, emphasis in original). Credit theorists, however, describe the value of money as a form of abstract value embedded in credit relations.

A version of this conflict regarding the essential nature of value can be found in the reports when discussing the notion of “skills”. As an inquiry related to the skilled

migration program, the problem representations show that there is an assumption that the type of value that FQR recognises is in the form of “skills”. The Committee writes the following concerning “skills”:

As the Committee was asked to inquire into overseas skills recognition, upgrading and licensing, it is important to clarify what is meant by “skills” in this context. The Committee took this term to encompass looking at the recognition process for overseas qualifications—educational attainment represents a measure of skill—through the various Australian assessment and licensing bodies and at several other skills sets that play an important role in this process. (JSCM, 2006, p. 9)

The statement above describes problem representations where “educational attainment represents a measure of skill” and the word “skill” describes the category of education’s value. By substituting the word “skill” with the word “value”, the meaning becomes more accurate for the purposes of this study: “educational attainment represents a measure of *value*”. In this context, “skills” can therefore be a surrogate for the term “value”.

However, skills are not the only form of value in education. Value has many meanings beyond the economic use of the term. Value also has an ethical dimension, as in one’s values. Value can also mean standards or principles of behaviour. It is possible to explore the many facets of the term “value” using problem representations from the report. For instance, the following statement explores the tension between the perceived need for convenient FQR arrangements and the screening of migrants.

The need to balance rigorous accreditation procedures that ensure the level of skills of those coming into the country is equivalent to Australian quality and safety standards with the call for streamlined, fast-tracked arrangements is one of the challenges facing Australian policy makers. (JSCM, 2006, pp. 5-6)

This statement again shows how problem representations align to the same three functions as money. There is a need to:

balance rigorous accreditation procedures that ensure the level of skills [*measures of value*] of those [*stores of value*] coming into the country is equivalent to Australian quality and safety standards [*measures of value*] with the call for streamlined, fast-tracked arrangements [*medium of exchange*].

Indeed, if some words are replaced with a surrogate term the different dimensions of value in education can become clearer. Using the above statement, the two phrases relating to measures of value, “level of skills” and “quality and safety standards” have been replaced with the word “values”. The sentence becomes:

The need to balance rigorous accreditation procedures that ensure the *values* of those coming into the country is equivalent to Australian *values* with the call for streamlined, fast-tracked arrangements is one of the challenges facing Australian policy makers.

The possible ethical dimensions of value thus become clearer. This is important to consider because behind the language of skills and economic productivity lies the use of education systems to ascertain certain personal qualities and traits. Education systems have a long history as a means to create certain types of citizens. For instance, both Durkheim (1979) and Bourdieu (1977, 1986) show, in very different ways, how education systems can act as way to produce, and reproduce, types of individuals. Bowles and Gintis (2002) in their research, sometimes referred to as control theory, show how education can be a means to produce a docile workforce and entrench class division. What becomes apparent when using the term “values” as a surrogate for words such as “skills” and “standards” is how the functions of education as it pertains to value are also applicable to conceptions of value outside of the economic realm. Moreover, the problem representations in this report obscure such evaluations of the values of

migrants behind a flawed belief that expressions of value in education are objective, neutral meritocratic signifiers of some productive capacity in an individual.

This is important to discuss in the context of Australia's skilled migration program. The use of education outcomes as a means to select migrants arose as a seemingly objective way to select migrants. Compared to the White Australia Policy that preceded it, FQR in Australia's skilled migration program is depicted as a meritocratic and apolitical selection process. Within the report there is an emphasis on the objective characteristics of FQR which "evolved from a need to determine the quality and comparability of skills and qualifications obtained in countries outside the traditionally accepted British education and vocational training systems" (JSCM, 2006, p. 75). However, the ostensibly objective nature of FQR can mask a series of complex power relations. The acquisition of education outcomes is subject to an array of social, economic, political and cultural forces that extend beyond any objective and meritocratic achievement. Concealed behind the rhetoric of human capital and the selection of migrants based on "skills" are value-laden decisions about an individual. As any store of value is bound to an individual, all the social, political, economic and cultural forces that went into the production of the education outcome are present when using FQR to make judgements about an individual and to determine whether they are able to migrate to Australia. The problem as it is represented to be in this report is an economic problem, and in doing so all the other types of values that exist within education systems become hidden or disavowed, in favour of a position that views educational outcomes as neutral expressions of some economic value, free from the social and power relations that lie at their core.

Report 3 – 2012 Committee on Health and Ageing Report

Like the 2006 report, the 2012 report *Lost in the labyrinth: report on the inquiry into registration processes and support for overseas trained doctors* occurred under the auspices of the federal parliamentary inquiry system. Unlike the previous two reports used in this discourse analysis, the 2012 report focuses on a single occupational area, the medical workforce and, specifically, international medical graduates (IMG). At the time of the report, Australia had become increasingly “reliant on IMGs to address medical practitioner workforce shortages, particularly in regional, rural and remote communities, where they make up over 40% of the medical workforce” (HRSCHA, 2012, p. ix). The report investigated some of the many problems that IMGs experience when they come to practise in Australia.

The 2012 report noted similar concerns as the 1983 and 2006 reports, describing a labyrinthine process for registration and accreditation, lacking in efficacy and accountability. The report highlighted issues with the defensibility of standards used for assessment, the duplication of recognition processes and the persistent barriers to recognition. The report made forty-five recommendations aimed at shortening delays, streamlining regulatory and accreditation processes, and promoting a uniform, consistent approach to recognising the qualifications of IMGs.

During the time of this report, as Figure 11 shows, skilled migration remained the largest stream of the migration intake. What had changed since the 2006 report was a movement towards more temporary skilled migration pathways. Whereas the past two decades of Australian skilled migration policy had focused on permanent migration, by 2013 74% of all skilled migrants came under temporary arrangements where they were sponsored by an employer (Hawthorne, 2015). Because of the temporary nature of most of the sponsored work arrangements (at least initially as many temporary migrants go

on to become permanent residents), and the highly regulated nature of medical occupations, a major focus of the report was examining ways to improve the speed and accuracy of FQR arrangements in order to meet pressing workforce needs.

Conceptual framework and the 2012 report

The 2012 report describes the problem of FQR and internationally trained medical graduate doctors (IMGs) as follows:

the challenge is to establish a system which enables suitably qualified and experienced medical practitioners to work in Australia, while also protecting the health and wellbeing of the Australian public. With the latter in mind, it is important that IMGs undergo a thorough screening process to ensure that they meet the professional standards needed to practise medicine in Australia. (HRSCHA, 2012, p. 1)

In this statement, the problem as it is represented to be, aligns to the same three functions as money. IMGs represent a store of value as evidenced by their status as “qualified and experienced medical practitioners”. There is a description of the value that they possess as suitable and needing to “meet the professional standards”, indicating measures of value. As a medium of exchange, the FQR process enables a person to “work in Australia” and “to practise medicine in Australia”.

One of the salient features of this report is the extent to which the value held by an IMG, and the need to enable the deployment of this value, becomes juxtaposed against health and safety considerations.

The Committee does not support any reduction in the high clinical standards [IMGs] are required to meet. Rather, in formulating the ... recommendations the fundamental aim has been to reduce red tape, duplication and administrative hurdles faced by IMGs whilst ensuring that the Australian standard continues to be rigorously applied. (HRSCHA, 2012, p. xi)

The problem as it is represented to be, is that there is a need to improve the functions of education as a medium of exchange by reducing “red tape, duplication and administrative hurdles” while preventing any diminution of measures of value that manifest themselves in the form of “high clinical standards”. This problem representation shows how other discourses, such as health and safety, can become intertwined with a migration discourse when exploring the issue of FQR in Australia’s skilled migration program.

Regulation and credit

The role of credit in the nature of value in education is a focus of the 2012 report, manifesting itself in a discussion of the different regulatory bodies involved in FQR arrangements of IMGs. As the report explains, a prominent feature of the Australian health system, and particularly medical specialist occupations, are the licensing regimes and regulatory functions performed by different government and non-government organisations. As the report makes clear, the regulatory regime in Australia is highly complex. An IMG wishing to practise in Australia is subject to what the report describes as “a system lacking in efficiency and accountability, and importantly, one in which IMGs themselves often had little confidence” (HRSCHA, 2012, p. x). It is a problem that results in “discrimination” and “anticompetitive practices” (HRSCHA, 2012, p. x). Of particular target are the practices of medical specialist colleges who regulate those who can practise certain professions.

Evidence has been provided to the Committee suggesting that specialist medical colleges are often not held accountable for their decisions, with a perception that some specialist colleges are “boys clubs” with a “closed shop” mentality which discriminate against IMGs. (HRSCHA, 2012, p. 103)

The above statement about “boys clubs” and a “closed shop” demonstrates the role of credit in expressions of value in education. The qualifications that an education system produces act as ostensibly neutral devices whose attainment comes by seemingly meritocratic means. However, it is through certain licensing and regulatory bodies that individuals are able to practise in a profession. The problem as it is represented to be in the report is that regulatory bodies can engage in exclusionary practices by using arcane and unfair systems that make recognition decisions based on something other than objective criteria.

The report outlines many problems caused by specialist medical colleges. One problem relates to education’s function as a medium of exchange where inefficiencies and the lack of transparency results in the inability for migrants to work in the health sector and for the Australian population to benefit from their labour. Another problem refers to the credibility of regulatory bodies. The report makes numerous recommendations for regulatory bodies to “develop clear, evidence based criteria by which comparability of training programs can be assessed” (HRSCHA, 2012, p. 88). These recommendations emanate from a perspective that views the primary source of the value of the expressions produced by education systems as coming from something intrinsic to the individual. However, the type of value created by certification regimes may be, first and foremost, a type of credit. When the report recommends the development of “clear, evidence based criteria” as the basis for a recognition decision, the type of criteria they are measuring may be whether or not a person deserves the credit of the third party, which in this instance is the specialist medical college. The transparency that is recommended thus refers to making clearer what a third party will accept as a token of credit, which “training programs can be assessed”, to facilitate a medium of exchange.

The primacy of credit in FQR arrangements is evident in the uneven conventions that preference certain countries over others. Those who have medical qualifications from the United States, United Kingdom, Ireland and New Zealand gain a higher level of recognition. The Australian Medical Council (AMC) states this model recognises:

there are a number of established international screening examinations for the purposes of medical licensure that represent a “competent” assessment of applied medical knowledge and basic clinical skills to a standard consistent with that of the AMC examination for non-specialist registration. (HRSCHA, 2012, p. 71)

This statement aligns the problem as it is represented to be to the same three functions as money. As a store of value, medical qualifications indicate a person is “competent”. As a measure of value there are “established international screening examinations” to a “standard consistent with that” of the Australian system. As a medium of exchange, the process is used “for the purposes of medical licensure”.

The preference of some countries over others, however, is clearly discriminatory. As one doctor stated to the Committee:

What [is] so special about doctors trained in the USA, UK, Canada and NZ? Isn't [it] that medical knowledge is a universal thing, regardless of language, colour, country status, the biochemical principles, human anatomical landmarks, mode of action of medications, types of bacteria and viruses, etc. are all the same wherever you are on Earth ... Therefore there shouldn't have boundaries in categorising and assessing competency of an IMG regardless of country of origin. (HRSCHA, 2012, p. 72)

It is a point that demonstrates how the value of tokens such as qualifications emanates from credit relations. It is the status of the authority, in this instance the medical schools and regulatory bodies from English-speaking Western countries, that forms the basis of recognition. It is not some intrinsic value in an individual that is recognised, but the

word of another authority. Qualifications are like modern day letters of introduction where the awarding authority vouches for the provenance of an unknown individual. Regardless of the fairness of the situation, and the argument that this is an unjust arrangement is strong, what is recognised is the educational provenance of a person. There is a tacit acknowledgement and acceptance of this situation. For instance, there is a suggestion to extend favourable FQR arrangements to other countries “particularly those in Western Europe ... which also have very high standards of medical education and training” (HRSCHA, 2012, p. 72). The argument is not that making FQR decisions based on trust and the educational provenance of a person is invalid, just that it is fairer to extend the custom, particularly to “those in Western Europe”.

Measures of value

Similar to the other two reports in this discourse analysis, recommendations from the 2012 report outline a need to establish occupational standards for use in the FQR assessment process. The problem presents itself with IMGs in the form of a disjuncture between what the occupational role requires of an individual and what occurs during an assessment process. The problem representation is evident in the following two statements:

Evidence to the Committee suggests that college examinations generally assess IMGs at the level of competence expected of an Australian-trained medical graduate entering the relevant specialist medical college training program. Specifically, IMGs who have acquired significant specialist experience in their home countries have been frustrated by the target level of the college examinations. (HRSCHA, 2012, p. 94)

One particularly illustrative example of the type of problems faced by IMGs was a specialist who despite being highly regarded overseas was forced to sit a basic

exam for his field. There was a textbook listed as a study guide – he was the author! (HRSCHA, 2012, p. x)

The problem as it is represented to be here is that highly trained professionals must sit examinations based on a body of knowledge aligned to that of a graduate, and that the “target level” of such examinations is inappropriate. There are several important points regarding this problem representation.

First, the process of FQR for medical doctors is slightly different from other occupations because some doctors are required to sit an examination as part of the FQR process. In the skilled migration program, most other assessing authorities do not require an examination and rely solely on a foreign qualification as part of the FQR process (JSCM, 2006). Depending on the specialty and the country of origin, medical doctors may be required to sit an examination in order to attain either a provisional or full licence. This means that what the FQR process recognises is not based solely on a token like a qualification. The token may establish eligibility to sit an examination, or access to a provisional licence. Often, a further testing regime is used by regulatory authorities before granting a full licence. The problem as it is represented to be refers to whether the body of knowledge which constitutes the standard is appropriate as part of the examination regime.

Second, the issue of examination standards relates to problems aligned to the function of education as a measure of value. The problem as it is represented to be in the above two statements is that the body of knowledge used in the examination does not align to the trained and skilled status that some IMGs possess. The problem here refers to the inappropriateness of the denomination used in the measure of value. The consequence is that the measure of value cannot properly perform its role in the establishment of credit relations. Due to the inappropriateness of the measure of value,

the other functions as a store of value and as a medium of exchange cease to operate properly. Because the measure is seemingly inappropriate, it becomes impossible to identify the validity of the store of value attributed to the individual. Because the validity of the store of value remains uncertain, the qualification's function as a medium of exchange cannot occur and the individual cannot access a licence.

There is an important distinction to make regarding the standards used in the examination. The primary purpose of the measure of value is not to represent some objective body of knowledge. The primary purpose of the measure of value is in its use in establishing credit relations between an individual and a third party, which in this instance is between an IMG and a professional association or a licensing authority. The specificity of value in this instance is *abstract* value embedded in credit relations. The body of knowledge is important only insofar as it helps achieve the aim of establishing trust in the individual and facilitating a medium of exchange. Consequently, the situations outlined in the statements above are sub-optimal, or even ridiculous, because individuals who clearly qualify for credit because they have "significant specialist experience in their home countries" or they are an author of a textbook, are subject to an inappropriate "level" of examination which uses a measure of value not appropriate for the level of credit they seemingly possess.

What is the problem represented to be?

The final section of this chapter more explicitly addresses questions two to six listed in Table 2 and posed in Bacchi's WPR approach. From the analysis of the three government reports, it has been shown that the problem representations regarding FQR in Australia's skilled migration program closely relate to the same three functions as money. In the following section, the focus is on understanding the logics behind the emergence of the problem representations and the effect this has on the debate

concerning FQR in Australia's skilled migration program. Moreover, using Bacchi's questions as a guide, it is possible to make more general observations about the nature of value in education and how perceptions, and even misperceptions, can shape policy outcomes and the frame of policy debates.

What presumptions or assumptions underlie these representations of the “problem”?

Bacchi argues that in answering questions regarding the presumptions or assumptions held by policymakers, we are not necessarily interested in their beliefs or identifying biases. Instead, the task is to identify what makes problem representations possible. As Bacchi writes, the goal is “to identify and analyse the conceptual logics ... the meanings that must be in place for a particular problem representation to cohere or to make sense” (Bacchi, 2009, p. 5). In this instance, it is not the problems with FQR that are the focus, such as its apparent inefficacy, it is the presumptions and assumptions that make it possible for FQR in Australia's skilled migration program to be a problem in the first place.

At the core of the problem representations is a particular position regarding expressions of value in education. The following comment from the 2006 report is indicative of the position taken in all three reports:

[FQR] processes play a crucial role in facilitating the engagement of migrants and overseas trained Australians in employment commensurate with their ability, thereby maximising their productive potential and contribution to the Australian economy. (JSCM, 2006, p. 1)

In this statement, the type of value FQR recognises is largely economic which has some productive potential in the workplace. It relies on an ontological perspective that views the expressions produced by education systems as referencing some form of actual or

real ability within an individual. That is, the type of value that tokens such as qualifications specify is objective, meritocratic, and embedded in a notion of “skills”.

There are several interconnected presumptions and assumptions that enable the problem representations in the report to cohere or to make sense. First, the assumption in the reports is that expressions of educational value are a type of neutral veil. This perspective aligns with the certain positions in the education literature that views educational experiences as valuable largely because of what an institution teaches, and an individual learns. From such a perspective, in order to recognise the real value that a qualification represents, the symbol of the qualification is largely unimportant and “must be discarded just as a veil must be drawn aside if we are to see the face behind it” (Schumpeter, 1994 [1954], p. 277). The presumption is that what FQR recognises, therefore, is some actual ability or skill within an individual.

Second, the assumption is that educational outcomes, such as a qualification, take on commodity-like forms because “as a symbol, it can *directly* represent real commodities” (Ingham, 2004c, p. 17). That is, a qualification has the same properties as a commodity because the nature of the value they directly represent is also a commodity, conceptualised as a set of skills. However, skills is a contested term and there are many arguments that show rather than describing some commodity-like set of abilities, skills is actually “a social product, a negotiated identity” (Tilly, 1988, p. 453). The assumption in these reports is that rather than being a social construct or an embodiment of power relations, the nature of expressions of value produced by education systems is as a natural and objective phenomenon that has “productive potential” in the workforce.

Third, the reports take a position where expressions of educational value are a legitimate, neutral and meritocratic means to sort and rank migrants. Ultimately, such a

perspective supports the policy rationale that educational outcomes are also a fair and just way to determine who can participate in the migration process. Moreover, such an assumption allows policymakers to persist with a belief that educational outcomes are free from the discriminatory practices that existed in previous iterations of migration selection regimes, such as the White Australia Policy.

The conceptual framework outlined in this study suggests these assumptions are flawed and may not be able to fully account for the role of credit in constructions of value in education. Consequently, expressions of value in education may not be a neutral veil that acts as a symbol that directly represents a commodity-like type of value in the form of skills. Instead, it may be better to characterise the type of value measures of value and stores of value in education refer to as abstract value embedded in credit relations. The assumptions and presumptions in these reports align to certain positions regarding the nature of expressions of value in education, like those in human capital theory, which can downplay or elide the role of credit in education systems and constructions of value in education.

How has this representation of the “problem” come about?

Bacchi writes that an objective of the WPR approach is to raise how key concepts have become legitimate and highlight the conditions “that allow a particular problem representation to take shape and to assume dominance” (Bacchi, 2009, p. 11). Central to the problem representations in the three reports is a belief in the validity and reliability of using educational outcomes as a means to sort, rank and select migrants. It is accepted, mostly without question, that educational outcomes are valid representations of some form of intrinsic value within a migrant, and where there are problems, they manifest themselves in an inability to properly recognise this value.

The positioning of educational outcomes this way relies on a certain perception of what measures of value in education actually measure. While the problem representations often focus on the suitability of different measures used for the purposes of FQR, they do not question whether an objective measure of value actually exists. For instance, the 1983 report makes the following statement regarding some of the limitations of using “basic formal qualifications” (CIROQ, 1983, p. 90) to make judgements regarding the value purported to be held by an individual:

A number of individuals who submitted evidence to the Committee felt that this emphasis on the basic formal qualification was undesirable as it did not take account of experience or further training which may have been completed later. As one submission from an Engineer who had failed to gain recognition for his qualification pointed out: “I qualified as a Mechanical Engineer in 1958, which leads me to wonder how any feasible decision can be arrived at when comparing my qualification with those currently being obtained”. (CIROQ, 1983, p. 90)

Each report contains a similar comment. However, despite noting the limitations of using qualifications as a proxy for an individual’s value, every report makes the same recommendation that there is a need to find a suitable and objective standard on which to base FQR decisions.

In the terms of this study, there is a lack of questioning about specificity of the value that measures of value enable measurement of. This is important because, adapting what Keynes writes of money, a measure of value is the “primary concept” (1958 [1930], p. 3) of any theory on the nature of value in education. A measure of value establishes both validity and relativity. It is through a connection to the measure of value that valid and commensurable expressions of educational value can occur, and the phenomenon of FQR becomes possible. For instance, in the statement above, there were many examples where FQR “did not take account of experience or further training

which may have been completed later”. This type of work experience and education was discounted because an organisation that undertook FQR ignored the potential worth of these experiences due to its lack of attachment to an accepted measure of value.

What these examples show is that it is through an ontological commitment to the idea that measures of value can capture the full value of an educational experience that these problem representations come about. Consequently, when there are problems with FQR it is because the measure of value is not functioning properly, as opposed to a questioning of whether the measures of value in education can ever capture the type of value that these reports suggest that they can. Because of a certain understanding of expressions of value in education, all three reports show a continued search to find a new or updated measure of value, usually in the form of occupational standards, that will adequately capture the objective and meritocratic value they presume FQR exists to recognise. The conceptual framework outlined in this study suggests that such a search will continue to be futile because the objective, meritocratic and real form of value that it is assumed expressions of value in education directly represent does not exist.

What is left unproblematic by this representation of the “problem”?

What is left unproblematic in these problem representations is that the creation of any standard in the context of FQR, regardless of its composition, will likely be, first and foremost, a standard that outlines what is required for a third party to bestow a benefit, a bestowal that is always embedded in credit relations. As outlined in the conceptual framework for this study, a third party makes a judgement of an individual based on the strength of the guarantee provide by an authority. What a third party like a professional association “recognises” in the process of FQR is the status of the awarding authority listed on the qualification, a recognition that is based in credit relations. When the reports recommend an objective standard and admonish authorities for recognising

some qualifications and not others, the possibility of achieving a type of value that is not embedded in credit relations endures.

Such a position manifests itself in the reports in the critiques of different organisations that undertake FQR. For instance, in the 2012 report into IMGs, the report raises concerns that specialist medical colleges are operating as “‘boys clubs’ with a ‘closed shop’ mentality” (HRSCHA, 2012, p. 103). Within the literature there is significant research that offers similar critiques of professional associations and licensing organisations. For instance, Freidson (1986, 1994) critiqued professional associations and their role in social closure. There is a substantial strand of the economics literature which also criticises professional associations for their tendency towards anti-competitive behaviour and their tendency to create economic monopolies (Redbird, 2017).

While critiquing the role of authorities that undertake FQR assessments, the problem representations suggest that assessing authorities can act in a neutral manner. What remains unproblematic in these problem representations is whether a neutral arbiter of objective value can actually exist. The ontological approach taken in these reports strips away the social, political and cultural elements that lie embedded in expressions of value in education. This means these expressions become independent from the various institutions and procedures that exist to bestow upon an educational experience the qualities needed so that they may acquire functions similar to money. Consequently, the ways in which various actors exercise their position of authority becomes obscured by the possibility that, rather than entities with vested interests, they can be neutral arbiters of objective value.

What effects are produced by this representation of the “problem”?

According to Bacchi, there are three interconnected and overlapping kinds of effects of problem representations to identify “so that they can be critically assessed” (Bacchi, 2009, p. 15). They are discursive effects, subjectification effects and lived effects. Discursive effects refer to the effects that certain problem representations have on discourses and the parameters of what becomes possible in debates. Subjectification effects refer to the impact that the problem representations and discourses have on the way that individuals can position themselves in relation to others, particularly in terms of power relationships. Lived effects refers to material impact of problem representation and how problem representations affect people’s lives.

In terms of discursive effects, the reports show how FQR moves further into a position as a legitimate method to select migrants. The reports detail an evolution of FQR from a phenomenon that occurs post-migration to something that becomes central to the migrant selection process. By relying on FQR to select migrants and viewing the FQR process as recognising some form of skill, a migration system becomes established and legitimised that obscures the economic, political, social and cultural aspects of the process. Expressions of value in education, in the form of foreign qualifications, become valid proxies for the value of a person. Those without approved qualifications are excluded from the process, rejected because they lack the documentation to substantiate a claim to some form of value. Those individuals who are excluded from the process are, in the eyes of the Australian Government, of unknown and unprovable provenance, and they therefore miss out on the benefits of migration. Moreover, a system becomes established where the reproductive elements of education systems that preference those from higher-socio-economic backgrounds moves into a globalised

realm as those with higher levels of approved educational attainment can benefit from the mobility and opportunity that migration brings.

In terms of subjectification, the migrant subject becomes constituted as a “skilled person”. As Foucault (2008, p. 230) writes, “migration is an investment; the migrant is an investor. He is an entrepreneur of himself who incurs expenses by investing to obtain some kind of improvement”. The individual becomes a migrant subject who invests in themselves in order to acquire the objects in the form of signs and symbols, such as a qualification, that a third party recognises as legitimate and which confers upon the individual a benefit. The stores of value that education systems produce become intertwined with an individual in an arrangement where participants in the process interpret the token as representing some form of intrinsic value held by the individual. The effect of this arrangement is that the subject, in the form of the migrant, and the object, in the form of a qualification, become interchangeable as representing the same form of value. Consequently, what one does to the object in the form of a qualification, one also does to the subject, in the form of the individual. The rigours of the education system and its demands are therefore necessary aspects to experience in order to acquire the token to satisfy the Australian Government’s requirement that a potential migrant presents themselves as a “skilled person”.

In terms of lived effects, the discourses surrounding these reports demarcate the parameters of who can legitimately participate in the migration realm. For instance, there is a gradual turning away from the problems of refugees and migrant communities as the discourse of multiculturalism recedes from prominence. In its place, as a version of human capital gains ascendancy, is a discourse that focuses on skills and economic productivity. As FQR becomes a central component of the selection regime, all migrants become subject to the various institutions and processes that seek to enable the

purported value of their educational experience to be known. Migration applicants have little choice but to submit themselves to a process of FQR in one way or another. As part of this discourse, there is little attention given to the legitimacy of using educational attainment to determine migration outcomes. Those who do not hold a formal qualification exist outside of the purview of the migration regime and there seems to be little desire to include them. Consequently, a logic takes shape that if FQR is an act grounded in objective meritocracy, then so too is the exclusion of those that do not meet the requirements of the process.

How/where is this representation of the “problem” produced, disseminated and defended? How could it be questioned, disrupted and replaced?

The final question of the WPR analysis directs attention to the practices and processes that allow certain problem representations to dominate. Bacchi states the purpose of this question is to “pay attention both to the means through which some problem representations become dominant, and to the possibility of challenging problem representations that are judged to be harmful” (Bacchi, 2009, p. 19). This question asks us to consider how changes can occur in the debate that disrupts the dominant mode of thinking.

What may cause a significant shift in the dominant mode of thinking concerning FQR is a move away from viewing expressions of value in education as a natural phenomenon. This means challenging dominant modes of thinking which view tokens such as qualifications as representing some form of objective and real set of value. Instead, the emphasis should shift to an understanding of the problem of FQR as one where value comes from the types of credit that different actors afford individuals. There are two areas where such a shift could result in substantial change.

First, individuals with foreign qualifications may be the beneficiaries of a better understanding of the role of credit in FQR. Inadequate FQR arrangements are a pressing problem for many individuals. Poor FQR arrangements can be very destructive, resulting in the exclusion and downgrading of the occupations that individuals can access in the labour market (Wagner & Childs, 2006). A better understanding of the nature of expressions of value in education would result in a focus on solutions that are more likely to be effective. For instance, this could include better post-migration support where migrants are able to access various education and employment schemes that mean they can acquire greater credit to enable them to compete on a more equal level with others in the Australian labour market. Reforms could also include more stringent requirements on the organisations that undertake FQR to mandate the provision of feasible pathways so that migrants can access the same benefits that Australian-educated individuals can access. The policy reform emphasis should be on equalising access to credit as opposed to searching for some way to recognise some objective and real skill.

Second, challenging the dominant mode of thinking may result in a shift away from the idea that qualifications are a meritocratic and neutral method to select migrants. This is an important point because migration regimes are set up not only to let certain people in, but also to keep many people out. One attraction of using educational outcomes for migration purposes is that it offers governments the prospect of believing that their migration selection mechanisms are meritocratic and free from discrimination. This is particularly important in the Australian context where there is a history of overt racism in the form of the White Australian Policy. However, the use of educational outcomes to determine migration outcomes is not free from the discriminatory or racist practices that existed in other migration regimes (Guo, 2007, 2009, 2010a). By

challenging the underpinning logic regarding in the dominant mode of thinking, this offers up the possibility of changing the migration regime so that people who have been excluded may be able to participate. This may have the effect of expanding access to the Australian migration program beyond those who have the right paperwork, in the form of approved qualifications, to include those who are traditionally disadvantaged but nonetheless have an enormous amount to offer a country like Australia.

Conclusion

This chapter examined three government reports into FQR using a WPR discourse analysis. All reports contain problem representations aligned to the same three functions as money. Moreover, all three reports share a similar approach that treats expressions of educational value like a neutral veil that covers some form of intrinsic worth within a person. Despite this perception, there are clear indications of the primacy of credit in the problem representations. This is particularly noticeable in discussions regarding standards and recognition arrangements with professional associations. The problem representations also show how approaches to expressions of value in education intersect with prevailing discourses. Multiculturalism, human capital and health discourses are all mobilised to frame an understanding of the problem of FQR in Australia's skilled migration program.

Each report approaches the problem of FQR in Australia's skilled migration program in a way that emphasises a neutral and objective standard as a corrective measure to improve FQR's efficacy. These reports all demonstrate an ontological commitment to the idea that expressions of value in education, such as qualifications, can adequately capture the full value of an educational experience. Consequently, there is a continued search for measures of value that can adequately capture the type of value that assumes FQR exists to recognise. However, the conceptual framework used in this

study suggests that such a search will continue to be futile, because the reports fail to adequately understand the role of credit in constructions of educational value. These reports show that the primacy of credit in expressions of value in education is either misunderstood, ignored or elided in favour of an approach that preferences the pursuit of an objective standard and, furthermore, an approach that reinforces the idea that educational outcomes are a legitimate, objective and meritocratic way to sort and rank individuals.

Chapter Seven: Analysing the assessment process

Introduction

This results chapter analyses the assessment process of FQR in Australia's skilled migration program. The main focus of the chapter is whether the process of FQR recognises skill or whether it recognises the accreditation arrangements associated with certain educational experiences. This focus is related to the second and third research questions: what are the origins of expressions of value as a form of currency; and what is the specificity of expressions of value in education. The process outlined below shows how an individual who wishes to migrate to Australia must submit a claim using a set of documents to an assessing authority approved by the Australian Government. The assessing authority uses the various measures of value listed on the documents to establish both the validity and relativity of the claim made by an individual. Consequently, it is factors associated with the qualification, such as the accreditation status of the awarding institution, the length of a course, the entrance requirements and the relative esteem of a foreign country's education system that the assessing authority evaluates when determining the assessment result. This is important to probe because it helps establish whether it is factors intrinsic or extrinsic to the individual that the assessment process recognises. Using publicly available information, this chapter also establishes how the findings in the case study apply to FQR and qualification comparisons more generally. The focus is on determining whether FQR recognises some real or objective value or whether the recognition process is embedded in credit relations.

Overview of method

This chapter uses a single site case study as the primary means to explore the FQR assessment process. In order to analyse the assessment process, there were several forms of evidence collected at the site of the case study. These include interviews with staff involved in the assessment process, publicly available information, and artefacts such as assessment guidelines. To illustrate the assessment process, two examples are given. These examples outline the process and assessment outcome in two scenarios, one for an individual with qualifications from India, and the other an individual with qualifications from Malaysia.

Information provided by the Assessing Organisation is de-identified. References for the evidence are provided in three ways. The first is in the form of documentary evidence such as website information, publicity material and internal documents provided by the organisation. Where these documents are quoted, they are referred to as 'documentary evidence'. The second is in the form of interview transcripts with three people involved in the assessment process. These interviewees were individuals who undertook assessments of foreign qualification on a daily basis or were managers involved in overseeing staff who undertook assessments of foreign qualifications on a daily basis. When quoted, the reference identifies the interviewee using the aliases 'Interviewee 1', 'Interviewee 2' and 'Interviewee 3'. The third form of referencing uses a traditional format for forms of evidence, such as government issued documents and guidelines, that are both publicly available and do not identify the Assessing Organisation.

Referencing code	Overview
Documentary evidence	Refers to evidence such as website content, promotional material, guidelines and procedures. De-identified to maintain anonymity of Assessing Organisation.
Interviewee 1, Interviewee 2, Interviewee 3	Refers to statements from employees at the Assessing Organisation. De-identified to maintain anonymity of the individuals.
Standard referencing	Refers to other documents that do not identify the Assessing Organisation or individuals. Standard referencing using APA format is used.

Table 3: Outline of referencing used for evidence collected at case study site

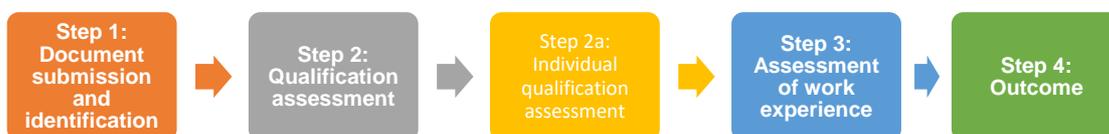
There are two further investigations to establish wider applicability of the results of the case study to other situations where FQR occurs. The first is a review of the assessment process used by other assessing authorities in Australia. This review analyses whether the assessment process recognises ‘skill’ or whether it recognises the accreditation arrangements associated with certain educational experiences. The second investigation explores the applicability of findings to situations outside of the Australian skilled migration program using documents outlining the assessment process for FQR in European countries. The purpose of using evidence from outside of the case study is to investigate the applicability of the findings to the wider problem of FQR and expressions of value in education.

About the Assessing Organisation and its role

The Assessing Organisation is one of over forty approved organisations that can undertake FQR assessments on behalf of the Australian Government. The Australian Government approves assessing authorities through the Australian Migration Regulations 1994 (Cwth). Each assessing authority has a set of occupations they can

assess for migration purposes. The Australian Government issues a list of “eligible skilled occupations” and delegates an assessing authority as the appropriate organisation to assess an individual’s claim to being skilled in that occupation (DHA, 2019). For instance, a physiotherapist migrates using the occupation “2522511 – Physiotherapist” and the assessing authority is the Australian Physiotherapy Council. Each assessing organisation can set its own criteria for assessment. The list of eligible skilled occupations is drawn from the Australian and New Zealand Standard Classification of Occupations (ANZSCO) developed by the Australian Bureau of Statistics and Statistics New Zealand. An individual must submit their documents to the designated assessing authority which undertakes an assessment. The positive outcome letter from the assessing authority is submitted to the Australian Government, along with other necessary documentation, as part of a migration application.

Overview of FQR assessment process at the Assessing Organisation



Step 1: Document submission and identification

The first step in the FQR assessment process is to submit the relevant documents to the Assessing Organisation. These documents form the basis of the assessment and are classifiable into three groups: proof of identity; evidence of educational attainment; and evidence of employment. Proof of identity requirements involve submitting documents such as a birth certificate or a passport along with a recent photograph. Evidence of educational attainment requires the presentation of an award certificate accompanied by a transcript. Evidence of employment takes the form of statements of service, payment evidence (such as a payslip), organisational charts and other relevant documents such as licensing or registration documents.

All documents submitted to the Assessing Organisation must be certified. After receiving the documents, the Assessing Organisation, “check(s) the documentation and then [we] go through the process of undertaking the assessment” (Interviewee 2). The Assessing Organisation requires applicants from some countries to meet further documentary requirements. Applicants from certain listed countries must organise with the awarding institution of their qualification to send evidence of educational attainment directly to the Assessing Organisation. The extra requirements for applicants from certain countries are because of concerns with fraud. One interviewee explained that the extra requirements are because some countries have higher incidence of fraud stating, “I would have said years ago that qualifications that were fraudulent would be easy to pick up. I think we are finding the fraudsters now are in fact much more adept at their craft” (Interviewee 3).

The first step in the assessment process demonstrates the importance of confirming the identity of a person when determining the value of their educational experiences. As the assessment process nominally assesses a store of value embodied in

an individual, it is paramount to establish the evidence used in the assessment relates to the identified individual. Without assurance of a document's authenticity, and its relationship to the individual who represents the store of value, there is a threat to the ability of the recognition process to generate a legitimate outcome.

Step 2: Qualification assessment

Step Two of the assessment process involves assessing the qualification or qualifications against the assessment criteria. The aim of this stage is to establish the comparability of the applicant's formal qualifications against the Australian standard. There are two standards used for assessment. The first is the Australian Qualifications Framework (AQF) which is used to determine the validity of the qualification. The second standard is the Australian and New Zealand Standard Classification of Occupations (ANZSCO). This standard is used to determine the relevance of the qualification to the nominated occupation.

To determine the comparability of the foreign qualification to the Australian system, the Assessing Organisation uses a set of documents known as the Country Education Profiles. These are a set of guidelines produced by the Australian Government that outline overseas education systems. They also issue guidelines concerning the comparability of overseas qualifications to the Australian system. The Country Education Profiles are "an online recognition tool providing guidance on the comparability of overseas qualifications to qualifications on the AQF, [containing] lists of recognised institutions and information about education systems for 126 countries" (AEI-NOOSR, 2015, p. i). Every foreign qualification received by the Assessing Organisation is compared to the guidelines.

The assessment is undertaken with reference to the ... Country Education Profiles (CEP). The assessment is about looking at whether the applicant's qualification is

equivalent to the Australian qualification which is required for the skilled occupation they are wishing to migrate under. The CEPs provide for a highly consistent process. (Interviewee 2)

The guidelines act in a similar way to a currency pegging by setting the level which a foreign country's expressions of educational value compares to the Australian system. In most circumstances, it is necessary to have a qualification from an organisation listed in the Country Education Profiles. If the qualification is from a recognised institution, then the Country Education Profiles will list the award title of the qualification to outline the comparability of a qualification compared to the Australian education system. If the qualification is not from a listed awarding authority, or the qualification is in a form not listed in the Country Education Profiles, the assessment falls out of the guidelines. These assessments proceed to another stage known as an individual assessment, as outlined in Stage 2a below.

Once the assessor has determined whether the qualifications are at the appropriate level, the next phase involves "determining relevance of [the] qualifications for [the] nominated occupation" (documentary evidence). At this point there is a comparison of the qualification to the nominated occupation as outlined in the ANZSCO. An applicant must have a qualification that has a "major" (documentary evidence) in a field that matches the nominated occupation.

In the terms of this study, what this stage establishes is the validity, relativity and the relevance of the qualification using a measure of value. In the first instance, the Assessing Organisation determines the validity of the measure of value by establishing the status of the awarding institution. The awarding institutions in the Country Education Profiles are institutions that have an accreditation status in the awarding country. After establishing validity, the assessment determines the relative worth of the qualification using the nomenclature of the education system. The measure of value also

helps determine relevance, as the field of study is compared to the occupation in which the individual wishes to migrate under. For instance, a qualification would need to be in an engineering field if they wish to migrate to Australia under an occupation with an engineering focus.

It is important to note here that what is the subject of recognition is not skill. Instead it is the features of a qualification that relate to the awarding authority. This includes the accreditation status of the awarding institution, the level of a qualification on a qualification framework, and the alignment of a field of study to the classifications outlined in the ANZSCO. The set of skills, knowledge or ability that may have been the basis for the awarding qualification could have been forgotten, changed or updated. However, as a fixed representation of a past occurrence, it is not real value that is the subject of recognition, but some form of abstract value that the qualification represents.

Stage 2a: Individual assessment

Further evidence of the nature of value that FQR recognises can be found in the process known as an “individual assessment” (Interviewee 2). There are many qualifications that fall outside of the guidelines published in the Country Education Profiles. In these instances, the Assessing Organisation undertakes an individual assessment. An individual assessment involves “looking at, in particular, the education system of the country, the awarding institution, things like the nature of the program, and any previous cases or identical cases ... received” (Interviewee 2). The most important aspect when determining the comparability of a qualification is whether the awarding institution has accreditation from the appropriate authority. The following statement outlines the position:

Accreditation would mean ... if [the qualification] is recognised by the authority in that country, the academic authority in that country ... the accreditation is very crucial, we have to establish that [the qualification] is accredited. (Interviewee 1)

If there is no accreditation regime attached to the qualification, then the evidence of educational attainment is not an “assessable qualification” (Interviewee 1). If the qualification is awarded by a body with approved accreditation, then “the next task ... would be to try to establish the comparability within the Australian Qualifications Framework” (Interviewee 1). This is determined by examining the features of the qualification such as admission requirements, the length of the course, and the “breadth and depth” (documentary evidence) of the course using the Australian Qualifications Framework as a benchmark. The assessment process thus looks at factors exogenous to an individual that went into the manufacture of the qualification, such as the admission requirements, the length of the course, the number of credit points, the final grade and the relative standing of the awarding institution.

In the terms of this study, the individual assessment shows how it is the measure of value that is the site of recognition. Regardless of an individual’s actual ability or skill, without a claim denominated in an approved measure of value, an individual will not be successful in the assessment process. If the awarding authority of a qualification has no accepted accreditation status, then the individual cannot participate in the skilled migration process.

Step 3: Assessment of work experience

After determining the comparability of the qualifications, the Assessing Organisation assesses work experience. The standards for the work experience component of the assessment are drawn from the ANZSCO. The ANZSCO lists a series of tasks that relate to an occupation and the assessors match the duties listed in the

ANZSCO to the information provided by the applicant in their statement of experience. There is a requirement for “highly relevant experience” (documentary evidence) to meet the requirements of the assessment. “Only full time (at least 20 hours per week) and paid employment can be considered for skills assessment purposes” and “the major tasks undertaken should closely match major tasks usually undertaken in that occupation in Australia” (documentary evidence). The threshold requirement is to demonstrate at least one year of work experience relevant to the occupation in the past five years. There is a concern “about the currency of the employment” so there is a requirement for a “minimum one year [work experience] within the last five years” (Interviewee 1).

Applicants submit documents such as a curriculum vitae, position descriptions, payslips and references from employers. These documents are compared to the list of duties outlined in the ANZSCO that the assessor uses to determine both the relevance and quantum of previous work experience to the nominated occupation.

Step 4: Outcome

The final stage of the process is the production of a letter used for the purposes of skilled migration. Its primary purpose is for submission to the Australian Department of Home Affairs to demonstrate the applicant meets the skilled component of the skilled migration program. It is, in effect, used with other documents, such as English language scores, to facilitate a medium of exchange where the potential migrant presents evidence in order to facilitate a migration outcome with the Australian Government.

Examples of FQR at the Assessing Organisation

During the evidence collection process, there were several cases discussed that demonstrated the arbitrary nature of some of the assessment decisions. In this next

section, there are two examples given that help illustrate the intricacies of the FQR process and also the type of value that FQR recognises. They also vividly show how much the assessment process relies on certain factors in order to arrive at an assessment decision. The first example is for an individual with a qualification from India and the second example relates to an individual who has employee sponsorship with a qualification from Malaysia.

Example 1: Indian qualifications

India is one the highest source countries in Australia's skilled migration program. In 2016–17, individuals from India accounted for 33.8% of successful applicants under the points tested skilled migration stream (DHA, 2018).

In this example, the applicant has a three-year university degree in a science-related course from an Indian university and wishes to migrate to Australia. Like hundreds of thousands of other applicants each year, because they are migrating under the auspices of the skilled migration program, there is a need to present evidence of a successful skills assessment before the Australian Department of Home Affairs will review their application. Consequently, the applicant will need to undertake an assessment process with the Assessing Organisation.

The first step is to submit all relevant documents to the Assessing Authority. After the administrative process that verifies the submission of the correct documents, the Assessing Organisation uses the Country Education Profiles to assess the comparability of the Indian qualification to the Australian system of higher education qualifications. The Country Education Profile guidelines differentiate the comparability of Indian qualifications depending upon the status and perceived quality of the awarding institution as described by Indian accreditation authorities. Indian higher education accreditation authorities rate universities and the Country Education Profile guidelines

“have adopted the descriptive terms used by the National Assessment and Accreditation Council (NAAC) to categorise accredited institutions – very good institutions, good institutions and satisfactory institutions” (AEI-NOOSR, 2019). “Very good institutions” are those with the highest ranking by the Indian NAAC and “are assessed at face value” (AEI-NOOSR, 2019) so that the Assessing Organisation assesses all three-year bachelor’s degrees from these institutions as comparable to an Australian bachelor’s degree. For “good institutions” and “satisfactory institutions”, which are the bulk of Indian higher education institutions, the final mark of the degree affects the outcome of the assessment. As a minimum, all qualifications from these institutions are assessed at sub-bachelor’s degree level, as comparable to the level of an associate degree level. However, “final grades have been used as a basis for upgrading assessment outcomes” (AEI-NOOSR, 2019) which means that individuals with “good grades” in three-year bachelor’s degrees from Indian institutions deemed as “good institutions” and “satisfactory institutions” can have their assessment upgraded to the same level as an Australian bachelor’s degree. These guidelines mean that for applicants with a three-year bachelor’s degree from India, the final mark of their degree is very important to the assessment result.

In this example, because the selected occupation is in a science-related field, the applicant needs to demonstrate to the Assessing Organisation that they have a qualification assessed as comparable to an Australian bachelor’s degree. Unless the Indian awarding institution is relatively high status, or the final grade of the degree is also high, the applicant is unlikely to pass the assessment process. Regardless of their innate ability or record of achievement, without a qualification assessed as comparable to an Australian bachelor’s degree, an individual will not receive a positive outcome. As one interviewee stated, “when it comes to skills assessment ... you have to have a

bachelor qualification. No experience can substitute for the lack of a qualification” (Interviewee 1). So, in this example, if the applicant does not have a qualification from a relatively prestigious organisation in India or high grades then for the Assessing Organisation:

... unfortunately, our [outcome letter] has to say their [Indian] bachelor’s degree is assessed at Australian associate degree level and although their experience was highly relevant [to their occupation] they will not be able to pass because they did not meet the educational level required (Interviewee 1).

There are several points to make using this example. First, it is the measure of value that is the site of recognition. The Assessing Organisation uses the measure of value listed on the qualification in order to determine the assessment outcome. Qualification frameworks also play a role because they enable the comparability of expressions of educational value. As the Australian Government states, the assessment guidelines compare “overseas educational qualifications with qualifications on the Australian Qualifications Framework (AQF)” (AEI-NOOSR, 2018). It is through an attachment to approved measures of value, such as qualification frameworks and degree titles, that the intelligibility of expressions of educational value for the purpose of FQR becomes possible.

Second, this example highlights the primary role of the awarding authority in constructions of educational value. The reputation and status of the awarding institution is used as a proxy to determine the relative value of an individual’s educational experience. In the case of the Indian example, the guidelines do not consider all institutions as equal as:

the Indian higher education system is large and diverse with over 400 university-level institutions. There are differences in size, specialisation and programs offered. There are also differences in quality. (AEI-NOOSR, 2019)

This shows the existence of the three-cornered guarantee when determining the value of a qualification. The awarding institution acts as a type of guarantor for an individual that the education system certifies as having acquired some form of educational value. The Australian Government, through its Country Education Profiles, makes the declaration that the value of this guarantee is dependent upon the status of the awarding institution and the Assessing Organisation assigns an assessment outcome accordingly. This example also suggests that in response to the second research question, that it is in factors extrinsic to an individual, such as the perceived status of the awarding institution, that lie the legitimacy of expressions of value in education as a form of currency.

Third, the type of value that a measure of value establishes as valid does not have the same qualities as learning, skills or ability and is instead better characterised as a form of credit. The measure of value establishes the denomination of valid expressions of educational value. It is through recognising the validity and relativity of this measure that credit relations become established. Regardless of any skills or ability, or an individual's substantive knowledge at the time of assessment, it is through the measure of value that the individual acquires credit. They then use this credit to facilitate a medium of exchange with the Australian Government for a migration outcome. This helps frame responses to the third research question for this study by suggesting the specificity of expressions of value in education exists as a credit as opposed to some set of skills, knowledge, or ability possessed by an individual.

Example 2: Malaysian qualifications

In the second example, an employer has sponsored an applicant with Malaysian qualifications to work in Australia under the Employer Nomination Scheme (ENS). The ENS is a permanent visa that requires applicants to be under the age of 45 and to have

employer sponsorship. Applicants must still meet the skills and language requirements and therefore submit documents to an assessing authority for a skills assessment.

The applicant's field is in a business-related course and their nominated occupation requires a qualification assessed at a bachelor's degree level. While their work experience involves extensive international experience in business-related occupations, their original qualification is from Malaysia. The applicant completed a Bachelor of Business from a private Malaysian university in 1996. As this is their only formal qualification, it is this qualification that the Assessing Organisation assesses for the purposes of FQR

In the first instance, the Assessing Organisation checks that the applicant submitted the correct paperwork before proceeding to the next step of assessing the qualifications of the applicant. The Australian Government issued guidelines state that qualifications from private Malaysian universities are normally "assessed as comparable to the level of an AQF Bachelor degree" (AEI-NOOSR, 2019). However, there is an important caveat in that at the time of awarding, the qualification must be accredited by the Malaysian Qualifications Authority (MQA) or its predecessor, the *Lembaga Akreditasi Negara* (National Accreditation Board), usually referred to as the *LAN*. As the guidelines explain, the *LAN* began operating in 1998 "as a statutory body to monitor the quality of all courses offered by private higher education institutions" and "accreditation was optional" (AEI-NOOSR, 2019). Many private universities that were operating before 1998 would not have accreditation. In this example the accrediting authority lists accreditation for the awarding institution as beginning in 2000, four years after the awarding of the qualification. In these instances, the Malaysian Country Education Profile states the assessment is undertaken on a "case by case basis" (AEI-

NOOSR, 2019). Because the qualification falls outside the guidelines, the Assessing Organisation undertakes what they refer to as an individual assessment.

The first step of an individual assessment is to determine the accreditation status of the institution awarding the qualification. This is difficult in this example because the accreditation authority did not accredit the awarding institution until some years after the awarding of the qualification. As one employee at the Assessing Organisation states:

Malaysia is famous for changing accreditation [regimes] because their accreditation system only came into play in 1998. So, there was a window period when they advised the education institutions to apply for accreditation status. There were institutions that didn't bother to do that, or they were not fully equipped to apply for accreditation, but they then later applied for the accreditation.

(Interviewee 1)

Because the qualification was awarded before an authority formally accredited the course or the university, the applicant is likely to receive a negative outcome. The Assessing Organisation applies this rule strictly. However, there are some occasions where assessors can make a case to assess a qualification despite not having accreditation at the time of the award.

There was one time that we did accept [a Malaysian] qualification even though at the particular time of awarding, the qualification was not accredited. We gave an exemption because we looked at the curriculum. We knew that particular course and institution later got accredited after a year and they literally didn't change the course structure ... They didn't change anything. That particular course was accredited through the accreditation system so we gave an exception. Our argument was the course they offered which was later accredited was exactly the same as what the course that our applicant had undertaken ... So, the assessor did a lot of work. But we had the right to refuse it because we could just follow our basic rule that at the time of awarding the course had to be accredited. (Interviewee 1)

The importance of formal accreditation is to the extent that it is only after “a lot of work” that the Assessing Organisation will bend the requirement for formal accreditation of a qualification before proceeding with the assessment. The grounds for the exception are very tight. Formal accreditation, therefore, is vital in the establishment of the validity to any claim to the possession of educational value.

This example demonstrates several important points. First, it demonstrates again how the measure of value is the site of recognition. If the Assessing Organisation cannot establish the validity of the measure of value, then the Assessing Organisation cannot ‘recognise’ the qualification.

Second, it demonstrates how it is the status of the awarding authority that confers the qualities needed to generate acceptance of an expression of educational value. In the case of FQR, institutions need to be part of an authorised accreditation regime in order for the qualifications they issue to generate acceptance. This also helps shape responses to the second research question of this study, because it suggests it is factors extrinsic to an individual that lie the origins of expressions of value in education as a form of currency.

Third, the example shows how the value of FQR is embedded in credit relations as opposed to some real or objective value. In this example, the individual already has a job offer and an employer has deemed their experience and skills as sufficient to warrant sponsorship. However, the type of value that FQR recognises is not an individual’s skills or ability. Instead, it is features extrinsic to the individual that are the subject of recognition. Without a claim through an expression of educational value that the Assessing Organisation deems as valid, the credit necessary to facilitate a medium of exchange between the Australian Government and the individual cannot occur. Consequently, in response to the third research question, what is the specificity of

expressions of value in education, this example suggests it is credit that lies at the heart of expressions of value in education because these expressions enable the establishment of credit relations between parties that rely on principles and qualities that are different from an individual's ability, skill or knowledge at any given time.

Establishing the reliability of the findings

The findings of the case study outline the assessment process at one assessing authority only. There are over forty organisations that the Australian Government authorises to undertake FQR assessments as part of the Australian skilled migration program. In order to examine the reliability of the findings, it is necessary to analyse the process of other assessing authorities. All assessing authorities have different standards. However, there is publicly available information that outlines the assessment process at each assessing authority. The aim of this analysis is to explore whether it is the measures of value in education that FQR recognises and not some real or objective skill.

In order to determine whether FQR recognises the accreditation arrangements associated with a qualification or whether FQR recognises skill, the analysis focuses on ascertaining the means by which each assessing authority examines an individual's claim to possession of educational value. In the case study, the Assessing Organisation established validity of a qualification through the accreditation arrangements of qualifications and the Australian Government guidelines that use the Australian Qualifications Framework as a benchmark. This analysis examines the process of all assessing authorities to determine the means by which FQR occurs. There is close attention paid to the various accreditation arrangements that assessing authorities use when undertaking an FQR assessment. This includes the requirement to hold a foreign qualification assessed as comparable to a qualification on the Australian Qualification Framework (AQF). Where a foreign qualification assessed as comparable to an AQF

qualification is not required, there is further analysis to determine whether the assessing authority would accept another form of evidence from an accreditation body, such as from an international licensing body or from a government regulatory body.

The results of the analysis are in Table 4 below.

Assessing Authority	Foreign qualification comparable to AQF required	Licence or international accreditation required in lieu of qualification comparable to AQF
Architects Accreditation Council of Australia (AACA)	Y	
Australasian College of Physical Scientists and Engineers in Medicine (ACPSEM)	Y	
Australasian Osteopathic Accreditation Council (AOAC)	Y	
Australasian Veterinary Boards Council (AVBC)	N	Y
Australian Association of Social Workers (AASW)	Y	
Australian Community Workers Association (ACWA)	Y	
Australian Computer Society (ACS)	N	N
Australian Dental Council (ADC)	Y	
Australian Institute of Management (AIM)	N	N
Australian Institute of Medical Scientists (AIMS)	Y	
Australian Institute of Quantity Surveyors (AIQS)	Y	
Australian Institute of Teaching and School Leadership (AITSL)	Y	
Australian Maritime Safety Authority (AMSA)	N	Y
Australian and New Zealand Podiatry Accreditation Council (ANZPAC)	Y	
Australian and New Zealand Society of Nuclear Medicine (ANZSNM)	Y	
Australian Nursing and Midwifery Accreditation Council (ANMAC)	Y	
Australian Orthotic Prosthetic Association Ltd. (AOPA)	Y	
Australian Pharmacy Council (APharmC)	Y	
Australian Physiotherapy Council (APC)	Y	
Australian Podiatry Association (APodA)	Y	

Australian Psychological Society (APS)	Y	
Australian Society of Medical Imagery and Radiation Therapy (ASMIRT)	Y	
Certified Practising Accountants of Australia (CPAA)	Y	
Chartered Accountants Australia and New Zealand (CAANZ)	Y	
Chinese Medicine Board of Australia (CMBA)	N	Y
Civil Aviation Safety Authority (CASA)		Y
Council on Chiropractic Education Australasia (CCEA)	Y	
Dietitians Association of Australia (DAA)	Y	
Engineers Australia	Y	
Institute of Public Accountants (IPA)	Y	
Legal admissions authority of a state or territory	Y	
Medical Board of Australia (MedBA)	Y	
National Accreditation Authority for Translators and Interpreters (NAATI)	Y	
Occupational Therapy Council (OTC)	Y	
Optometry Council of Australia and New Zealand (OCANZ)	Y	
Speech Pathology Australia (SPA)	Y	
Surveying and Spatial Sciences Institute (SSSI)	Y	
Trades Recognition Australia (TRA)	Y	
Vocational Education and Training Assessment Services (VETASSESS)	Y	

Table 4: Analysis of assessment process at assessing authorities

What this analysis shows is that all but six assessing authorities require a foreign qualification assessed as comparable to an Australian award found on the Australian Qualification Framework. If an individual does not hold a valid qualification with recognised accreditation, they will not be successful in the assessment process, regardless of their actual ability or skill.

Of the remaining six, four assessing authorities require the presentation of a qualification validated by an international authority that has legitimacy in the industry. For instance, for commercial pilots the authorised assessing authority is the Civil Aviation Safety Authority (CASA). The licensing regime for pilots sits outside the formal education system, so there is no formal higher education award for a commercial

pilot. Consequently, it is not necessary to complete a formal AQF award to gain a licence as a commercial pilot. To receive a positive skills assessment from CASA, it is necessary to hold accreditation with a body affiliated with the United Nations International Civil Aviation Organisation (ICAO). For other assessing authorities in most instances a qualification comparable to the AQF is mandatory except in limited circumstances. For instance, the Australasian Veterinary Board Council (AVBC) usually requires a qualification comparable to an AQF qualification but will accept examinations from limited Canadian, USA and UK licensing bodies in lieu of degrees from the formal education sector.

Table 4 suggests that there are only two assessing authorities where it is possible to receive a positive assessment without evidence of a formal qualification comparable to an Australian educational award or, in lieu of a formal qualification, a licence accredited by international accreditation authority. These authorities are the Australian Computer Society (ACS) and the Australian Institute of Management (AIM).

For the Australian Computer Society, there are five possible pathways to receive a positive assessment. Four of these pathways require a formal qualification and one is a “work experience only” pathway. For the work experience only pathway, applicants are required to submit a range of documents attesting that they meet a set of standards known as the “Core Body of Knowledge Guidelines for ICT” produced by the ACS (ACS, 2006).

The Australian Institute of Management assesses occupations related to senior level managers such as Chief Executive Officers and Divisional Executives in large organisations. There is no mandatory qualification or licensing requirement for a positive assessment. Instead, applicants must meet a set of criteria demonstrating their seniority and employment within a large organisation over the preceding three years.

What this analysis suggests is that FQR recognises the validity and the relativity of measures of value that a formal education system produces. This process is not a recognition of skill, but rather a recognition of factors extrinsic to an individual, such as the accreditation status of an awarding institution. Where there is no token produced by an educational system because of the nature of the occupation, a licence can substitute for an official qualification. However, this still continues the three-cornered arrangement, where an assessing authority makes a judgement of an individual based on the strength of the guarantee provided by the authority. In these instances, rather than using an institution such as a university to judge an individual's claim, the assessing authority uses a foreign licensing body to establish trust in the individual.

There are only two instances where there is no discernible requirement to have an accredited authority vouch for the individual. These instances are atypical and arise in occupations with historically weaker links to licensing regimes. However, both instances still require an applicant to meet a set of standards in order to be successful and these standards reflect factors extrinsic to the individual. Moreover, similar to all other instances of FQR in Australia's skilled migration program, the nature of the value remains embedded in credit relations. The assessing authority establishes the validity of the individual's claim to some kind of educational value that the individual then uses as credit to facilitate a medium of exchange with the Australian Government.

International FQR assessments – NARIC documents

The processes outlined above consider instances of FQR in Australia's skilled migration program. FQR, however, is a process that occurs in many situations all around the world. In order to establish the applicability of the findings to other situations, it is necessary to analyse FQR in an international context. The guidelines published by the Australian Government in the form of the Country Education Profiles

also exist in other countries. For instance, European countries have established a network of organisations whose role is to undertake FQR. These organisations are known as National Academic Recognition Information Centres (NARICs) and they are responsible for issuing national guidelines for FQR. It is possible to analyse these guidelines to determine the assessment process and the type of value that FQR recognises.

Similar to the situations outlined in the case study, the accreditation status of the authority awarding the qualification is paramount. According to the European manual outlining the FQR process:

A foreign qualification cannot be properly evaluated without taking into account the official status of the institution awarding the qualification and/or the program taken. In other words, it should be established whether the institution is authorised to award qualifications which are accepted for academic and professional purposes in the home country, or, where applicable, if the program is accredited. The fact that an institution and/or the program is recognised or accredited indicates that the qualification in question represents an appropriate minimum level of education in that particular country. (NUFFIC, 2012, p. 21)

This statement demonstrates the primacy of the accreditation status of the authority that awarded the qualification when determining the validity of a qualification for the purposes of FQR. It is necessary for the qualification to have some “official status” before an assessment can occur. This statement also shows the existence of the three-cornered arrangement with expressions of value in education where a third party judges the strength of the claim made by an individual by using the status of the awarding authority. If the organisation undertaking FQR is unable to ascertain the accreditation status of the awarding institution, regardless of any ability an individual possesses, the assessment will not proceed.

Following the establishment of the “official status” of the qualification, the European guidelines outline five aspects to determine FQR. These five aspects are:

1. Level
2. Workload
3. Quality of the program or institution which the qualification was obtained
4. Profile of the program or institution at which the qualification was obtained
5. Learning outcomes of the program that led to the applicant’s qualification.

(NUFFIC, 2012, p. 14)

All five criteria refer to ascertaining the quantum of educational value by using the measures of value produced by education systems. The level of a qualification usually refers to its place on a national qualifications framework, or the place of the qualification on a hierarchy of qualifications in a post-secondary education system. The workload refers to the volume of educational value usually expressed in a form such as credit points or learning hours. The quality of the program or institution refers to the accreditation status associated with the awarding body and the perceived esteem in which the program or institution may be held. The last two criteria refer to the relevance of the various features of the qualification to the assessment being undertaken.

These five criteria demonstrate how it is the measure of values that an education system produces that are the primary site of recognition. The various measures, such as degree titles, credit points, final grades and statements of learning outcomes, are all the major determinants of the FQR outcome. They are features that an awarding authority ascribes to an individual and a third party assesses in order to make a determination regarding a claim to some form of educational value held by an individual. Moreover, it is factors extrinsic to an individual that are the subject of recognition, rather than some notion of skill. It is the features of a qualification using the nomenclature of an

educational system that an assessing organisation assesses rather than an individual's intrinsic capabilities at any given time.

Conceptual framework and FQR assessment process

These findings suggest that FQR is not a recognition of skill. Instead, the type of value that FQR recognises is embedded in credit relations. The conceptual framework used in this study helps frame the findings from the analysis of the assessment process in several important ways.

First, these findings show how expressions of value in education have the same three functions as money. As a measure of value, tokens such as qualifications enable assessing authorities to determine the validity and relative worth of educational experiences. As a store of value, the ontological approach to the qualification is that it is a direct representation of some form of value held by an individual. As a medium of exchange, the establishment of credit through the assessment process facilitates an exchange for a benefit. In the case of FQR in Australia's skilled migration program, this exchange occurs in the migration realm where the individual acquires a migration outcome and the Australian Government grants an individual whom they believe is economically productive certain rights to live and work in Australia.

Second, the process of FQR demonstrates the role of a three-cornered arrangement in the nature of value in education. The initial relationship is between an individual and an authority, such as a university. The individual uses the qualification in order to establish a relationship with a future third party. The third party, in this instance the Australian Government and the assessing authority, uses the strength of the guarantee provided by the awarding authority to make a judgement concerning the creditworthiness of the individual.

Third, the assessment process helps highlight the importance of measures of value in constructions of educational value. Adapting what Keynes writes regarding money, a measure of value is the “primary concept” (Keynes, 1958 [1930], p. 3) of any theory regarding expressions of value in education. This is because a measure of value confers both validity and relativity. Essentially what the FQR process recognises is the validity and relativity of the measure of value in a process used to establish credit relations. The measure of value may *appear* in a denomination aligned to a body of knowledge, such as a Bachelor of Arts, Master of Finance or a Master of Education as occurs in Figure 6, Figure 7 and Figure 8. However, this denomination is only relevant insofar as it assists in establishing credit relations in an individual of unknown provenance. As the analysis of the FQR assessment process suggests, if there is no attachment to an accepted measure of value then the assessment does not occur, regardless of the actual intrinsic ability of an individual.

Fourth, the type of value that FQR recognises is constant and commodity-like and, consequently, is different to the qualities of learning, skills or knowledge. The education system of the foreign qualification produces an expression of value that is both a memory and a promise. As a memory, the awarding authority verifies that an individual undertook a valid educational experience. As a promise, the token attests to the creditworthiness of the individual to a third party. Licensing regimes take the place of awarding institutions when there is no educational certification regime in certain occupations, such as commercial pilots. It is the word of an authority that forms the basis for the assessment, not the substantive skills or knowledge of an individual. Adapting what Innes writes of money, it is not the content of the educational experience which forms the basis for recognition, but “the name or distinguishing mark of the issuer, which is never absent” (Innes, 1913, p. 382).

Fifth, the specificity of the value that FQR recognises is embedded in credit relations and not some real or objective value. The policy rationale for the use of FQR in Australia's skilled migration program takes an ontological approach to expressions of value where they act as neutral veils covering some real worth in an individual. However, the examination of the FQR process shows, it is not some commodity-like objective value that is the subject of recognition. Instead the value comes through the granting of credit to an individual who can use this credit to facilitate an exchange.

Sixth, the case study suggests the type of value that FQR recognises is not neutral and is subject to all the inconsistencies and inequalities that exist in other forms of societal relations. There is clear evidence of discounting certain educational experiences and excluding some individuals based on some arbitrary notion of the relative worth of another country's education system. FQR decisions can penalise individuals based on their country of origin. The ranking and sorting of individuals according to arbitrary criteria thus become hidden behind a mistaken belief that FQR recognises some neutral and meritocratic value that is intrinsic to an individual.

Conclusion

This analysis of the FQR assessment process suggests that there is a disconnect between the policy rationale behind the use of FQR in Australia's skilled migration program and what FQR recognises. In Australia's skilled migration program, FQR is part of a process known as a "skills assessment". However, FQR does not recognise skill, nor does it recognise some real or objective value. Instead, the analysis suggests that FQR recognises factors relating to an awarding authority that are extrinsic to an individual. Because the value FQR recognises is embedded in credit relations, this value has a different set of properties from any notion of learning, skills or ability. In this way, the nature of value in education is commodity-like and relatively constant, and therefore

available for use as part of a ranking and sorting regime used to determine eligibility for migration.

The results of this chapter also suggest the applicability of credit theories of money to constructions of educational value. They imply that expressions of value in education function like a currency and have the same three functions as money. There is evidence that a measure of value is the “primary concept” (Keynes, 1958 [1930], p. 3) of any theory concerning the nature of educational value because it is through the connection to a measure of value that all other functions of expressions of value in education can occur. While the measure of value may be denominated using a body of knowledge or a set of learning outcomes, it is through the establishment of credit relations that the value of FQR comes into existence. Qualifications are thus a form of “*assignable* trust” (Ingham, 2004c, emphasis in original) that the Australian Government uses to establish the provenance of unknown individuals who wish to participate in the migration process. The results also suggest that certain positions, such as human capital theory, may misunderstand the nature of expressions of value in education. These positions can subscribe to the perspective where representations of value in education are objective signifiers of value. However, the process outlined above suggests that FQR can reflect the biases, prejudices, stratified and racial elements, power, class conflict, and any other aspect of societal relations, that goes into the production and recognition of the expressions of value produced by education systems.

Part V: Discussion and conclusion

Chapter Eight: Discussion

Introduction

Money is a vital part of our existence and without it our world would not be able to function as we currently experience it. As Ingham (2004c, p. 3) writes, “money is one of our essential social technologies; along with writing and numbers, it was the foundation for the world’s first large-scale societies ... and today it literally does make the globalized world “go round””. Of the three functions of money that this study also ascribes to education, “each is fundamental for the continuance of routine life in the modern world” (Ingham, 2004c, p. 3). A starting point for this discussion chapter is that expressions of value in education, like money, are an essential social technology that plays vital roles in our modern lives. The functions of education as it pertains to value are commonplace and the expressions of value that education systems produce are fundamental to the continuance of routine life. As the example of FQR in Australia’s skilled migration program suggests, education outcomes continue to perform important functions in regulating our existence in a globalised world. Indeed, FQR is a stark example of the new frontiers where educational outcomes are subject to constant reinterpretation and redeployment.

Despite the importance of education, there remains confusion concerning the origins of its value. There is undoubtedly a connection between socioeconomic attainment and educational attainment (Bills, 2003; Blaug, 1992). However, explanations for this link often use a concept of education that may misunderstand its fundamental nature. These orthodox concepts take certification regimes at their word, and because education institutions purport to certify something intrinsically valuable within an individual, then the origin of the link between educational attainment and socioeconomic attainment is can be attributed to something that an institution teaches,

and an individual learns. There is a substantial heterodox literature that confronts many of the conventional assumptions concerning the nature of value in education, some of which has already been discussed in this study (see for example Berg, 1973; Bourdieu, 1977, 1986; Bowles & Gintis, 1975, 2002; Collins, 1979). This study has used credit theories of money to contribute to this heterodox literature. It has built on aspects of the current literature and more closely identified the specificity of expressions of value in education as a type of credit.

Monetary theory provides a rich literature to ground an examination of the nature of value in education. There are substantial parts of monetary theory that remain unexplored by this study, and many of these unexplored elements can contribute to a plethora of education and education policy debates. In this discussion chapter, one purpose is to highlight aspects of monetary theory that this study has yet to explore and to relate these aspects to both the example of FQR in Australia's skilled migration program and more broadly to expressions of value in education. Before doing this, however, it is important to clarify the findings that this study has already made by summarising responses to the research questions and the results of the research. Following this summary, there is a discussion of aspects of monetary theory that can help further our understandings of the nature of value in education with a particular emphasis on possible areas for further research.

Summary of arguments and findings

This study has made three main arguments in response to the research questions, what are the functions of expressions of value in education; what are the origins of expressions of value in education as a form of currency; and what is the specificity of expressions of value in education? In response to these research questions this study has found that, first, expressions of value in education have the same three functions as

money, as a measure of value, as a store of value and as a medium of exchange; this is the view of education as currency. Second, that the origins of these expressions as a form of currency are exogenous, not endogenous, to an educational experience. Third, that the primary nature of these expressions exists as a credit. These points are important to make because they relate to a much wider problem concerning the nature of value in education. This problem concerns why education is a valuable thing and the origins of the link between socioeconomic attainment and educational attainment. The area of the research literature most concerned with studying this problem is that of certification theories. Theories such as human capital theory, sorting and signalling, and credentialism represent approaches from different sections of the academy which attempt to understand the nature of value in education. At the core of these theories are different, and often irreconcilable, understandings of the nature of the expressions of value that education systems produce.

The impetus for the direction of this study came after reading literature regarding the nature of money and noticing remarkable similarities between monetary theory debates and debates concerning expressions of value in education. Indeed, while reading the literature on money, it often seemed possible to replace the word ‘money’ with a variation of the phrase ‘expressions of value in education’ and the problems associated with understanding why education is a valuable thing became more cogently expressed than in many parts of the education research literature. The reasons for this are likely to stem from similarities in the ontology of money and education. Money is an expression of value and certification regimes exist in large part to enable expressions of educational value. Credit theories of money display strong commonalities with the positions taken in this study and these credit theories of money challenge orthodox

economic positions by describing the essential nature of expressions of value as a type of credit based in social relations.

Building on credit theories of money, this study outlined a conceptual framework that proposed expressions of value in education have the same three functions as money. Aligning to Keynes' reasoning, it is the measure of value that this framework suggested that is the "primary concept" (1958 [1930], p. 3) of any theory of the nature of value in education. This is because monetary and educational expressions of value require a meter in order to exist and attain meaning and it is through an agreed measure of value that valid expressions of value come into existence. Measures of value confer two important qualities, validity and relativity, which are vital for the proper functioning of the stores of value which education systems produce. As a store of value, education systems bind the measures of value to individuals and produce some means to enable the identification of this store, such as a qualification. As a medium of exchange, the individual uses the measure and the store of value to facilitate an exchange with a third party such as an employer, or a licensing body. The third party uses the strength of the guarantee provided by the awarding body in order to make a judgement regarding the measure and store of value associated with the individual.

The conceptual framework also adapted another area of monetary theory debates known as the "neutral veil" (Ingham, 2004c; Keynes, 1963 [1933]; Wray & Innes, 2004). The neutral veil concerns the issue of whether or not money references real value or whether it exists as a credit. This is important because it is a debate that mirrors wider divides in education. Aligned to certain positions is the ontological approach to representations, such as qualifications, as referencing some real or actual ability within an individual, such as perspectives taken in human capital theory. This study suggested this position results in an inadequate understanding of expressions of value in education.

Instead, this study proposed that expressions of value are not a neutral veil over some real or actual ability but rather their essential nature exists as a credit.

In order to explore the responses to the research questions, this study investigated the conceptual framework using the case of foreign qualification recognition (FQR) in Australia's skilled migration program. This FQR process involves the submission of documents to an authority approved by the Australian Government who assesses the documents to determine eligibility to migrate to Australia. FQR in Australia's skilled migration program offers a useful example to explore expressions of value in education for several reasons. First, it sits at the intersection of several important discourses such as globalisation and immigration where the value of education takes on new and updated roles. Second, it is an area suited to an ontological exploration of the nature of value in education because the purpose of FQR is to convert expressions of educational value into new jurisdictions. This study used a mixed method approach analysing two sets of data in order to explore the research questions.

The discourse analysis of government reports revealed how problem statements regarding FQR in Australia's skilled migration program relate to the ability for expressions of value in education to properly perform three functions like those of money. Importantly, the government reports emanated from a perspective that viewed expressions of educational value as a type of neutral veil that directly represents actual skills and ability in an individual. Despite this position, there was still an implicit awareness of the role of credit and how educational outcomes communicate a form of creditworthiness between an individual and a third party. The reports also showed the shifting uses of FQR in Australia's skilled migration program. The recognition of foreign qualifications became intertwined with other discourses such as health and

migration. The expressions of value produced by education systems are thus constantly subject to redeployment into new domains in order to achieve various aims.

The case study analysed the process used by assessing authorities in Australia's skilled migration program when they recognise a foreign qualification. What the findings suggested was that FQR does not recognise skill but rather the credit relations associated with certain educational experiences. The assessing authority used the status of the awarding institutions to determine whether the qualification was a valid expression of educational value. Following this, the assessing authority determined the validity of the qualification for a particular occupation or professional field using the denomination of the measure of value. The relative value of the qualification was determined by using other measures such as qualification level, years of study, credit points and grades. If the assessing authority determined the suitability of the qualification then they 'recognise' the store of value and the individual can use the qualification as part of a medium of exchange, which in this instance is for the purposes of skilled migration. The substantive knowledge or ability of the individual appeared to be largely irrelevant and instead it was the perceived status of the expressions of value issued in the awarding institution's name that formed the basis of assessment. Linked to the perceived value of the qualification were what appeared to be arbitrary decisions regarding the quality of the education system of certain countries. There was also evidence that the recognition process undertaken in Australia's skilled migration program is applicable to FQR arrangements more generally.

In relation to FQR in Australia's skilled migration program, these findings suggest a fundamental challenge to the policy rationale for the use of qualifications in the migration process. They imply that rather than recognising skill, the process as examined in the case study is part of a three-cornered arrangement where the Australian

Government uses qualifications to establish trust in an individual using the strength of the guarantee provided by the awarding authority. This guarantee exists according to a different set of rules and answers to a different set of principles than any notion of skill. Moreover, the rationale for the use of FQR in Australia's skilled migration program is that it recognises some neutral, objective value in the form of skills, as if expressions of value in education are a type of neutral veil. This rationale can obscure all the racial elements, power relations, class conflicts and any other aspect of social relations that are present when the Australian Government uses foreign qualifications to determine migration outcomes.

On a broader level, these findings have implications for debates concerning the link between socioeconomic attainment and educational attainment. They support the wider literature that describes the social and cultural factors that embed themselves into education systems. Moreover, the findings challenge perspectives that implicitly or explicitly describe the link between socioeconomic attainment and educational attainment as a function of meritocratic achievement or acquisition of technical ability. Indeed, the findings suggest that the conception and utilisation of expressions of value in education as if they are neutral indicators of some intrinsic value held by the individual may be based on a flawed understanding of their nature. Instead, the type of value that education systems make intelligible, calculable and communicable appears to be abstract value denominated in a regulated measure of value, and the nature of this value exists as a type of credit.

Using monetary theory to explore issues concerning the nature of value in education

Using monetary theories to deconstruct expressions of value in education and, moreover, to identify these expressions as based in credit relations is not a project that

researchers in the education field have on the whole sought to undertake. There are examples where researchers have described education as a type of currency (Brown, 2004; Brown & Souto-Otero, 2020; CEDEFOP, 2013; Collins, 1979), but the use of monetary theories to explore the ontology of the expressions of value produced by education systems seems to be largely missing from the literature. Consequently, there are many possible avenues for further discussion. Adding to the issue of selecting appropriate strands for discussion is the large literature associated with monetary theories. Even the relatively small subsections of monetary theories, such as chartalist, credit theories and other heterodox positions with which this study aligns itself, offer a substantial body of work to fashion further critiques. In deciding which areas to focus on in this discussion chapter, the aim has been to identify aspects of monetary theories that have relevance to contemporary issues. Moreover, the aim is also to select areas that can highlight important issues that have arisen in the study, but for various reasons remain largely unexplored. This discussion will take a broad approach to the adaptation of monetary theories to the nature of value in education and explore five key areas.

The first area relates to the neutrality of the nature of value in education. An important argument made in the study is that expressions of value in education are not neutral, objective signifiers of some real value held by a person. Instead, these expressions are better characterised as forms of credit that rely on social, political and cultural forces for their realisation. These forces can be arbitrary and exclusionary. Indeed, there are elements of monetary theory that describe how money has a ‘despotic’ quality and how the regime of monetary production is itself an expression of power. There is an exploration of how these strands of monetary theory can help frame certain issues concerning FQR in Australia’s skilled migration program.

The second area relates to education's ontology as a commodity. The commodification of education is a topic that receives regular attention and there is often a linkage made between the commodification of education and the application of neoliberal ideologies to the education sphere. However, this section shows there are many instances throughout history of educational outcomes having commodity-like properties with the same three functions as money. Indeed, monetary theory suggests it is through the acquisition of commodity-like features that expressions of value in education can exist. This section describes some of the paradoxes that occur when education systems use commodity-like forms to communicate value. It makes the point that it is important to understand the strengths and limitations of the various ways we make the value of educational experiences calculable, intelligible and communicable, and to work within these parameters.

The third area of this discussion chapter relates to the concept of an "invariant of value" (Mirowski, 1991) which concerns the various regimes necessary to maintain stable currencies. In monetary systems these governance regimes are the domain of fiscal and monetary policy. Education systems also maintain a regulatory infrastructure that enables stable and credible expressions of value. This section uses phenomena such as qualification frameworks and learning outcomes to show that in attempting to create and maintain an "invariant of value", there can be a misunderstanding or misrecognition of what expressions of value in education represent, resulting in negative consequences.

The fourth area of this discussion applies aspects of monetary theory to new developments in education. There has been significant interest in cryptocurrencies, such as bitcoin, and there are parts of the education sector that seek to use the technology that underpins cryptocurrencies to revolutionise the way society communicates educational attainment. The promise is a democratisation of education that diminishes the

importance of institutions in the creation and communication of educational value. However, while these are new educational spaces, they are likely to face old problems. This section outlines how communicating the value of education is not a problem of learning, but rather a problem relating to the acceptance of credit.

The fifth and final area of this discussion relates to the role of debt. Credit theories of money are explicit in arguing that credit and debt are essentially the same thing. If money is a token of credit, then it is also a token of debt. This study has not explicitly explored the relationship of debt to expressions of value in education. This section considers how to incorporate concepts of both credit and debt when examining the nature of value in education.

The topics in this discussion chapter are broad. What runs as a common thread through all the topics below is the need for a better understanding of the nature of expressions of value in education. As Schumpeter (1994 [1954], p. 289) writes of money, “there is no denying that views on money are as difficult to describe as are shifting clouds”. The result is a puzzle with divergent interpretations of what this essential social technology actually represents. Similarly, views on expressions of value in education are difficult to describe and their nature remains a puzzle. Rather than trying to solve the puzzle, the aim in this discussion chapter is to suggest ways to better understand the problem. It is an important endeavour because education and educational outcomes will continue to play fundamental roles in our daily lives. Without a better understanding of how expressions of value in education function, we are likely to continue to make errors and ask education to perform functions it cannot feasibly achieve.

Money and education have a despotic nature

A central issue in monetary debates is whether money is a type of neutral veil. It is an important issue that goes to the core of ontological positions regarding the nature of money. On one side is the orthodox position that money is essentially a vessel that allows the carriage of the “true” value of goods and services, a type of “wrapper in which goods come to you” or “a veil behind which the action of real economic forces is concealed” (Pigou, 1949, p. 18). In this position, money is a largely unimportant signifier of real value and in order to understand economic functions, “must be discarded just as a veil must be drawn aside if we are to see the face behind it” (Schumpeter, 1994 [1954], p. 277). Contrasted against this perspective is the view that money is not neutral, has very important social origins and has a nature that exists “independently of the production and exchange of commodities” (Ingham, 2004b, p. 25). This counterview fundamentally challenges orthodox perceptions. Keynes described it as part of “an underworld” of monetary analysis (Ingham, 2004b, p. 24) and has in more recent times been taken up by sections of the academy associated with credit theories of money, neo-chartalism and what is known as Modern Monetary Theory (Ingham, 2004c; Wray, 2004, 2014).

This counterview is important particularly because of its critique of the dominant, orthodox perspective. As Wray (2004, p. 234) writes of the view that money is neutral, “thus, the orthodox economist (as well as most of the rest of society) ‘forgets’ that money is a social creation where social relations are hidden under a veil”. This quote from Wray could just as easily apply to the approach taken by orthodox economists, such as human capital theorists, concerning the nature of value in education “as well as most of the rest of society” (Wray, 2004, p. 234). In this perspective, education systems produce skills and knowledge, and representations such as

qualifications are a “veil” in the sense that they are largely apolitical and asocial signifiers of some form of value embodied by an individual. Consequently, the social origins of various representations are forgotten about in favour of a perspective that makes expressions of educational value largely indistinguishable from any other commodity.

One of the reasons why it is important to counter these orthodox perspectives is because subscribing to them strips from education and educational outcomes all the social, political and cultural aspects that embed themselves in expressions of educational value. Educational outcomes become akin to a natural phenomenon, removed from the power relations that create them. Some parts of the literature on money provide a useful way to frame this issue. For instance, Ingham (2004b, p. 20) writes how money has a dual nature:

... money should not be seen simply as a useful instrument; it has a dual nature. Money does not merely have ‘functions’ – that is to say, beneficial consequences for individuals and the social and economic system. In Mann’s terminology, money is not only ‘infrastructural’ power, it is also ‘despotic’ power (Mann, 1986). Money expands human society’s capacity to get things done, as Keynesian economics emphasizes; but this power can be appropriated by particular interests. This is not simply a question ... of the possession and/or control of quantities of money – the power of wealth. Rather, the actual process of the production of money in its different forms is inherently a source of power.

Similarly, expressions of value in education should not be seen simply as a useful instrument that makes the value of education calculable. There is another element to the nature of value in education that has, in Mann’s (1984) terminology, a “despotic” quality. Education systems expand our ability “to get things done” (Ingham, 2004b, p. 20) and at a very basic level enable us to direct resources to aid the experience of learning. However, education systems retain a quality that makes them expressions of

power. This power can manifest itself in various forms. As credentialists argue (Brown, 2001), education systems create a means where the actual production of educational outcomes “is inherently a source of power” (Ingham, 2004b, p. 20). Education systems establish a complex set of power relations that describes what counts as valid expressions of educational value, who can participate and acquire these expressions, and which institutions are authorised to oversee the entire process. A neutral position results in a denial of these power relations in favour of a position that views expressions of educational value as objective, real, meritocratic, and free from the social relations of credit that lie at the core of their existence.

In the results of this study there were examples of this “despotic” nature. For instance, the assessing authority in the case study ascribed a lower value to qualifications from certain countries, such as India, regardless of the substantive knowledge or ability of the individual undergoing the assessment. The results suggest that the FQR process excludes many people based on discriminatory and arbitrary criteria. Because FQR involves the assessment and judgement of individuals, not just their qualifications, the assessment has a massive impact on the lives of those who submit themselves to the process, as well as their families. Those who are unsuccessful suffer the consequences of a regime designed to keep certain people out. Moreover, even those who are successful in obtaining a migration outcome can suffer due to poor FQR arrangements post-migration (Wagner & Childs, 2006).

These discriminatory aspects of FQR are not limited to Australia. Guo (2007, 2009, 2010b), in a pertinent critique, describes the Canadian context for FQR where many immigrant professionals experience “devaluation and denigration of their prior learning and work experience” (Guo, 2009, p. 37). Guo writes how certain forms of difference in experience and attainment are “exoticized and trivialized” and how

“knowledge is used as power to keep out the undesirable” (Guo, 2009, p. 47). The result is a form of racial discrimination that embeds itself in the FQR process and preferences certain types of knowledge over others. Guo is also one of the few authors who describes the assumptions behind the use of measurement devices in the process of FQR:

The existing scheme [of FQR] searches for Canadian equivalency and an absolute truth regarding knowledge and experience. It adopts a set of value-free criteria that discount the social, political, historical, and cultural context within which such knowledge is produced. Moreover, the measuring criteria and homogenizing rules have been not only those of the receiving society but also androcentric and man-made. The claimed neutral assessment and measuring usually disguises itself under the cloak of professional standard, quality, and excellence without questioning whose standard is put in place and whose interests it represents. (Guo, 2009, p. 48)

However, these valid and insightful comments that point to the more oppressive uses of FQR can remain largely the province of academia. As the government inquiries into FQR in Australia’s skilled migration program show, public discourses can preference a perspective that views expressions of value in education as neutral and as a type of “absolute truth” (Guo, 2009, p. 49), even though there is an awareness of problems for instance in the critiques of professional associations and the defensibility of assessment standards.

It is important to challenge orthodox perceptions of education and education outcomes as neutral signifiers of value within an individual because not only do they allow the appropriation and misuse of educational outcomes for certain political ends, they are also fundamentally flawed. For example, FQR has played a prominent part in controversial migration policy debates. During the Brexit referendum and recent proposed immigration policy reform in the United States, FQR has been offered as a solution to migration policy problems (Merrick, 2016; Parsons, 2018). In both instances,

the promise of educational outcomes is that they are a proxy for the identification and ranking of potential migrants within a discourse that identifies some migrants as more valuable than others. In the proposed American reforms, FQR is central to the claim of a “merit-based” process which identifies those who have more skills than others (Parsons, 2018). However, as this study has shown, FQR does not recognise merit or skill. What FQR recognises are the social relations of credit associated with certain qualifications.

It is perhaps unsurprising that educational outcomes become prominent parts of migration processes, especially as a core feature of educational outcomes is to act as “*assignable* trust” (Ingham, 2004c, p. 74, emphasis in original). Adapting what Ingham (2004c, p. 74) writes of money, “in the face of real world radical uncertainty”, education outcomes enable “potentially personally untrustworthy strangers ... to participate in complex multilateral relationships”. Modern migration regimes have established a system where being able to demonstrate your identity and creditworthiness facilitates easier access to freedom of movement. It is possible to argue that the establishment of trust is a legitimate use of educational outcomes in the migration realm, particularly within a wider discourse of securitisation (Foucault, 2007). However, the policy rationale of certain political actors goes beyond an argument of determining relative credit. The popular assumption is that educational outcomes are valid devices to determine migration outcomes because they identify something intrinsically valuable about an individual. That is, some migrants are more worthy than others because FQR shows they have more skill than others, and therefore more “merit” (Hay, 2017). As the results of this study suggest, such a perspective risks creating a rationale for casting some migrants as illegitimate and a justification for treating certain migrants as threats. Further research into this area is important to make it clearer what a process like FQR can feasibly achieve in the migration realm, and also to reveal how

the nature of the expressions produced by education systems allow the use of education outcomes to function in a potentially “despotic” manner (Mann, 1984).

Education as commodity

At the core of monetary theory debates are disagreements concerning money’s categorical identity as a commodity. Money does take a commodity-like form in the sense that it is a relatively durable, commensurable, fungible and valuable thing. Credit theorists of money take a position where they argue the essential nature of money differs from commodities such as gold, silver or grain. Instead, the essential nature of money is better understood as credit that takes a commodity-like form. These arguments concerning commodities may also help frame some wider debates in the education domain regarding the use of measurements in education. Moreover, a better understanding of education’s status as a commodity may also assist in the important endeavour of resisting certain systems of thought which seek to maximise the value of education based on a misunderstanding of its nature.

The commodification of education has been a controversial and prominent feature of recent education debates. Ball (2012, 2015) describes how certain market rationalities have proliferated in modern education systems, particularly universities, ushering in a “tyranny by numbers” (Ball, 2015) which encourages a governance of worth by regimes of measurement. The result is a type of “performativity”, a “powerful and insidious policy technology that is now at work at all levels and in all kinds of education and public service, a technology that links effort, values, purposes and self-understanding to measures and comparisons of output” (Ball, 2012, p. 19). There is also a substantial literature that has formed critiquing neo-liberal ideologies and their relentless application to different domains, including education. Neoliberalism can be an amorphous term, though one way of defining it is the attempt to commodify all parts

of social life and subject as many parts of our existence as possible to market-based and market-orientated approaches (Brenner *et al.*, 2010; Harvey, 2005; Radin, 1996).

Arguments concerning the commodification of education present an interesting conundrum regarding the nature of expressions of value in education. As the results of this study suggest, it is the commodity-like forms of expressions of value in education, such as qualifications, that allow the value of an educational experience to be intelligible, calculable and communicable. Moreover, while there is a denouncing of the commodification of education, particularly recently, education systems have for a very long time produced something that is commodity-like. Indeed, creating a representation that has commodity-like features may be an indispensable feature of formal education systems, because without it, it is difficult to communicate the value of an educational experience.

It is possible to identify the commodity-like features of expressions of educational value in a range of historical contexts. Medieval universities produced tokens with commodity-like forms. One of the first degrees, the *licentia ubique docendi*, was offered by the University of Paris in the 13th century and was modelled on the guild system where a qualification enabled an individual access to a profession (Harriman, 1935). The degree systems created by medieval universities, as Bergan (2007, p. 20) notes, “was a very significant development” that meant the legitimacy of an individual’s qualifications would “not need to be proved anew every time the holder of the qualification moved”. These tokens, such as the 1640 *Artium Baccalaureus* from Cambridge University shown in Figure 12, had commodity-like forms in the sense they enabled the value of educational experience to be commensurable, durable and fungible and were the historical antecedents to the higher education qualifications that exist today.



Figure 12: Artium Baccalaureus (Bachelor of Arts) certificate provided for Henry Smith of Magdalene College, Cambridge University, in 1640. Reproduced by kind permission of the Syndics of Cambridge University Library.

Even in medieval universities it is possible to identify the same three functions of education as it pertains to value that this study identifies. A medieval university degree in civil law, canon law, theology and medicine, “conveyed the legal right, and the legal monopoly, to practice these professions” (Collins, 1981, p. 199). Like the *licentia* from the University of Paris, these degrees were measures and stores of value that individuals used as a medium of exchange for a right to practice in a profession.

The legitimacy of university degrees came from “the granting of papal (and sometimes imperial) charters beginning in the 1200s” which made the “monopolies [of universities] legitimate throughout Christendom” (Collins, 1981, p. 199).

While medieval universities used measures and stores of value, this value was different to the economically productive skills and knowledge that we associate with the value of education today. In the medieval context, the measures and stores of value were as much about the character of the person who was being certified as any technical competence. The papal charters that authorised universities to grant degrees reveal the type of value education systems purported to certify. Pope Gregory XI in 1231 set forth the following regulations requiring a university to assess the suitability of the person for their future role:

Before conferring the license, the chancellor shall allow three months to elapse, dating from the day when the license was asked for, and during these three months he shall make inquiries of the professors of theology and other serious and instructed persons, in order to become acquainted with the life and manners, capacity, love of study, perfectibility, and other qualities needful in those who aspire to teach; and, these inquiries finished, he shall grant or refuse the license according to his consciences. (Harriman, 1935, p. 68)

It is interesting to contrast the above statement with modern expressions of value in education, such as units of competency. The value venerated in the regulations above refer to character, the “life and manners, capacity, love of study, perfectibility” (Harriman, 1935, p. 68) of the individual certified by the university. Modern units of competency extol a different type of value in the form of technical capability or employability.

In the example of FQR in Australia’s skilled migration program, the discourse analysis suggests that it is some technical capability that orthodox positions assume is

the specificity of the value that education systems produce and certify. However, there are many examples of education systems certifying something other than technical capability that has productive capacity in the workplace. Outside of the Western education system, the seminal study by the German sociologist Max Weber on the Chinese examination practices also shows how technical capability was not the primary purpose of certification, and also how expressions of value produced by historical education systems had the same three functions as money.

Writing in the late 19th and early 20th century, Weber detailed the difference between the Chinese and the Western education systems. He noted how the old feudal system of inherited privilege in Chinese society had given way to the use of education as a means to select entrants into elite positions. Unlike the Western system, which Weber described as specialised, the Chinese system favoured the study of esoteric Confucius texts. Successful completion of the examinations guaranteed entry into the elite bureaucratic positions even though the content of the examinations bore no relationship to the skills candidates required to work in the bureaucracy. As measures of value, the examination system created a series of levels to the extent that a stranger's rank was determined by their progression through the examinations:

examinations consisted of three major degrees which were considerably augmented by intermediary, repetitive, and preliminary examinations as well as by numerous special conditions. For the first degree alone there were ten types of examinations. The question usually put to a stranger of unknown rank was how many examinations he had passed. Thus, in spite of the ancestor cult, how many ancestors one had was not decisive for social rank. (Weber, 2009, p. 423)

As a store of value, the education system focused on the creation of a cultured individual:

The examinations of China tested whether or not the candidate's mind was thoroughly steeped in literature and whether or not he possessed the *ways of thought* suitable to a cultured man and resulting from cultivation in literature. (Weber, 2009, p. 428 emphasis in original)

As a medium of exchange, success in the exams enabled access to a range of benefits including:

first, freedom from the *sordida munera*, the *corvée* [a type of obligation to a feudal lord]; second, freedom from corporal punishment; third, prebends [a form of stipend]. (Weber, 2009, p. 434 emphasis in original)

Moreover, success in examinations enabled the individual access to higher social status. Those who had passed verified examinations “were considered holders of a magical charisma” (Weber, 2009, p. 417) and were able to exchange completion with a prestigious regard from others. Weber used the Chinese system of education to demonstrate the use of education as a new realm for the competition between status groups and how the seemingly meritocratic existence of education had only come to displace the old system of inherited privilege with another.

These historical examples show how expressions of value in education have for a long time, and in different contexts, had the same three functions as money. Moreover, they also point to the central role of credit. Similar to the description of the FQR assessment process, in these historical examples education systems use a three-cornered guarantee to communicate value. Initially, there is a relationship between an individual and an authority, such as a university or the monastery in the case of Weber's analysis of China. This relationship produces a token or proof of completion that has commodity-like properties which communicates to a future third party that the individual has credit, is trustworthy and has an entitlement to some form of benefit.

These historical examples are further evidence of what seems to be a central paradox of all formal education systems. In order to communicate educational value, education systems produce a representation that has commodity-like features and is therefore essentially different from what the representation purports to represent. In the example of FQR in Australia's skilled migration program, the Australian Government relies on the use of a token that answers to a different set of properties than any notion of skill. Whereas skill or ability can change, decay or evolve, the token is a fixed representation with a constant value. It is this discrepancy between signifier and signified that is also present in Bourdieu's description of the way qualifications confer on the holder a form of "conventional, constant, legally guaranteed value" completely disconnected from the value that the individual "effectively possesses at a given moment in time" (Bourdieu, 1986, p. 20).

There is a sense within many parts of the literature that the functions of formal education systems inevitably result in a perversion of the true value of education. Echoing Marxist arguments of 'use-value' versus 'exchange-value', the value of the learning becomes displaced and overridden by a system that places emphasis on what the education outcome can be exchanged for, such as a higher paying job. Those that were part of the 'deschooling' movement of the 1970s offer further critiques of formal education systems. Illich (1973), for instance, saw formal education and universal schooling as part of a false promise that no amount of reform will remedy: "universal education through schooling is not feasible. It would be no more feasible if it were attempted by means of alternative institutions built on the style of present schools" (Illich, 1973, p. viii). For Illich, the solution was to dismantle formal certification regimes and education institutions and replace them with "learning webs". This

movement was part of wider hostility at the time towards formal education institutions and formal education structures (Barrow, 1978).

Perhaps what the example of money offers to the commodification of education debates is a way to understand some of the paradoxes of formal education systems when they can create a means to identify and transmit value. As McLuhan (1964, p. 10) writes, money is a form of language which is a means “of translating the work of the farmer into the work of a barber, doctor, engineer or plumber ... money is action at a distance”. Similarly, education systems also create a type of language that enables the comparison and translation of different educational experiences. Complex formal education systems mean we can compare the work of a student studying at a rural high school with the economics undergraduate in a metropolitan university. International testing regimes of language, literacy and numeracy levels such as PISA and TIMSS mean we can contrast what a student learns in Singapore to the performance of students in Western Europe. Without the formal structures of education systems, the ability for education systems to communicate value would be severely limited. Adapting what Ingham (2013a, p. 144) writes of money, formal education systems and certification regimes “can be sources of power, exploitation, cold impersonal relations and so on; but they are at one and the same time a means of enabling and projecting human endeavour through time and space”.

What seems vital is an understanding of the nature of the expressions that education systems produce and to work within these parameters. This is particularly important because a misunderstanding, to borrow from Keynes (1963 [1933], p. 9), “results in a machinery of thought” that equips the minds of policymakers, researchers and the wider public and leads “in practice to many erroneous conclusions and policies”. In education, examples of this “machinery of thought” abound, particularly

with the plethora of applications of human capital theory. For instance, one report from an Australian university think tank uses human capital theory to make the extraordinary claim that lifting test scores of school students in regional Australia could result in the economy of regional Australia equalling the economic output of metropolitan cities. The report states that, “if the human capital gap between urban and non-urban Australia was closed, Australia’s GDP could be increased by 3.3%, or \$56 billion [US\$39 billion]” (Holden & Zhang, 2018, p. 5). Such logic takes orthodox stances regarding expressions of value in education to its logical conclusion, the neutral veil perspective, and views educational attainment in the same way as any other commodity. Increasing educational attainment or higher test scores thus becomes the equivalent of a bumper harvest or the mining of higher purity precious stones. It is an approach that seems to misunderstand the nature of value in education and turns education into an asocial, objective phenomenon. The expressions of value in education become “a symbol ... [which] can *directly* represent real commodities” (Ingham, 2004c, p. 17, emphasis in original) and thus neutral signifiers of value which are divorced from the social relations of credit that lie at their core. As a consequence, formal education becomes asked to perform all sorts of functions it cannot feasibly perform, such as completely removing the economic divide between urban and regional areas.

Such neutral veil perspectives are not confined to the fringes of the economics discipline – these are mainstream economic theories. For instance, Hanushek, an editor of the *Handbook of the Economics of Education* (Hanushek *et al.*, 2006), undertakes a similar analysis to the one outlined above in order to explore the role of education on the long-term growth economic rates of countries. Hanushek uses human capital approaches but substitutes attainment, in the form of schooling, for achievement such as scores in international testing regimes like those of PISA as a “direct measure of skill”

(Hanushek, 2013, p. 206). Hanushek (2013, pp. 206-207) finds that whereas school attainment “explains one-quarter of the international variation in growth rates ... international math and science tests for school attainment” explain “three-quarters of the variance in growth rates”. The result of the analysis is that on a national level, “one standard deviation difference in performance equates to two per cent per year in average annual growth of GDP per capita” (Hanushek, 2013). The argument here is again that lifting test scores will result in an increase in economic productivity. Central to this argument is the use of the expressions of value produced by education systems as variables with qualities that enable their deployment in economic models. By using ‘achievement’ as a parametric variable, regression analyses become possible that enable economic modelling of the relationship between increases in test scores and economic growth. For instance, in Figure 13 below, the impact of twenty-year and thirty-year reforms that result in an increase of 0.5 standard deviations in test scores at the upper secondary school level, described as “moderately strong knowledge improvement”, is modelled according to its impact on GDP. The result shows a cumulative impact where improved test scores increase GDP by more than 30% over a seventy-five-year period. Such a forecast relies on an interpretation of educational achievement as expressing the relative worth of some embodied, commodity-like, income-producing ability. Moreover, the interpretation of variables in this way seems to elide the role of societal and cultural factors in the relationship between economic productivity and educational achievement. For instance, if expressions of value in education function in a way as to apportion credit that individuals use to facilitate various exchanges, then increases in test scores will not necessarily equal increased productivity. Indeed, such a position can be found in Spence’s (1973, 2002) concept of the signal and Hirsch’s (1976) positional good because they associate expressions of value in education in increases in earnings

relative to others, as opposed to aggregate increases in earnings across a given population.

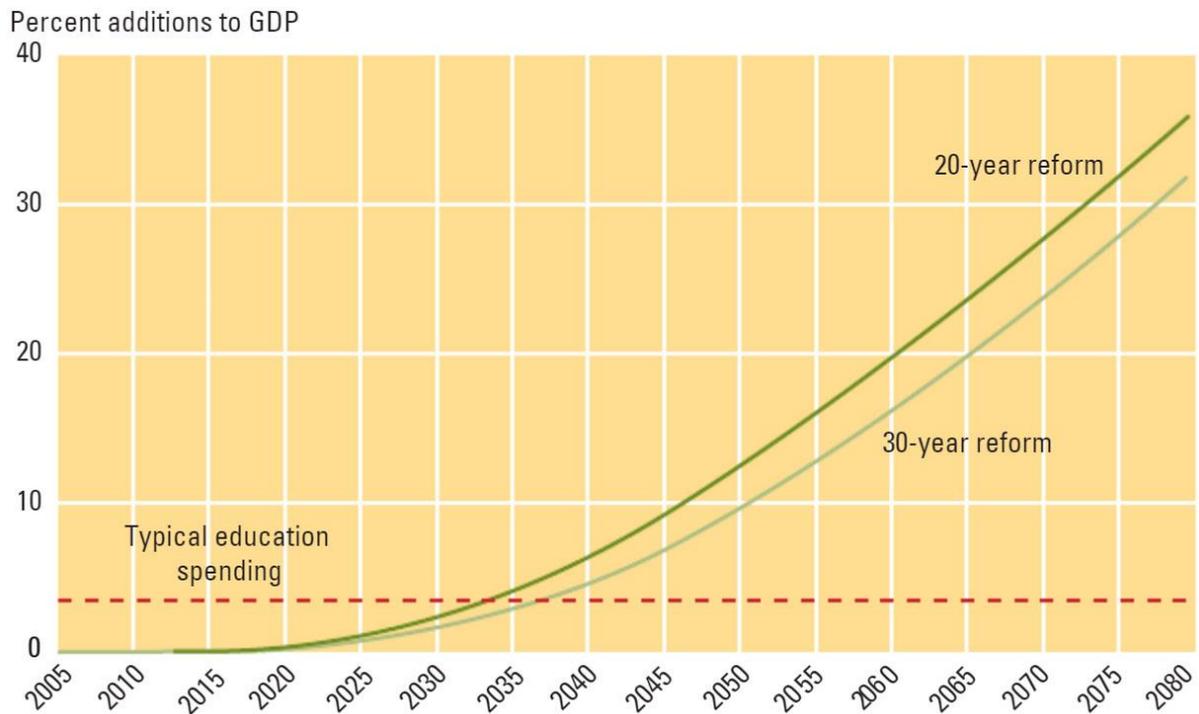


Figure 13: Model forecasting increases in GDP due to 0.5 standard deviation improvement in student outcomes at the end of upper secondary schooling (“moderately strong knowledge improvement”). From Education quality and economic growth by E. Hanushek (2007), Washington D.C.: World Bank. Reprinted under Creative Commons Attribution CC BY 3.0 IGO.

If, like money, expressions of value in education are an essential social technology, then it seems it is through commodity-like forms that this social technology functions. In McLuhan’s terms, commodity-like representations are integral to the “language” of how we communicate the value of educational experiences, and there are historical examples that also support this conclusion. It is likely, therefore, that a project that aims to eliminate commodity-like forms from education would be difficult to achieve. What seems important to acknowledge is that it is not a commodification of education that is inherently a problem, but rather the misinterpretation of this commodity-like form. The approach of many orthodox perspectives is one that seems to

misunderstand what the “language” of expressions of value describes. As Keynes (1983, p. 402) writes of orthodox positions concerning money, this approach is “like confusing a theatre ticket with the performance”. It is also one that has potentially disastrous consequences, part of the “satanic mill” that Polanyi (2001 [1944], p. 77) describes when market societies mistakenly describe man-made constructions, “fictitious” commodities, as natural phenomena. There is the possibility of significant further research into this area. Moreover, considering the importance of the topic to contemporary issues and the relentless application of market-based ideologies to the education domain, it would be worthwhile to examine more closely how monetary theories can contribute to debates concerning the commodification of education.

An invariant of value

As an essential part of our lives, the proper functioning of money is vital to the continuance of daily life. When monetary systems begin to fail, there are disastrous consequences. Keynes (1920, p. 122) wrote after the end of World War I that, “there is no subtler, no surer means of overturning the existing basis for society than to debauch the currency”. It was a prescient comment considering the hyperinflation that plagued Germany in the 1920s and the regime that followed the Weimar Republic. An inability to properly manage the money supply is a symbol of a disintegrating society. Hyperinflation results in a massive destruction of value and wreaks havoc on societies unfortunate to suffer through it. There are many examples throughout history of faltering regimes that have been unable to ensure money can perform its basic functions, with modern day examples including Venezuela and Zimbabwe.

Monetary disorder, however, is not limited to problems with inflation. One example, the collapse of the Argentine peso in 2001-2002, can provide new perspectives on modern education policy initiatives and provide a launching point for

further research. In 2001, Argentina suffered through a collapse of its economy and defaulted on its national debt. The decade long pegging of the peso to the US dollar was abruptly ended, causing a run on the banks and a form of monetary incoherence and chaos (Ingham, 2004c). As soon as the currency peg ended, two measures of value with rapidly changing exchange rates became acceptable forms of payment, the Argentinian peso and the US dollar. The confusion was augmented by the existence of various “complementary currencies” issued by provincial governments. In 2001, some cash-strapped provisional governments began to pay their workers in self-issued bonds which circulated as a type of cash used in everyday transactions (Gregory, 2001). These bonds differed in name according to the issuing provincial government, and also in issuing date so that earlier versions of the bonds were at a different value to later versions. Rather than having a single measure of value, Argentina ended up with many competing units of account. A simple transaction like paying for a coffee could be settled using at least six different forms of currency (Catan, 2002). Even the upmarket shopping centre Galería Pacífico had its own voucher, *pacificos*, which circulated as a form of currency (Catan, 2002; Ingham, 2004c). The result was a form of money anarchy that paralleled riots and political upheaval. In a six-month period from 2001 to 2002, Argentina had four different governments.

This example illustrates a number of points that are relevant to education and education policy debates. First, it is a reminder of the importance of proper regulation for the maintenance and construction of certain forms of value. Monetary production relies on the continuous creation and settlement of debts and this “can only be achieved if it is believed that money will maintain its value over time” (Ingham, 2013b, p. 133). Regulatory authorities play vital roles in managing financial systems in order that money can continue to be a stable expression of value. As the results of this study

suggest, education regulatory authorities also play a crucial role in ensuring the legitimacy of expressions of educational value. Without proper regulatory maintenance, the ability for the trust in the value of the outcomes that education systems produce becomes compromised. There are many examples where poor regulatory oversight has compromised the trust in the value of educational outcomes (for example, Burke (2018) describes how poor regulatory oversight led to massive fraud and waste in Australia's VET sector). The mere existence of regulatory oversight, however, is not sufficient to maintain valid expressions of value. What is also important is the type of regulatory oversight. Examining monetary theories may help foster a better understanding of the role of education regulatory authorities and how they can regulate education systems to ensure stable and accepted expressions of educational value.

The second area where the Argentinian example can help frame current education policy debates comes in the form of what is known as the "working fiction of an invariant monetary standard" (Ingham, 2004c, p. 144). Mirowski (1991, p. 579) writes that:

The overriding problem of all market-oriented societies is to find some means to maintain the working fiction of an invariant standard so that debt contracts (the ultimate locus of value creation) may be written in terms of the unit at different dates.

Modern market societies must continually ensure that money exists as a credible expression of value at different periods of time, otherwise there is a risk of massive erosion in the trust that money will retain its value at a future point. Without the maintenance of the "working fiction" of an invariant standard, the ability to enter into credit and debt contracts becomes severely hampered. Hyperinflation is one manifestation of such a problem where doubt over the future worth of the currency

causes erosion in its real value. In the Argentinian example, the multiple and overlapping measures of value in the form of provincial government bonds, foreign currencies and even shopping centre tokens compounded problems associated with hyperinflation. These multiple measures interfered with the ability for a single “invariant standard” and thus compromised the ability for a currency to generate the trust needed to facilitate basic transactions, such as paying for a cup of coffee.

The same principle outlined by Mirowski can also apply to education systems. The “overriding problem” of any formal education system is to find some means to “maintain the working fiction of an invariant of standard” (Mirowski, 1991, p. 579) so that the value of disparate and fundamentally unique educational experiences can be written in the same terms and at different dates. Medieval universities overcame such a problem through the use of degree titles in a nomenclature that remains largely the same today. In the example of the Chinese system described by Weber, regular examinations were part of an “invariant standard” which enabled the easy determination of the social rank of strangers. The ceremony and ritual that surrounds education that theorists such as Bourdieu (1986) and Foucault (1979) describe can be viewed in this light as part of the machinery of education systems that enables the continuation of the “working fiction” of educational value as a type of “invariant”.

Indeed, there are a number of prominent recent examples where authorities have sought to create, reform and expand the ways in which education systems “manage the working fiction of an invariant standard” (Mirowski, 1991, p. 579). For instance, the Bologna process provides a striking example of how expressions of educational value become a central tool for the reform of education systems. The Bologna process began in 1999 and has evolved to have the purpose of creating a common single entity, namely the European Higher Education Area (EHEA), through various means such as

standardised qualifications and credit point systems. The Bologna process is part of a wider European project that seeks to create a more coherent, interconnected European Union through a ‘convergence’ and alignment of important social, political and economic institutions (Dale & Robertson, 2009). Like another European project, the euro, it is reforms of expressions of value that lie at the core of the Bologna process. For instance, the ECTS system creates a common ‘standard’ of value so that it is possible to quantify and translate into different jurisdictions the value of a student’s study at higher education institutions throughout Europe. To avoid a situation similar to Argentina where more than six different units of account existed causing confusion, there has been a standardisation of qualifications so that there is a common expression using three levels or “cycles”. The first cycle consists of 180–240 ECTS and is usually considered part of an undergraduate degree and the second cycle, like postgraduate courses in the British tradition, consists of 60–120 ECTS (European Commission, 2015). A Diploma supplement has also been introduced which provides a standardised description of the course of study, ostensibly to ease translation, transparency and mobility

In implementing these reforms, authorities seek to enact improvement by focusing on expressions of value in education. This can be a powerful reform tool. As Ingham (2004b, p. 25) description of money shows, currency “is a form of sovereignty” and there is a link between the validity of expressions of value and sovereign spaces. The Bologna process and the creation of the EHEA seeks to overlay national educational spaces with international educational spaces and extend where expressions of value can feasibly function as a legitimate medium of exchange. However, in enacting such reform it is important not to fall into the trap of confusing representations of value as directly signifying some real ability within the individual. As previously discussed, measures of value in education establish two important qualities, validity and

relativity. Validity establishes what counts as acceptable expressions of value and relativity enables the comparisons of these expressions. However, validity and relativity are not the same thing as being valuable. Often policymakers conflate valid expressions of value with value itself. This leads to the mistaken belief that by enabling the easier identification of what counts as a valid expression of value, or by enabling the production of more valid expressions of value, they are in fact creating more value or wealth.

To illustrate this point, it is worth briefly discussing the case of qualification frameworks. A qualification framework has become a favourite education reform policy tool since such frameworks first appeared in the 1990s in countries such as Britain and Australia. They have now spread across the world, with the notable exception of the United States. Qualification frameworks usually place post-secondary qualifications on levels and are often part of wider moves to describe educational experiences through a set of learning outcomes (Bohlinger, 2012). The Bologna process features the creation of a European Qualifications Framework (EQF) where the secondary school certificate and all formal post-secondary qualifications are placed on an eight-level framework with the purpose of making “qualifications more readable and understandable across different countries and systems” (CEDEFOP, 2019).

In the terms of this study, what a qualification framework establishes is a framework for valid expressions of measures and stores of abstract educational value. As the example of FQR suggests, it is attachment to an accepted meter, such as a qualification framework, that enables the verification of a claim to the possession of educational value and for the function of education as a medium of exchange to occur. Like the Australian Government’s approach to FQR, the policy rationale for the existence of a qualification framework is that it can facilitate the easier exchange of real

value in the form of skills or knowledge. However, the findings of this study suggest that such a position may misunderstand the specificity of the value a qualification framework establishes. The type of value a qualification framework establishes is abstract and embedded in credit relations. A qualification framework assists in solving the “problem” that faces all education systems by finding a “means to maintain the working fiction of an invariant standard” (Mirowski, 1991, p. 579) so that expressions of educational value can be written in the same terms at different periods of time. This function has enormous utility, as the example of FQR in Australia’s skilled migration program shows. In a European context, a qualification framework may indeed assist with the endeavour of standardising qualifications so it is easier for regulatory authorities to understand the qualifications of other countries, or for employers to interpret a qualification, the “signal” (Spence, 1973), acquired in another European country. As a technical device, qualification frameworks may also assist authorities by enabling a system of governance and creating a form of shared sovereign space that supports wider efforts of harmonisation. However, the fundamental nature of value these qualifications frameworks report to facilitate remains based on credit relations. Moreover, a misunderstanding of the nature of value in education can have negative consequences, as some researchers have shown. In attempting to create an “invariant standard”, qualification frameworks, along with outcome-based representations of learning, can have undesirable effects. For instance, by focusing on outcomes and qualification levels, there can be a relegation of the importance of knowledge in the curriculum which causes a hollowing out of the substance of educational experiences (Muller & Young, 2019). There is also strong evidence that shows that rather than aiding democratic principles of access and equity in education, qualification frameworks can actually exacerbate problems and undermine educational institutions

and the acquisition of knowledge (Allais, 2014). Qualification frameworks are also a favoured tool of international organisations as part of aid projects to developing countries. However, there is little evidence of their efficacy and they can impose on countries an alien system of organising credit relations and in doing so divert resources from building institutional capacity and improving education provision in the service of an elaborate regime of governance (Allais, 2011, 2014).

It is important to remember that the value of an educational experience differs from the value of a learning experience, despite many perspectives that conflate the two. A heavy policy focus on the aspects of an educational experience that enable calculability of educational value can detract, displace or threaten the individual learning experience that education systems also exist to deliver. Simmel writes of money that it transforms the world into an “arithmetic problem” and causes the “reduction of qualitative values to quantitative ones” (Simmel, 1903, p. 50). Robust regulatory systems are important in the construction and maintenance of educational value because without them there would be a compromising of the important functions that education performs. However, care needs to be taken that pedagogical and learning problems are not turned into “arithmetic problems” (Simmel, 1903, p. 50). The example of money, and credit theories of money in particular, offers an important avenue for further research in this area. Moreover, they offer the possibility to counter the imposition of educational policy initiatives that seek to improve the calculability of the value of an educational experience but often fail because they fundamentally misunderstand the nature of the expressions produced by education systems.

New educational spaces

One of the most prominent recent developments in monetary debates has been the emergence of blockchain technology and cryptocurrencies such as bitcoin and

ethereum. These innovations offer the prospect of revolutionary new monetary spaces, such as ‘private money’, where neither the state nor banks are involved in the production and distribution of money. Cryptocurrencies have received a huge amount of attention since bitcoin’s creation in 2008. The soaring price of bitcoin and other cryptocurrencies has led to an industry of trading cryptocurrencies, ‘cryptomining’ and digital wallets. Elements of these innovations have also found their way into the education sector. There are numerous reports of attempts to adapt blockchain technology in order to create a digital credential ‘wallet’ which records qualifications and micro-credentials (Dodd, 2017; Roberts, 2019). There are also reports of the transformation of FQR using blockchain technology (Newton, 2018). The promise is a more digital, democratised and decentralised chronicling of educational attainment with less involvement from traditional institutions such as universities. These innovations, however, are likely to face many of the same limitations that restrain other representations of value in education. As the case of FQR in Australia’s skilled migration program suggests, while representations of value in education are the subject of constant reinterpretation and redeployment, at the core of their nature lies the social relations of credit. The results of this study can offer another way to frame and critique some of the claims attached to the new frontiers in educational value such as digital credentialing and digital badging.

In using cryptocurrencies to explore educational debates it is important first to understand their status. The main innovation of cryptocurrencies comes in the form of blockchain technology. Blockchain technology uses a distributed ledger in order to record transactions. It is an open, deregulated peer-to-peer system that essentially replaces the role of banks. Cryptocurrencies place every transaction on a permanent ledger, known as blocks, and as the number of transactions grows the blocks form a

long chain of largely immutable records, which is why the ledger is known as a blockchain. The technology moves the role of verifying transactions from the clearing houses of banks to an open, decentralised environment. Cryptocurrencies create tokens at a predefined rate and distribute the tokens to those involved in maintaining the blockchain. It is these tokens, known by names such as bitcoins, which act as assets with similar characteristics to money.

Cryptocurrencies, however, are not money and are better classified as a type of speculative asset (ECB, 2019). Unlike other types of assets such as company stocks, cryptocurrencies do not have any ‘intrinsic value’ because they are not associated with any financial claim on an identifiable entity (ECB, 2019). Importantly, money does represent some claim on an entity. In establishing an official unit of account, governments undertake to use money as settlement for taxation obligations levied on their citizens. Indeed, it is argued by many that the state’s acceptance of money as the means by which a citizen can settle their taxation obligation is the origin of money’s legitimacy as an expression of value (Innes, 1913, 1914; Knapp, 1924). From this perspective, a cryptocurrency only becomes money when a government says it will accept payment of taxes in a quantity denominated in something like bitcoin and, while some politicians have floated such an idea, this has not happened (Bagshaw, 2017).

There is a strand of the grey literature that suggests that cryptocurrencies and blockchain technology can revolutionise expressions of value in education. Some claims include that blockchain technology can “empower a decentralized community of learners with full control over their trusted credentials and transcripts” (Smolenski, 2016, p. 17). The promise of blockchain technology is it can remove the role of the authority in overseeing the issuing of qualifications and expand the number and type of educational experiences that individuals can officially record. The technology has

captured the attention of many in the education sector and there are numerous reports of prominent universities and professional organisations investigating blockchain technology as a new way to create digital forms of traditional tokens like qualifications (Dodd, 2017; Newton, 2018). In what seems to be a new iteration of the promise that underpinned the introduction of competency-based training in the 1990s, some commentators have focused on the ability for technology to transform what measures of value in education express:

Learning, rather than seat time, will be the core measure of progress in this new system, and students will be able to demonstrate what they've learned through dynamic online platforms. What's more, education beyond high school will be viewed not as a static, one-time experience but as a lifelong journey of building one's knowledge and skills (Merisotis, 2016, p. 28).

Overcoming some of the problems associated with recognising foreign qualifications is also another purported benefit of blockchain technology. For instance, one of the largest international organisations that undertakes recognition of foreign qualifications, World Education Services (WES), has announced a piloting of digital 'badges' using blockchain technology and groups such as the European Union have investigated blockchain and digital credentialing as a means to improve FQR arrangements (Atack, 2018; European Commission, 2018; Grech & Camilleri, 2017).

While cryptocurrency technology may lead to some changes in the appearance of the tokens produced by education systems, these new innovations are unlikely to alter the fundamental nature of expressions of educational value. The biggest challenge for any new expression of educational value will be to generate trust. This is because without trust an individual cannot successfully use the token as part of a medium of exchange. The results of this study suggest that in the formal education sector, all expressions of educational value are part of a three-cornered arrangement between an

authority, an individual and a future third party. The tokens produced by formal education systems are both a memory and a promise. They are a memory recorded using the nomenclature of the education system and they are a promise to a future third party that the individual to which the memory refers has a claim to the possession of some form of educational value. These representations allow the establishment of relationships between “potentially untrustworthy strangers” in “large impersonal markets where interpersonal trust *cannot* be generated” (Ingham, 2004c, p. 74, emphasis in original). As the analysis of the FQR process has suggested, it is the authority that acts as guarantor to any claim to creditworthiness made by the individual. The future third party in the form of the Australian Government uses the strength of the guarantee provided by the authority to make a judgement on the claim made by the individual. Altering this three-cornered arrangement is one of the major attractions, and also problems, with the promise of blockchain technology because the implication is a reduction or even removal of the role of the authority. However, it is an authority that confers validity and without validity it is difficult to generate trust in the educational outcome. Indeed, it is not the content of an educational experience that generates validity but “the name or distinguishing mark of the issuer, which is never absent” (Innes, 1913, p. 382). Removing the authority from the expression of educational value in favour of an open, peer-to-peer, decentralised and deregulated form using blockchain technology is likely to encounter problems concerning validity and trust. The lack of an involvement by a credible authority results in an expression of value which, using the European Central Bank’s terms, does not represent a claim on any entity, such as a university or government approved regulatory authority (ECB, 2019). Blockchain technology may be successful in the education sphere when there is involvement of established authorities that can act as a verifier to any token. In these instances, the

blockchain technology would not fundamentally alter expressions of educational value but rather represent essentially the same token except in digital form.

The results of this study help highlight an important point regarding new educational phenomena such as digital credentialing. The challenge that non-traditional forms of expressions of value in education face is not a problem based in the quality of learning, but one based in the ability to generate credit. Whether digital wallets or blockchain-based credentials become accepted expressions of educational value rests in whether third parties accept the validity of the token. Moreover, there seems to be a misunderstanding in the debates of new educational phenomena regarding what expressions of value in education communicate. Similar to the policy reports used in the discourse analysis, the assumption can be that representations such as qualifications communicate some form of learning or intrinsic ability. The promise of new technology is that they will create “greater clarity around student learning” by transforming how we represent the value of educational experiences from “an accounting of time spent” to one which provides “information about what a student learned” (Peck et al., 2016, pp. 83-84). However, as Nock (1993, p. 14) writes, “a credential is something that gives a person access to credit or confidence” and the learning an individual undertakes during any educational experience is important only insofar as it helps achieve this purpose. There is a need to assess the claims associated with new educational phenomena against an understanding of the nature of value in education. The promise is for something revolutionary, however, the likelihood is something much less dramatic. It is important to point out the constraints that new educational phenomena will likely face in order to better understand what they can feasibly achieve.

The role of debt in the expression of value in education

One area of credit theories of money that remains largely unexplored by this study is the role of debt in the nature of value in education. Credit theories of money are explicit in describing the central role of debt in the nature of money. Innes, the British diplomat, economist and author who first proposed a credit theory of money, argued that credit and debt are essentially the same thing:

Credit and credit alone is money. ... It is simply the correlative of debt. What A owes to B is A's debt to B and B's credit on A. A is B's debtor and B is A's creditor. The words 'credit' and 'debt' express a legal relationship between two parties, and they express the same legal relationship seen from two opposite sides ... [Whether] the word credit or debt is used, the thing spoken of is precisely the same in both cases, the one or the other word being used according as the situation is being looked at from the point of view of the creditor or of the debtor. (Innes, 1913, p. 393)

In this study, it is the role of credit that has been the focus. Using credit theories of money, the study has shown how the primary nature of expressions of educational value exists as a type of credit. While the role of credit has been explicit, the role of debt has been less overt. It is an important area to explore because the theories that form the basis for the conceptual framework used in this study suggest not just the primacy of credit, but the primacy of debt as the two are part of the same system that creates valid expressions of educational value. How debt manifests itself in expressions of value in education, therefore, is an important area for further research.

Economic theories concerning value in education often use terms that have linkages to concepts of debt. For instance, human capital theory explores the return on investment that individuals receive when they forgo earnings in order to undertake an educational experience. 'Investing' in 'human capital' is effectively entering into some form of debt. It is possible to view the Mincer earnings equation in terms of credit and

debt because it plots the financial return of those who go deeper into debt by forgoing earnings and investing in more years of education. This investment is often described in terms of opportunity costs, which in this instance refers to the loss of income-generating capacity by choosing to invest one's effort in pursuing education.

While also describing opportunity costs, signalling differs slightly from the human capital formulation in its use of debt. Signalling more closely aligns the ability to benefit from the value of formal education with some intrinsic ability possessed by the individual. Those who possess the characteristics employers seek do not have to invest as much in education. Education is essentially cheaper for those with more 'ability' and thus the more able individuals can more easily acquire the signal that employers use as proxies to discern suitable employees. Spence (2002, p. 437) writes that education may "distinguish low- and high-productivity people and the reason it is able to do so is that the cost of the signal is negatively correlated with the unseen characteristic that is valuable to employers, in this case productivity itself". What this essentially means is that a major reason why the signal of education has value is because its acquisition costs less for certain people whom employers wish to hire and who, therefore, are more able to handle the costs that education systems demand.

What constitutes an ability to manage debt can vary in the above examples. Human capital formulations more closely align the ability to manage debt with time and money, because those who can invest the time and forgo earnings can manage the debt required to invest in their 'human capital'. In signalling there is a closer connection to something akin to aptitude or intelligence as there is a linking of the ability to manage the costs of education to characteristics within an individual. Other economic considerations of the nature of value in education also attempt to account for some kind of intrinsic ability within an individual. Hirsch (1976), in his discussion of the

positional good, describes the economist's problem of determining whether the nature of value in education comes from the educational experience itself or something already present in the individual such as "native ability", which can manifest itself as "a combination of intelligence, motivation, and discipline necessary to absorb on-the-job training" (Hirsch, 1976, p. 47).

These economic perspectives suggest that there is a link between the ability to manage a debt and the ability to acquire a credit. Indeed, debt does play a prominent role in modern education systems, particularly financial debt. There are many education policies that align the attainment of a qualification with a debt. Student loans are one such example of this. An individual goes into financial debt in order to receive a qualification that they can use at a later date as a medium of exchange in order to pay off the debt through earnings attained during employment. The token of a qualification acts as a type of property which actors in the education system use to facilitate the creation and discharging of credit and debt relations associated with certain educational experiences.

However, it is possible to go beyond the financial realm when discussing notions of credit and debt in education systems. For instance, there is a very strong empirical observation that those from higher socio-economic backgrounds generally also achieve higher scores on testing regimes. This observation is well known and often, when communicating the results of testing regimes, the assessment results control for socioeconomic status. In Australia, school results of the National Assessment Program – Literacy and Numeracy (NAPLAN) are weighted using an index of socioeconomic advantage known as an ISCEA score so that an individual school performance is measured against schools that have students from similar socioeconomic backgrounds (Lingard *et al.*, 2016). In the United States, there was a recent proposal for the

introduction of a so-called ‘adversity score’ as a measure to accompany the SAT admission results used for entrance into higher education courses. The ‘adversity score’ uses a scale from 1 to 100 drawn from factors such as school size, median family income, local crime statistics and percentage of students at a school eligible for subsidised lunches (Hartocollis, 2019). In the terms of this study, the adjustments made in the case of NAPLAN and the ‘adversity score’ are a manifestation of the knowledge that measures of value in education are not neutral. They are attempts to compensate for the unequal ability to manage the debts that education systems demand of individuals, an ability that is highly correlated with socioeconomic status. Such examples show how concepts of debt and credit already exist within discourses concerning expressions of value in education.

Perhaps what the arguments made by credit theorists of money concerning the relationship between debt and credit can offer is a way to advance understandings of the role of education in society. This study has argued that the nature of expressions of value in education is as a form of abstract value. If, to adapt Ingham’s comments on money, “the means of storing and transporting this abstract value consist in the social organisation” (Ingham, 2004c, p. 71) of the education system, then the role of education systems is to establish a field in which certain credit and debt relations can be organised, obtained and discharged. For this system to function, “three elements are important. Debtors must be, first, willing and, second, able to pay. Third, there needs to be effective organization for the transfer of credits and debts” (Ingham, 2004c, p. 77). Students in this model are debtors who must, first, be willing to participate in the education system and, second, able to afford the demands of the education system. Third, there needs to be a system in place which organises the expressions of value so that the individual can take advantage of the credit they have acquired and receive

compensation for any debt they have incurred. Education systems facilitate this through several means such as licensing regimes or establishing minimum entry requirements for certain jobs.

The case of FQR in Australia's skilled migration program provides an interesting example to illustrate how education systems mediate credit and debt relations. The migrant is a type of debtor who has acquired a credit that is an expression of value that has validity in their country of origin. The Australian Government searches for ways to measure creditworthiness of potential migrants and uses foreign education systems to establish trust. The measure of value listed on the foreign qualification is denominated in various forms such as degree titles and fields of study. The assessing authority's role in the process is first to establish the validity of the denomination to a certain occupation and then to evaluate the quantity of the denomination to ascertain whether it meets a benchmark. What the assessing authorities assess are essentially the credit and debt relations associated with certain educational experiences. Through this process, the Australian Government accepts the credit associated with the individual who receives some compensation for the debt they incurred while obtaining the token. The process is another example of how education systems enable the "effective organization for the transfer of credits and debts" (Ingham, 2004c, p. 77). Moreover, the system is not objective or meritocratic. For instance, those individuals from relatively rich, Western countries have stronger credit because their universities and regulatory bodies have more sophisticated recognition arrangements. Individuals from poorer countries or countries where assessing authorities view their education system with less esteem would have to go further into debt to acquire the same level of credit as someone from a richer country, which has the effect of excluding them from the migration process regardless of their actual ability.

The primacy of credit and debt in expressions of value in education raises an interesting and controversial question: are all the ways we use to measure value in education essentially a means to enable expressions of credit and debt relations? As this study has shown, measures of value in education are denominated in various forms. For instance, in the testamurs and transcripts shown in Figure 6, Figure 7 and Figure 8, these measures use various denominations such as ‘Bachelor of Arts’, ‘Master of Arts in Education’ and ‘Master of Finance’. In the case of FQR in Australia’s skilled migration program, the denomination of the measure of value enables an assessing authority to assess the claim to the possession of some form of educational value by an individual and, by extension, their creditworthiness. The assumption is that these measures of value capture something relating to skill, knowledge or ability in an individual. However, the framework used in this study also lends itself to the argument that the denomination of value in terms of knowledge, field of study, competence, or any other measure used in education, occurs primarily in the service of organising, obtaining and discharging abstract value based in credit and debt relations that are intertwined with other power relationships and inequities that exist within society. They consequently end up largely being expressions of these power relations and inequities. While such arguments do challenge orthodox perceptions regarding the use of measures and value in education, they also have concordance with sections of the heterodox literature concerning the nature of value in education. Indeed, there is a long history of challenging the notion that expressions of value in education are the product of some meritocratic attainment of knowledge. The British sociologist Michael Young (1958) wrote a dystopian satire, *The Rise of the Meritocracy*, where the ruling class in the form of a “meritocratic elite” exploits the education system to justify its position of power. “Their trick would be to control what ‘merit’ constituted. They would justify their

positions of power on the back of their superior results” (Major & Machin, 2018, p. 169). The example of money offers a way to understand the mechanics of a system that blends notions of knowledge and merit to enable an expression of value which has the appearance of something neutral, objective and meritocratic but obscures a more stratified reality. Indeed, the dystopian satire that Young described sixty years ago seems less imaginary and closer to a current reality. On an international level, education qualifications are now being used to determine migration outcomes based on some notion of “skills” (JSCM, 2006, 2013) and “merit” (Parsons, 2018), when really what a foreign qualification enables in the migration realm is for an authority to establish trust in “potentially untrustworthy strangers” (Ingham, 2004c, p. 74) using the credit and debt relations associated with certain educational experiences.

Chapter Nine: Conclusion

This study sits within a much wider discussion about what makes education valuable. It is a discussion that spans various fields of academia and occupies the minds of many policymakers. It is also a discussion that drives the allocation of extraordinary resources. UNESCO (2018) estimates annual worldwide spending on education at US\$4.7 trillion. Every modern country has an education system that plays vital and constantly changing roles in society. However, the nature of the expressions of value produced by education systems remains somewhat of a riddle and there are divergent, and often irreconcilable, viewpoints regarding the origins of the link between socioeconomic attainment and educational attainment.

Of the responses to the research questions made in this study, it would be possible to find consensus in the literature that expressions of value in education can have the same three functions as money. The purpose of our education systems is to create stores of value whether in the form of skills, a certain type of citizenry, a docile workforce (Bowles & Gintis, 1975, 2002), or some other type of value. As a measure of value, our education systems create a means so that we can determine what counts as an educational experience and also ways to make educational experiences commensurable. As a medium of exchange, the myriad ways we use educational outcomes in society show the important relationships that educational outcomes help establish. As Chapter Eight shows, there are many historical examples of educational outcomes functioning as a type of currency that has the same three functions as money. The certification regimes of medieval universities and Weber's analysis of the Chinese examination system show how monetary theories can apply to a range of situations regarding the nature of expressions of value in education. The example of FQR in Australia's skilled migration

also demonstrates how education's functions as a type of currency continue to play new and updated roles in organising our lives in a globalised world.

Where this study diverges from conventional understandings is with the position that expressions of value in education are relational, or exogenous. Certain positions, like those in human capital theory, can take a perspective that views representations of educational value as signifying some real or objective value. This position can view the origins of value in education as primarily endogenous to the educational experience and traceable to something intrinsic an individual has acquired. However, this position does not seem to adequately account for the complex societal structures that turn education into a form of currency in the first place. In order to become a form of currency, and a variable that has categorical, ordinal, interval or ratio qualities, the expression must answer to a different set of rules and act according to a different set of principles than something like learning or skills. The position taken in perspectives such as human capital theory ideologically naturalises the social relations that lie at the core of expressions of value in education, resulting in a conflation of their essential nature with any other type of commodity. Consequently, expressions of value in education become asocial and objective indicators of some real, productive potential often conceived of in the form of skills, knowledge or competencies.

One of the main focuses of this study is an examination of what expressions of value in education actually represent. The denomination of the measures of value in education may take the form of skills, civic attitudes, bodies of knowledge, numeracy levels, a set of tasks or any other form of content that a student may learn while engaged in our education systems. However, the findings of this study suggest the essential nature of this value is abstract and embedded in credit relations. Tokens of value in education, such as qualifications, are a memory and a promise that enables the value of

this credit to exist across space and time. The memory and the promise facilitate trust in situations where the existence of unknown actors makes interpersonal trust between strangers impossible to generate. These expressions enable the establishment of provenance, which assists in the determination of where an individual has come from and the relative societal value to which they have some entitlement. Tokens such as a qualification are indicators of creditworthiness in the individual that are open to an array of social, political, economic and cultural uses. As the example of FQR in Australia's skilled migration program shows, the Australian Government uses the expressions of value from foreign education systems as proxies to determine relative creditworthiness in potential migrants. Those with the strongest claim to the possession of some form of educational value are those who are successful in the process. The assessment of the claim uses a set of predefined benchmarks and criteria that enables the Australian Government to rank and sort the strength of claims made by individuals. While the process occurs under the auspices of a skilled migration program, the process itself does not directly assess skill. Ultimately, it is the status of awarding authorities that forms the basis of the assessment, and the outcome is used to establish a relationship between the potential migrant and the Australian Government.

The findings of this study have wider implications for theory, policy and practice. In terms of theoretical discussions, this study contributes to wider inquiry concerning what makes education valuable, and also provides a model to explore how the value of education becomes intelligible, calculable and communicable. From Keynes' theoretical perspective an important finding is that it is a measure of value, or its synonymous term unit of account, that seems to be the "primary concept" (1958 [1930], p. 3) of any theory concerning the nature of expressions of value in education. In the analysis of the FQR assessment process in Chapter Seven it was in attachment to

the measure of value that lay the primary means to the establishment of educational value. The crucial element of the FQR process is the recognition of the validity of the measure of value that the token of the qualification expresses.

This is important because measures of value come to establish the very idea of value in education. That is, measures of value establish what is education in the first place, and in the process confer the qualities of validity and relativity. A measure of value is what distinguishes formal education as a separate phenomenon distinct from all other phenomena, including learning. After a measure of value has been established, the value of an educational experience can be embodied by an individual as a store of value using the denomination of value expressed by the measure. Examples of the store of value include a degree, a unit of competency, an exam result, or a year of schooling. Only then does the nature of value in education take on the status of a commodity that opens it up to economic analysis and its deployment in society as a thing of value.

From a policy perspective, monetary theories can help us understand the mechanics of our education systems and the means that education systems produce value. This is very important because such an understanding can feed into policy-making decisions and the allocation of resources. Awareness of the nature of expressions of value in education may help inform the policymaking process so that there is a clearer distinction made between validity and value. In Chapter Eight, there was a discussion of some of the contemporary policy issues such as qualification frameworks, units of competency and digital credentialing. In many of these policy discussions, there can be an approach where validity and value become conflated. Consequently, the role of credit and the abstract nature of the specificity of expressions of value become subsumed by an approach where the categorical identity of expressions of value is indistinguishable from any other commodity. For policymakers, a

comprehensive understanding of the nature of expressions of value in education can lead to the formulation of better-informed policy and the use of education and educational outcomes in more effective ways. Possible examples of reframing policy perspectives were outlined in Chapter Six when the repositioning of FQR as a problem based in access to credit, as opposed to one based in recognising some objective value embodied by an individual, offers the prospect of more effective recognition processes.

In terms of practice, such a reframing of policy problems involves moving away from viewing the expressions of value produced by education systems as signifiers of some neutral, objective value. This is particularly important because a belief in the categorical identity of representations produced by education systems as objective, neutral signifiers of some commodity-like productive potential means we are led to believe that outcomes associated with education are the result of some purely meritocratic and objective phenomenon. Consequently, there can be a perception of expressions of value in education as little more than a natural phenomenon whose value is self-evident. In this way, a high school diploma enables access to post-secondary education, a medical degree entitles someone to practise as a doctor and a person who gets a high mark is intelligent. However, such a perspective elides the complex mechanisms that go into the production of expressions of value in education. Indeed, the production of expressions of value in education is a source of power in itself. The production of educational outcomes is part of a societal process that decides who can participate in our education systems, who is likely to succeed, what type of knowledge is valid, and who can benefit most from the credit education systems give access to.

In the case of money, it is impersonal stores of abstract value that circulate in the form of coins, notes and increasingly digital expressions of money facilitated through online accounts and payment systems. With education systems, the store of value is

always attached to an individual or group of individuals and, consequently, educational outcomes become used to determine how individuals can circulate within our society, such as who can have access to certain occupational positions. FQR in Australia's skilled migration program is a striking example of the new frontiers where expressions of value in education determine how individuals can circulate in our societies and the benefits educational attainment enables some people to access. Indeed, from a policy and practice perspective, monetary theories provide a useful resource to understand the institutions that create expressions of value in education and how these expressions of value get into society. The strand of literature concerned with the production of money is by no means settled. There are many competing accounts as to how money is produced and how money acquires its value. Nevertheless, there has been significant research into the mechanics of monetary production that offers the prospect of furthering our understanding of how to construct our education systems.

While there are many parts of the research literature where there is agreement with the arguments made in this study, the positions aligned to human capital theory remain dominant in public discourse. From a practical perspective this results in the persistence of the belief that education is valuable because of what an institution teaches and what an individual learns. It is a seemingly ubiquitous perspective despite its inadequacy in fully explaining the link between socioeconomic attainment and educational attainment. It remains important to continue to challenge the perspectives that view expressions of value in education as neutral and natural phenomenon. The same challenge also exists with monetary theories. The credit theories of money that this study makes use of exist outside of economic orthodoxy. Even Keynes described the credit theory of money as a "fallacy" (Keynes, 1914) before going on to largely incorporate the underlying position in his later works (Ingham, 2004c).

The continued questioning of the nature of educational value is important because, like money, expressions of value in education are an essential social technology that performs vital roles in our society. They help us decide who gets jobs, who gets to migrate, whose education system is the best, where further resources may be needed, who gets social status, and a huge array of other functions. Yet despite this, they remain somewhat of a mystery. What this study on the nature of expressions of value in education has attempted to do is to explore this mystery a little further and enlighten some elements that remain hidden or unexplored. Moreover, there is also the hope that in exploring this topic, it will help us to focus on aspects of educational experiences that are valuable in a way that can be difficult to represent in expressions such as qualifications or assessment results. Education does offer the prospect of a profoundly transformative experience and this has enormous power and value to individuals and society. Understanding how we can structure our education systems in a way to assist this prospect is an important endeavour that will only contribute to the wider value that our education systems exist to create.

Appendix A: Data collection forms and instruments



CONSENT FORM

Assessing authorities

Project: The role of foreign educational attainment in migration assessments

Chief Investigator:

<insert contact>

<insert contact>

I have been asked to take part in the Monash University research project specified above. I have read and understood the Explanatory Statement and I hereby consent to participate in this project.

I consent to the following:	Yes	No
To participate in the research project and to be interviewed by a member of the research team about the use of foreign educational attainment in migration	<input type="checkbox"/>	<input type="checkbox"/>
That the data I provide to be used according to the information provided in the explanatory statement	<input type="checkbox"/>	<input type="checkbox"/>
I agree to the audio recording of the interviews	<input type="checkbox"/>	<input type="checkbox"/>

Name of Participant _____

Participant Signature _____ Date _____

EXPLANATORY STATEMENT

Skill assessing authorities

Project Title: The role of foreign educational attainment in migration assessments

Project Number: 7866

<insert contact>

<insert contact>

You are invited to take part in this study. Please read this Explanatory Statement in full before deciding whether to participate in this research. If you would like further information regarding any aspect of this project, you are encouraged to contact the researchers via the phone numbers or email addresses listed above.

What does the research involve?

The aim of this study is to examine the role of education and qualifications attained outside of Australia in the migration process. The research will seek to understand how educational attainment is used by organisations in their role as gazetted assessing authorities. The research will involve approximately three interviews over a period of six months, with a researcher who will ask a series of questions about the assessment process at your organisation. Each interview is expected to take about 30 minutes to one hour.

Why were you chosen for this research?

You have been identified as a gazetted assessing authority. The research will focus on the work of assessing authorities and how they use educational outcomes as part of their function.

Consenting to participate in the project and withdrawing from the research

If you agree to participate in the research, you will be asked to complete a consent form. You have the right to withdraw from participation at any stage. Your withdrawal should not impact on the study, although your experiences will not be able to be included in the final report.

Possible benefits and risks to participants

Assessing educational outcomes is an important part of the migration process. This research will help to better understand the strengths and weaknesses of the using educational attainment acquired outside of Australia in the migration process. The findings may help policy makers and stakeholders, like assessing authorities, in their duties and functions.

During the research, questions may be asked that you consider to be commercial in confidence. If this is the case, you are under no obligation to answer the questions, and can raise concerns with the interviewer at any time.

Confidentiality

Personal information you provide as part of this research will not be used in any way that can individually identify you. All data will be de-identified. General information about your organisation such as its status as an assessing authority, and its general industry area, may be included in the research.

Storage of data

Data will mainly take the form of interview transcripts. This data will be held securely on Monash University networks and in storage at Monash University. It will be destroyed five years after the final report is published.

Results

The final report will be published as part of a PhD thesis. These results may also be presented at various conferences.

You can access a copy of the findings by emailing a member of the research team listed above.

Complaints

Should you have any concerns or complaints about the conduct of the project, you are welcome to contact the Executive Officer, Monash University Human Research Ethics (MUHREC):

Executive Officer
Monash University Human Research Ethics Committee (MUHREC)
Room 111, Building 3e
Research Office
Monash University VIC 3800

Tel: +61 3 9905 2052 Email: muhrec@monash.edu Fax: +61 3 9905 3831

Thank you,

Project	The role of foreign educational attainment in migration assessments
Title	Interview template
Version	1.0
Scope note	Contains the questions asked in the interview along with usage guidelines. In addition, it has a helpful 'setting the scene' introduction.

Interview location:	
Time/Date:	

Name of interview subject:	
Title:	
Organisation:	

Setting the scene

The goal of the project is to study the use of foreign educational attainment in migration assessments. The study will outline the different processes and assumptions that underlie a migration assessment of a person's education attained outside of Australia.

We have asked you to participate in the research because of your organisation's work as a skill assessment authority.

The information you provide in this interview will not be given to your employer. Information provided will not be used in any way that will be able to identify you.

The research will involve an interview with a researcher who will ask a series of questions about your experience. It is expected to take about 30 – 60 minutes. After this interview the information provided will be collected and transcribed. It is expected that a follow up interview will occur in a few months.

Do you have any questions before we get started?

1. Overview: organisational role, types of assessments, volume

1.1 Can you tell us briefly about your role and your organisation?	
1.2 Can you give an overview of the type of assessments that you undertake?	
1.3 Can you give an overview of how many assessments, and the type of assessments that you undertake?	
1.4 Can you give an overview of what you think the main purpose of assessing the educational attainment of potential migrants?	

2. Assessment process (typical)

2.1 Can you describe, step by step, the process for assessing a typical applicant's educational attainment that has been attained overseas?	
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2.2 What resources and guidelines do you use in the assessment?	
2.3 What proportion of applicants would you describe as 'typical'?	

3. Non-typical applicants

3.1 Can you describe the process, step by step, for applicants who fall outside of established guidelines (non-typical applicants)?	
3.2 What resources do you use to make these assessments?	
3.3 What are some of the difficulties in cases that don't meet the guidelines?	
3.4 What is the volume of non-typical applicants?	
3.5 Are there particular countries or regions where assessing overseas qualification attainment is difficult?	

4. Assessor experience

4.1 What do you think are the strengths of the assessment program?	
4.2 What do you think are the weaknesses?	
4.3 What do you think can be done to make the process better?	

5. Further Information

5.1 Information not covered above:

Thank you again for your time.

Appendix B: Ethics approval



Monash University Human Research Ethics Committee

Approval Certificate

This is to certify that the project below was considered by the Monash University Human Research Ethics Committee. The Committee was satisfied that the proposal meets the requirements of the *National Statement on Ethical Conduct in Human Research* and has granted approval.

Project Number: 7886

Project Title: Qualified for recognition: the use of foreign qualifications in migration assessments in Australia

Chief Investigator: Professor Jeffrey Brooks

Expiry Date: 14/03/2022

Terms of approval - failure to comply with the terms below is in breach of your approval and the *Australian Code for the Responsible Conduct of Research*.

1. The Chief Investigator is responsible for ensuring that permission letters are obtained, if relevant, before any data collection can occur at the specified organisation.
2. Approval is only valid whilst you hold a position at Monash University.
3. It is responsibility of the Chief Investigator to ensure that all investigators are aware of the terms of approval and to ensure the project is conducted as approved by MUHREC.
4. You should notify MUHREC immediately of any serious or unexpected adverse effects on participants or unforeseen events affecting the ethical acceptability of the project.
5. The Explanatory Statement must be on Monash letterhead and the Monash University complaints clause must include your project number.
6. Amendments to approved projects including changes to personnel must not commence without written approval from MUHREC.
7. Annual Report - continued approval of this project is dependent on the submission of an Annual Report.
8. Final Report - should be provided at the conclusion of the project. MUHREC should be notified if the project is discontinued before the expected completion date.
9. Monitoring - project may be subject to an audit or any other form of monitoring by MUHREC at any time.
10. Retention and storage of data - The Chief Investigator is responsible for the storage and retention of the original data pertaining to the project for a minimum period of five years.

Thank you for your assistance.

Professor Nip Thomson

Chair, MUHREC

CC: Mr Peter Hurley

List of approved documents:

Document Type	File Name	Date	Version
Consent Form	Consent form	12/01/2017	1.3
Explanatory Statement	Ethics explanatory statement	13/01/2017	1.3
Supporting Documentation	PhD interview template	13/01/2017	1.1

References

- ABS. (2016). *3412.0 - Migration, Australia, 2015-16*.
<http://www.abs.gov.au/ausstats/abs@.nsf/mf/3412.0>
- ACS. (2006). *Submission to the inquiry into overseas skills recognition, upgrading and licensing*.
https://www.aph.gov.au/Parliamentary_Business/Committees/House_of_Representatives_Committees?url=mig/recognition/subs.htm
- AEI-NOOSR. (2015). *Australia Country Education Profile*.
https://internationaleducation.gov.au/Documents/ED15-0091_INT_Australia_Country_Education_Profile_2015_ACC.pdf
- AEI-NOOSR. (2018). *Country Education Profiles - What our guidelines mean*. Retrieved 30th October 2018 from
<https://internationaleducation.gov.au/CEP/Pages/UnderstandAsstGLs-Default.aspx>
- AEI-NOOSR. (2019). *Country Education Profiles*.
<https://internationaleducation.gov.au/cep/>
- Allais, S. (2011). The impact and implementation of national qualifications frameworks: a comparison of 16 countries. *Journal of Education and Work*, 24(3-4), 233-258.
<https://doi.org/10.1080/13639080.2011.584685>
- Allais, S. (2014). *Selling out education : national qualifications frameworks and the neglect of knowledge*. Rotterdam : SensePublishers.
- Arrow, K. J. (1973). Higher education as a filter. *Journal of public economics*, 2(3), 193-216. [https://doi.org/10.1016/0047-2727\(73\)90013-3](https://doi.org/10.1016/0047-2727(73)90013-3)
- Atack, P. (2018, 8 June). WES plots digital revolution of 'badges'. *The PIE News*.
<https://thepienews.com/news/wes-plots-digital-revolution-of-badges/>
- Aydemir, A., & Skuterud, M. (2005). Explaining the deteriorating entry earnings of Canada's immigrant cohorts, 1966 – 2000. *Canadian Journal of Economics/Revue canadienne d'économique*, 38(2), 641-672.
<https://doi.org/10.1111/j.0008-4085.2005.00297.x>

- Ayelet, S., & Ran, H. (2013). Recruiting "Super Talent": The New World of Selective Migration Regimes. *Indiana Journal of Global Legal Studies*, 20, 71-1445.
- Bacchi, C. (2009). *Analysing policy : what's the problem represented to be?* (1st ed.). Frenchs Forest, N.S.W. : Pearson.
- Bacchi, C. (2012). Introducing the 'What's the Problem Represented to be?' approach. In A. Bletsas & C. Beasley (Eds.), *Engaging with Carol Bacchi. Strategic Interventions and Exchanges*. University of Adelaide Press.
<https://doi.org/10.20851/j.ctt1sq5x83>
- Bacchi, C., & Goodwin, S. (2016). *Poststructural Policy Analysis: A Guide to Practice*. New York: Palgrave Macmillan US. <https://doi.org/10.1057/978-1-137-52546-8>
- Bagshaw, E. (2017, 7 August). Bipartisan push for the Reserve Bank to back Australian bitcoin. *The Age*. <https://www.smh.com.au/politics/federal/bipartisan-push-for-the-reserve-bank-to-back-australian-bitcoin-20170807-gxqrm7.html>
- Ball, S. J. (2012). Performativity, Commodification and Commitment: An I-Spy Guide to the Neoliberal University. *British Journal of Educational Studies*, 60(1), 17-28. <https://doi.org/10.1080/00071005.2011.650940>
- Ball, S. J. (2015). Education, governance and the tyranny of numbers. *Journal of Education Policy*, 30(3), 299-301.
<https://doi.org/10.1080/02680939.2015.1013271>
- Barrow, R. (1978). *Radical education : a critique of freeschooling and deschooling*. London : M. Robertson.
- Becker, G. S. (1962). Investment in Human Capital: A Theoretical Analysis. *Journal of Political Economy*, 70(5, Part 2), 9-49. <https://doi.org/10.1086/258724>
- Becker, G. S. (1964). *Human capital; a theoretical and empirical analysis, with special reference to education*. New York, National Bureau of Economic Research; distributed by Columbia University Press.
- Begoray, D. L., & Banister, E. M. (2010). Reflexivity. In A. J. Mills, G. Durepos, & E. Wiebe (Eds.), *Encyclopedia of case study research*. Thousand Oaks, Calif. : SAGE.

- Berg, I. E. (1973). *Education and jobs : the great training robbery*. Harmondsworth : Penguin Education.
- Bergan, S. (2007). *Qualifications : introduction to a concept*. Council of Europe.
- Bills, D. B. (2003). Credentials, Signals, and Screens: Explaining the Relationship Between Schooling and Job Assignment. *Review of Educational Research*, 73(4), 441-449. <https://doi.org/10.3102/00346543073004441>
- Blaug, M. (1992). *The Economic value of education : studies in the economics of education*. Aldershot, Hants, England ; Brookfield, Vt., USA : E. Elgar Pub.
- Bohlinger, S. (2012). Qualifications frameworks and learning outcomes: challenges for Europe's lifelong learning area. *Journal of Education and Work*, 25(3), 279-297. <https://doi.org/10.1080/13639080.2012.687571>
- Bourdieu, P. (1977). *Reproduction in education, society and culture*. London ; Beverly Hills : Sage Publications.
- Bourdieu, P. (1986). The forms of capital. In J. Richardson (Ed.), *Handbook of Theory and Research for the Sociology of Education* (pp. 241-258). Greenwood.
- Bowles, S., & Gintis, H. (1975). The problem with human capital theory--a Marxian critique. *American Economic Review*, 65, 63-82.
- Bowles, S., & Gintis, H. (2002). "Schooling in Capitalist America" Revisited. *Sociology of Education*, 75(1), 1-18. <https://doi.org/10.2307/3090251>
- Brenner, N., Peck, J., & Theodore, N. (2010). Variegated neoliberalization: geographies, modalities, pathways. *Global Networks*, 10(2), 182-222. <https://doi.org/10.1111/j.1471-0374.2009.00277.x>
- British Museum. (2010). *Hoxne Hoard Coins*. https://commons.wikimedia.org/wiki/File:Hoxne_Hoard_coins_6a.jpg
- Brown, D. K. (2001). The social sources of educational credentialism: status cultures, labor markets, and organizations. *Sociology of Education*, 74, Extra Issue, 19-34.

- Brown, D. K., & Bills, D. B. (2011). An overture for the sociology of credentialing: Empirical, theoretical, and moral considerations.(Report). *Research in Social Stratification and Mobility*, 29(1), 133.
<https://doi.org/10.1016/j.rssm.2011.01.005>
- Brown, P. (2004). *The mismanagement of talent : employability and jobs in the knowledge economy*. Oxford ; New York : Oxford University Press.
- Brown, P., Lauder, H., & Ashton, D. N. (2011). *The global auction : the broken promises of education, jobs and incomes*. New York : Oxford University Press.
- Brown, P., & Souto-Otero, M. (2020). The end of the credential society? An analysis of the relationship between education and the labour market using big data. *Journal of Education Policy*, 35(1), 95-118.
<https://doi.org/10.1080/02680939.2018.1549752>
- Burke, G. (2018). *Changes in funding in Australian vocational education and their effects*. T. U. o. Melbourne. https://melbourne-cshe.unimelb.edu.au/_data/assets/pdf_file/0010/2845774/Burke-Changes-in-funding-in-Australian-vocational-education-and-their-effects_.pdf
- Carey, K. (2015, 5 March). What Will Truly Change Higher Education: Online Degrees That Are Seen as Official. *The New York Times*.
- Carruthers, B. G., & Babb, S. (1996). The Color of Money and the Nature of Value: Greenbacks and Gold in Postbellum America. *American Journal of Sociology*, 101(6), 1556-1591. <https://doi.org/10.1086/230867>
- Catan, T. (2002, 11 April). Argentines snowed under by paper IOUs: Pesos or pacificos? A dizzying array of quasi-currencies now fill up the tills. *Financial Times*, 4.
- CEDEFOP. (2010). *Changing qualifications : a review of qualifications policies and practices*. Publications Office of the European Union.
http://www.cedefop.europa.eu/files/3059_en.pdf
- CEDEFOP. (2013). *The role of qualifications in governing occupations and professions*. P. O. o. t. E. Union.
http://www.cedefop.europa.eu/files/6120_en.pdf

- CEDEFOP. (2019). *European qualifications framework (EQF)*.
<https://www.cedefop.europa.eu/en/events-and-projects/projects/european-qualifications-framework-eqf>
- Chilisa, B. (2012). *Indigenous research methodologies*. Thousand Oaks, Calif. : SAGE Publications.
- CIROQ. (1983). *The recognition of overseas qualifications in Australia: report of Committee of Inquiry, December 1982*. Australian Government Publishing Service.
- Cobb-Clark, D. A. (2006). Selection policy and labour market outcomes of new immigrants. In D. A. Cobb-Clark & S.-E. Khoo (Eds.), *Public policy and immigrant settlement*. Cheltenham, UK ; Northampton, MA : Edward Elgar.
- Collins, R. (1979). *The Credential society : an historical sociology of education and stratification*. New York : Academic Press.
- Collins, R. (1981). *Sociology since midcentury : essays in theory cumulation*. New York : Academic Press.
- Dale, R., & Robertson, S. L. (2009). *Globalisation and europeanisation in education*. Oxford, U.K. : Symposium Books.
- Daly, A., Lewis, P., Corliss, M., & Heaslip, T. (2015). The private rate of return to a university degree in Australia. *Australian Journal of Education*, 59(1), 92-112.
<https://doi.org/10.1177/0004944114565117>
- Deloitte Access Economics. (2018). *Seizing the opportunity: Making the most of the skills and experience of migrants and refugees*.
<https://www2.deloitte.com/content/dam/Deloitte/au/Documents/Economics/deloitte-au-economics-making-most-skills-experience-migrants-refugees-011118.pdf>
- Department of Home Affairs. (2019). *Historical migration statistics*.
<https://data.gov.au/data/dataset/historical-migration-statistics/resource/8aa8ef88-8418-4b65-ad48-48cad7f7e58b>
- DHA. (2018). *Australian migration statistics, 2016–17*. Commonwealth of Australia.

- DHA. (2019). *Skilled occupation list*. <https://immi.homeaffairs.gov.au/visas/working-in-australia/skill-occupation-list>
- DIAC. (2012). *Trends in Migration: Australia 2010–11, annual submission to the OECD's Continuous Reporting System on Migration (SOPEMI)*.
<https://www.border.gov.au/ReportsandPublications/Documents/statistics/trends-in-migration-2010-11.pdf>
- DIBP. (2016). *Historical Migration Statistics* www.homeaffairs.gov.au/about/reports-publications/research-statistics/statistics/live-in-australia/historical-migration-statistics
- Dickson, M., & Harmon, C. (2011). Economic Returns to Education: What We Know, What We Don't Know, and Where We Are Going-Some Brief Pointers. *Economics of Education Review*, 30(6), 1118-1122.
<https://doi.org/10.1016/j.econedurev.2011.08.003>
- DIMIA. (2001). *Immigration : Federation to century's end, 1901-2000*. Commonwealth of Australia: Dept. of Immigration and Multicultural Affairs.
- DIMIA. (2005). *Joint Standing Committee on Migration — Inquiry into skills recognition upgrading and licensing*.
[http://www.aphref.aph.gov.au/house_committee_mig_recognition_subs_sub080%20\(3\).pdf](http://www.aphref.aph.gov.au/house_committee_mig_recognition_subs_sub080%20(3).pdf)
- Dodd, T. (2017, 1 May). Melbourne University joins vanguard of blockchain. *Australian Financial Review*, 12.
- Dunn, K. C. a., & Dunn, K. C. (2016). *Undertaking discourse analysis for social research*. Ann Arbor : University of Michigan Press.
- Durkheim, E. m. (1979). *Durkheim : essays on morals and education*. London ; Boston : Routledge & Kegan Paul.
- ECB. (2019). *Crypto-assets: Implications for financial stability, monetary policy, and payments and market infrastructures*.
- European Commission. (2015). *ECTS Users' Guide*.
https://ec.europa.eu/education/ects/users-guide/docs/ects-users-guide_en.pdf

- European Commission. (2018). *Europass framework for digitally signed credentials*. https://ec.europa.eu/futurium/en/system/files/ged/europass_background-info_framework-digitally-signed-credentials.pdf
- Foucault, M. (1979). *Discipline and punish : the birth of the prison*. Harmondsworth, England : Peregrine.
- Foucault, M. (1991). *Discipline and punish : the birth of the prison*. London ; Ringwood, Vic. : Penguin Books.
- Foucault, M. (2007). *Security, territory, population : lectures at the Collège de France, 1977-1978*. Houndmills, Basingstoke, Hampshire ; New York : Palgrave Macmillan.
- Foucault, M. (2008). *The birth of biopolitics : lectures at the College de France, 1978-1979*. Basingstoke : Palgrave Macmillan.
- Freidson, E. (1986). *Professional powers : a study of the institutionalization of formal knowledge*. Chicago : University of Chicago Press.
- Freidson, E. (1994). *Professionalism reborn : theory, prophecy, and policy*. Chicago : University of Chicago Press.
- Friedman, M. (1969). *The optimum quantity of money : and other essays*. Chicago : Aldine Pub. Co.
- Gee, J. P. (2011). *An introduction to discourse analysis : theory and method* (3rd ed. ed.). New York : Routledge.
- Gerring, J. (2004). What Is a Case Study and What Is It Good for? *American Political Science Review*, 98(2), 341-354. <https://doi.org/10.1017/S0003055404001182>
- Grech, A., & Camilleri, A. F. (2017). *Blockchain in Education*.
- Gregory, M. (2001, 24 December). The patacone plan - back to the future? *BBC News*. <http://news.bbc.co.uk/2/hi/business/1727599.stm>
- Grierson, P. (1977). *The origins of money*. London : Athlone Press.

- Guo, S. (2007). Tracing the roots of non-recognition of foreign credentials. *Canadian Issues*, 36-38.
- Guo, S. (2009). Difference, deficiency, and devaluation: Tracing the roots of non-recognition of foreign credentials for immigrant professionals in Canada. *The Canadian Journal for the Study of Adult Education*, 22(1), 37-52.
- Guo, S. (2010a). Toward Recognitive Justice: Emerging Trends and Challenges in Transnational Migration and Lifelong Learning. *International Journal of Lifelong Education*(2), 149-167. <https://doi.org/10.1080/02601371003616533>
- Guo, S. (2010b). Toward recognitive justice: emerging trends and challenges in transnational migration and lifelong learning. *International Journal of Lifelong Education*, 29(2), 149-167. <https://doi.org/10.1080/02601371003616533>
- Guo, S. (2014). Revisioning Education for All in the Age of Migration: Global Challenges and Opportunities for Lifelong Learning. *International Review of Education*, 60(4), 481-497. <https://doi.org/10.1007/s11159-014-9441-1>
- Hansen, H. (2011). Rethinking certification theory and the educational development of the United States and Germany. *Research in Social Stratification and Mobility*, 29(1), 31.
- Hanushek, E. A. (2007). *Education quality and economic growth*. Washington, DC : World Bank.
- Hanushek, E. A. (2013). Economic growth in developing countries: The role of human capital. *Economics of Education Review*, 37, 204.
- Hanushek, E. A., Welch, F., Machin, S., & Woessmann, L. (2006). *Handbook of the economics of education*. Amsterdam ; London : North-Holland.
- Harriman, P. L. (1935). Antecedents of the Liberal-Arts College. *The Journal of Higher Education*, 6(2), 63-71. <https://doi.org/10.1080/00221546.1935.11772619>
- Hartocollis, A. (2019, 27 August). SAT 'Adversity Score' Is Abandoned in Wake of Criticism. *The New York Times*.
- Harvey, D. (2005). *A brief history of neoliberalism*. Oxford ; New York : Oxford University Press.

- Hawthorne, L. (2007). Foreign Credential Recognition and Assessment: An Introduction. *Canadian Issues*, 3-13.
- Hawthorne, L. (2015). The Impact of Skilled Migration on Foreign Qualification Recognition Reform in Australia. *Canadian Public Policy-Analyse De Politiques*, 41, S173-S187.
- Hay, C. (2017, August 8). Immigrating to Trump's America? Philosophers Need Not Apply. *The New York Times*.
- Hirsch, F. (1976). *Social limits to growth*. Cambridge, Mass. : Harvard University Press.
- Hoad, T. F. (2003). *The concise Oxford dictionary of English etymology*. Oxford : Oxford University Press.
- Holden, R., & Zhang, J. (2018). *The economic impact of improving regional, rural & remote education in Australia : closing the human capital gap*. The University of New South Wales.
<http://research.economics.unsw.edu.au/richardholden/assets/gonski-report-final.pdf>
- HRSCCA. (1996). *A fair go for all : report on migrant access and equity*. Canberra : Aust. Govt. Publishing Service.
- HRSCCHA. (2012). *Lost in the Labyrinth: Report on the Inquiry into Registration Processes and Support for Overseas Trained Doctors*. The Parliament of the Commonwealth of Australia.
- Hugo, G. (2014a). Change and Continuity in Australian International Migration Policy. *International Migration Review*, 48(3), 868-890.
<https://doi.org/10.1111/imre.12120>
- Hugo, G. (2014b). Skilled Migration in Australia: Policy and Practice. *Asian and Pacific migration journal*, 23(4), 375-396.
<https://doi.org/10.1177/011719681402300404>
- Illich, I. (1973). *Deschooling society*. Harmondsworth, Middlesex : Penguin.

- Ingham, G. (1998). On the underdevelopment of the 'sociology of money'. *Acta sociologica [Norway]*, 41(1), 3-18.
<https://doi.org/10.1177/000169939804100101>
- Ingham, G. (2000). 'Babylonian madness': on the historical and sociological origins of money. In J. Smithin (Ed.), *What is money?* London ; New York : Routledge.
- Ingham, G. (2004a). The emergence of capitalist credit money. In L. R. Wray (Ed.), *Credit and State Theory of Money*. Edward Elgar Publishing Limited.
- Ingham, G. (2004b). The nature of money. *Economic Sociology: European Electronic Newsletter*, 5(2), 18-28.
- Ingham, G. (2004c). *The nature of money*. Cambridge, UK ; Malden, MA : Polity.
- Ingham, G. (2006). Further reflections on the ontology of money: responses to Lapavistas and Dodd. *Economy and Society*, 35(2), 259-278.
<https://doi.org/10.1080/03085140600635730>
- Ingham, G. (2007). The Specificity of Money. *Arch. Europ. Sociol.*, 48(2), 265-272.
<https://doi.org/10.1017/S0003975607000367>
- Ingham, G. (2013a). O sacred hunger of pernicious gold! What bands of faith can impious lucre hold? *Archives Europeennes de Sociologie/European Journal of Sociology*, 54(1), 127-146. <https://doi.org/10.1017/S0003975613000052>
- Ingham, G. (2013b). Revisiting the credit theory of money and trust. In J. Pixley (Ed.), *New perspectives on emotions in finance the sociology of confidence, fear and betrayal*. New York : Routledge.
- Innes, A. M. (1913, May). What is money? *The Banking Law Journal*(30), 377-408.
- Innes, A. M. (1914, Dec/Jan). The credit theory of money. *Banking Law Journal*, 31, 151-168.
- Iredale, R. (1987). *Wasted skills : barriers to migrant entry to occupations in Australia*. Sydney : Ethnic Affairs Commission of NSW.

- Iredale, R. (1992). *Where are we now in overseas qualifications recognition? A decade of review and changes* (Occasional Paper 26, Issue. C. f. M. Studies.
<http://ro.uow.edu.au/cmsocpapers/24/>
- Iredale, R. (2009). Luring Overseas Trained Doctors to Australia: Issues of Training, Regulating and Trading. *International Migration*, 47(4), 31-65.
<https://doi.org/10.1111/j.1468-2435.2009.00563.x>
- JSCM. (2006). *Negotiating the maze : review of arrangements for overseas skills recognition, upgrading and licensing*. Canberra : Joint Committee on Migration.
- JSCM. (2013). *Inquiry into Multiculturalism in Australia*. the Parliament of the Commonwealth of Australia.
- Katz, J. (1998). Testimonia-ritus-Italici: Male genitalia, solemn declarations, and a new Latin sound law. *Harvard Studies In Classical Philology*, 98, 183-217.
- Keynes, J. M. (1914). What is Money? *Economic Journal*, 24, 419-421.
<https://doi.org/10.2307/2222005>
- Keynes, J. M. (1920). *The economic consequences of the peace*. London England : Macmillan. Printer: (Edinburgh [Lothian] : R. & R. Clark).
- Keynes, J. M. (1936). *The General theory of employment, interest and money*. London : Macmillan.
- Keynes, J. M. (1958 [1930]). *A treatise on money*. London : Macmillan.
- Keynes, J. M. (1963 [1933]). On the theory of a monetary economy. *Nebraska Journal of Economics and Business*, 2(2), 7.
- Keynes, J. M. (1983). *The collected writings of John Maynard Keynes*. London Macmillan; New York St. Martin's Press, for the Royal Economic Society.
- Knapp, G. F. (1924). *The State Theory of Money* [book]. McMaster University Archive for the History of Economic Thought.
<http://wallaby.vu.edu.au:2048/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=edsrep&AN=edsrep.b.hay.hetboo.knapp1924&site=eds-live>
- Kula, W. (1986). *Measures and men*. Princeton, N.J. : Princeton University Press.

- Lawson, T. (2016). Social positioning and the nature of money. *Cambridge Journal Of Economics*, 40(4), 961-996. <https://doi.org/10.1093/cje/bew006>
- Lerner, A. P. (1947). Money as a Creature of the State. *The American Economic Review*, 37(2), 312.
<http://wallaby.vu.edu.au:2048/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=edsjsr&AN=edsjsr.1821139&site=eds-live>
- Liamputtong, P. (2013). *Qualitative research methods* (4th ed. ed.). South Melbourne, Vic. : Oxford University Press.
- Liettaer, B. A. (2000). *The future of money : a new way to create wealth, work and a wiser world*. London : Century.
- Lingard, B., Thompson, G., & Sellar, S. (2016). *National testing in schools : an Australian assessment*. Abingdon, Oxon ; New York, NY : Routledge.
- Lopez, M. (2000). *The origins of multiculturalism in Australian politics 1945-1975*. Carlton, Vic. : Melbourne University Press.
- Lukács, G. r. (1971 [1923]). *History and class consciousness: studies in Marxist dialects*. London, Merlin Press.
- Lumieux, T. (2006). The "Mincer Equation" thirty years after *Schooling, Experience and Earnings*. In S. Grossbard-Shechtman (Ed.), *Jacob Mincer: A pioneer of modern labor economics* (pp. 127-145). Springer.
- Lune, H. (2017). *Qualitative Research Methods for the social sciences* (9th Edition ed.). Pearson Education.
- Ma, J., Pender, M., & Welch, M. (2016). *Education pays 2016: the benefits of higher education for individuals and society*.
<https://trends.collegeboard.org/sites/default/files/education-pays-2016-full-report.pdf>
- Major, L. E., & Machin, S. (2018). *Social mobility and its enemies*. Pelican Books.
<http://wallaby.vu.edu.au:2048/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=edsrep&AN=edsrep.p.cepcnp.541&site=eds-live>

- Mankiw, N. G. (2016). *Macroeconomics* (Ninth edition. ed.). New York, NY : Worth.
- Mann, M. (1984). The autonomous power of the state : its origins, mechanisms and results. *European Journal of Sociology / Archives Européennes de Sociologie / Europäisches Archiv für Soziologie*, 25(2), 185-213.
<https://doi.org/10.1017/S0003975600004239>
- Mann, M. (1986). *The sources of social power*. Cambridge Cambridgeshire ; New York : Cambridge University Press.
- Marx, K. (2013 [1867]). *Capital*. Wordsworth Editions.
- Maxwell, J. A. (2013). *Qualitative research design : an interactive approach* (3rd ed. ed.). Thousand Oaks : SAGE Publications.
- McLuhan, M. (1964). *Understanding media : The extensions of man*. London : Routledge & Kegan Paul.
- Merisotis, J. (2016, 2 May). Credentials reform: how technology and the changing needs of the workforce will create the higher education system of the future. *Educause Review*. <https://er.educause.edu/articles/2016/5/credentials-reform-how-technology-and-the-changing-needs-of-the-workforce-will-create-the-higher-ed>
- Merrick, R. (2016). Points-based immigration system: What is it and why has Theresa May opposed it? *The Independent*.
- Mincer, J. (1958). Investment in Human Capital and Personal Income Distribution. *Journal of Political Economy*, 66(4), 281-302. <https://doi.org/10.1086/258055>
- Mincer, J. (1974). *Schooling, experience, and earnings*. New York : National Bureau of Economic Research; distributed by Columbia University Press.
- Mincer, J. (1984). Human Capital and Economic Growth. *Economics of Education Review*, 3(3), 195-205. [https://doi.org/10.1016/0272-7757\(84\)90032-3](https://doi.org/10.1016/0272-7757(84)90032-3)
- Mincer, J. (1989). Human Capital and the Labor Market. *Educational Researcher*, 18(4), 27-34. <https://doi.org/10.3102/0013189X018004027>

- Mirowski, P. (1991). Postmodernism and the Social Theory of Value. *Journal of Post Keynesian Economics*, 13(4), 565-582.
<https://doi.org/10.1080/01603477.1991.11489868>
- Mitchell, C. (1990). *The recognition of overseas professional qualifications*. South Carlton, Vic. : Bureau of Immigration Research.
- Morissette, R., & Galarneau, D. (2004). Immigrants: Settling for less? *Perspectives on Labour and Income*, 16(3), 7-18.
- Muller, J., & Young, M. (2019). Knowledge, power and powerful knowledge re-visited. *Curriculum Journal*. <https://doi.org/10.1080/09585176.2019.1570292>
- Nechleba, N. (2017). *Photograph of a degree certificate by the University of Oxford, for a Bachelor of Arts degree by incorporation*.
[https://commons.wikimedia.org/wiki/File:University_of_Oxford_Degree_Certificate_\(Bachelor_of_Arts_by_Incorporation\).jpg](https://commons.wikimedia.org/wiki/File:University_of_Oxford_Degree_Certificate_(Bachelor_of_Arts_by_Incorporation).jpg)
- Newton, D. (2018, 17 September). How blockchain will come to campus. *Forbes*.
- Nilsson, M., & Wihlborg, M. (2011). Higher Education as Commodity or Space for Learning: Modelling Contradictions in Educational Practices. *Power and Education*, 3(2), 104-116. <https://doi.org/10.2304/power.2011.3.2.104>
- Nock, S. L. (1993). *The Costs of Privacy: Surveillance and Reputation in America*. Aldine de Gruyter.
- Norton, A., Cherastidham, I., & Mackey, W. (2018). *Mapping Australian higher education 2018*. Grattan Institute. <https://grattan.edu.au/wp-content/uploads/2018/09/907-Mapping-Australian-higher-education-2018.pdf>
- NUFFIC. (2012). *European Area of Recognition Manual: Practical guidelines for fair recognition of qualifications 1*.
http://www.eurorecognition.eu/manual/ear_manual_v_1.0.pdf
- Oelgemöller, C. a. (2017). *The evolution of migration management in the global North*. London ; New York : Routledge, Taylor & Francis Group.
- ONS. (2014). *What is human capital? Infographic explaining what human capital is, how it changed over the economic downturn and how it differs by age, gender*

and qualifications held. Office for National Statistics, United Kingdom.
<http://www.ons.gov.uk/ons/rel/wellbeing/human-capital-estimates/2013/info-what-is-human-capital.html>

- Papadopoulos, A. (2017). Migrating qualifications: the ethics of recognition. *British Journal of Social Work*, 47(1), 219-237. <https://doi.org/10.1093/bjsw/bcw038>
- Parsons, G. H. (2018). An overview of the US immigration system and comparison with merit-based immigration systems in light of the proposed RAISE Act. (Reforming American Immigration for Strong Employment Act (Draft)). *Arizona Journal of International and Comparative Law*, 35(3), 469-497.
- Patinkin, D., & Steiger, O. (1989). In Search of the "Veil of Money" and the "Neutrality of Money": A Note on the Origin of Terms. *The Scandinavian Journal of Economics*, 91(1), 131-146. <https://doi.org/10.2307/3440167>
- Peck, K., Bowen, K., Rimland, E., & Oberdick, J. (2016). Badging as micro-credentialing in formal education and informal education. In L. Y. Muilenburg & Z. L. Berge (Eds.), *Digital badges in education : trends, issues, and cases*. New York, NY : Routledge.
- Picot, G., & Sweetman, A. (2012). Making It in Canada: Immigration Outcomes and Policies. *IRPP Study*(29), 0_1-42,45.
- Pigou, A. C. (1949). *The veil of money*. London : Macmillan.
- Polanyi, K. (2001 [1944]). *The great transformation: the political and economic origins of our time*. Beacon Press.
- Pomiankowski, A. (1987). The costs of choice in sexual selection. *Journal of Theoretical Biology*, 128(2), 195-218. [https://doi.org/10.1016/S0022-5193\(87\)80169-8](https://doi.org/10.1016/S0022-5193(87)80169-8)
- Productivity Commission, A. (2006). *Economic impacts of migration and population growth*. Melbourne : Productivity Commission.
- Psacharopoulos, G., & Patrinos, H. A. (2018). Returns to investment in education: a decennial review of the global literature. *Education Economics*, 26(5), 445-458. <https://doi.org/10.1080/09645292.2018.1484426>

- Radin, M. J. (1996). *Contested commodities*. Cambridge, Mass. : Harvard University Press.
- Redbird, B. (2017). The New Closed Shop? The Economic and Structural Effects of Occupational Licensure. *American Sociological Review*, 82(3), 600-624. <https://doi.org/10.1177/0003122417706463>
- Roberts, R. (2019, 12 April). Academic Credentialing on the Blockchain. *Medium*. <https://medium.com/awecademy/academic-credentialing-on-the-blockchain-38da8ee439b2>
- Romer, D. (2012). *Advanced macroeconomics* (4th ed. ed.). New York : McGraw-Hill/Irwin.
- Schultz, T. W. (1961). Investment in Human Capital. *The American Economic Review*, 51(1), 1-17.
- Schultz, T. W. (1963). *The economic value of education*. New York : Columbia University Press.
- Schumpeter, J. A. (1994 [1954]). *History of economic analysis*. London : Routledge.
- Schuster, A., Desiderio, M. V., & Urso, G. e. (2013). *Recognition of Qualifications and Competences of Migrants*. International Organization for Migration (IOM).
- Seymour, R. M., & Sozou, P. D. (2009). Duration of courtship effort as a costly signal. *Journal of Theoretical Biology*, 256(1), 1-13. <https://doi.org/10.1016/j.jtbi.2008.09.026>
- Simmel, G. (1903). The metropolis and modern life. In R. Sennett (Ed.), *Classic essays on the culture of cities* (pp. 47-60). Prentice Hall.
- Simmel, G. (1978 [1900]). *The philosophy of money*. London ; Boston : Routledge & Kegan Paul.
- Smolenski, N. (2016). *Academic credentials in an era of digital decentralization*.
- Spence, M. (1973). Job Market Signaling. *The Quarterly Journal of Economics*, 87(3), 355-374. <https://doi.org/10.2307/1882010>

- Spence, M. (2002). Signaling in retrospect and the informational structure of markets. *The American Economic Review*, 92(3), 434-459.
<https://doi.org/10.1257/00028280260136200>
- Stiglitz, J. (1975). The theory of "screening", education and the distribution of income. *The American Economic Review*, 65(June), 283-300.
- Sturman, A. (1997). Case study methods. In J. P. Keeves (Ed.), *Educational research, methodology and measurement : an international handbook* (2nd ed. ed., pp. 61-66). New York, N.Y. : Pergamon.
- Sweetman, A. (2004). *Immigrant source country educational quality and Canadian labor market outcomes*. S. Canada.
- Sweetman, A., McDonald, J., & Hawthorne, L. (2015). Occupational Regulation and Foreign Qualification Recognition: An Overview. *Canadian Public Policy-Analyse De Politiques*, 41, S1-S13.
- Tilly, C. (1988). Solidary Logics: Conclusions. *Theory and Society*, 17(3), 451-458.
<https://doi.org/10.1007/BF00160847>
- Ujaama, E. (2016). *Master of Arts in Education degree from Antioch University, Seattle, Washington*. https://commons.wikimedia.org/wiki/File:MAED_degree.png
- UNESCO. (2018). *Global education monitoring report 2019: migration, displacement and education – building bridges, not walls*. UNESCO.
- Wagner, R., & Childs, M. (2006). Exclusionary narratives as barriers to the recognition of qualifications, skills and experience—a case of skilled migrants in Australia. *Studies in Continuing Education*, 28(1), 49-62.
<https://doi.org/10.1080/01580370500525707>
- Wanner, R. (2001). Diagnosing and preventing “brain waste” in Canada’s immigrant population: A synthesis of comments on Reitz. *Journal of International Migration and Integration / Revue de l'integration et de la migration internationale*, 2(3), 417-428. <https://doi.org/10.1007/s12134-001-1006-z>
- Weber, M. (1968 [1922]). *Economy and society*. New York, Bedminster Press.

- Weber, M. (2009). *From Max Weber : essays in sociology*. Milton Park, Abingdon, Oxon ; New York : Routledge.
- Wray, L. R. (2004). Conclusion: The Credit Money and State Money Approaches. In L. R. Wray (Ed.), *Credit and State Theory of Money*. Edward Elgar Publishing Limited.
- Wray, L. R. (2005). *The credit money, state money, and endogenous money approaches: a survey and attempted integration*.
<https://cas2.umkc.edu/economics/people/facultyPages/wray/papers/Working%20Papers/CREDIT&STATE%20MONEY%20JOIE%20revised.doc>
- Wray, L. R. (2014). From the state theory of money to modern money theory: an alternative to economic orthodoxy.
http://www.levyinstitute.org/pubs/wp_792.pdf
- Wray, L. R., & Innes, A. M. (2004). *Credit and state theories of money : the contributions of A. Mitchell Innes*. Cheltenham, UK ; Northampton, MA, USA : Edward Elgar.
- Yin, R. K. a. (2018). *Case study research and applications : design and methods* (Sixth edition. ed.). Thousand Oaks, California : SAGE Publications, Inc.
- Young, M. (1958). *The rise of the meritocracy, 1870-2033 : an essay on education and equality*. London : Thames & Hudson.