The Centre for Enterprise, Markets and Ethics

enterprise and faith series

Capital Markets for the Good of Society

A Christian Perspective

Lyndon Drake

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First Edition, 2017
Reprinted, 2018

ISBN 978-1-910666-07-4

Published by:
Centre for Enterprise, Markets and Ethics
31 Beaumont Street
Oxford OX1 2NP

Printed in the United Kingdom by Foremost Print Ltd, Unit 9a, Vantage Business Park, Bloxham Road, Banbury, Oxfordshire OX16 9UX

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Preface

I spent a number of years as a trader, working directly in capital markets. When I was working in London, it often felt like a bit of a dream, because I grew up in a rather poor suburb of Auckland in New Zealand. Walking on to the trading floor in Canary Wharf and being involved in capital markets was to be part of a different world. Whenever I visited New Zealand, I realised my friends and family only dimly understood what I did, reinforcing the sense of distance.

My desire to write about capital markets is driven in part by a hope that my old line of work can be better understood. Despite the impact of the financial crisis, which I traded through, I still believe capital markets are fundamentally beneficial to society. I hope what follows can help to explain why that is the case.

In addition, I believe it is essential to consider the moral basis of the forms a society adopts. While I am slightly too old to be a genuine millennial, I have over time come to share the concerns many millennials have about the structure of society. My own sensitivity has been awakened not primarily by social media but by a growing awareness of the concern expressed throughout the Christian Scriptures for the well-being of society. In Christian thought, well-being is confined neither to an otherworldly spiritual dimension nor to the merely material. I am convinced that human well-being and societal flourishing are best understood in moral as well as pragmatic terms.

Human beings are profoundly moral creatures, and in the end it is our moral sense that drives our economic decision-making, including the ways we structure society.

I have never heard this more clearly expressed than in conversation with a Dutch colleague early in the financial crisis, when sovereign debt contagion was on our radar but not yet treated seriously in the wider market. This colleague told me that Greece should pay its debts, no matter what the

consequences. But what if this led to significant social harm – perhaps leading to a complete breakdown of society?

His reasoning was at root a moral reasoning; after all, there's no objective, non-moral way of deciding whether social chaos or failure to repay debts is the worse outcome.

Assessing the benefits of capital markets to society, and the problems associated with them, inevitably involves some degree of moral reasoning, whether explicitly stated or unquestioningly assumed.

Introduction

> The sea is beautiful in the eyes of God ... because ... it supplies the merchant with his wealth and easily provides for the necessities of life, allowing the wealthy to export their excess, and blessing the poor with the supply of what they lack.
>
> Basil of Caesarea, *Hexaemeron*, Homily 4.7

For much of its history, the Church viewed trade and merchants with suspicion, if not outright hostility. After all, merchants seem to make money from nothing: they buy a pot or some food for one price in one place, and then without the pot or food changing in any way, they sell it on for a higher price.

Basil of Caesarea recognised something virtuous in the process of trade. In a way quite different from philanthropy, trade is one way for the surplus of the rich to be put to use by the poor.

Capital markets provide a similar socially useful function for money. There is a good moral reason for the existence of capital markets, simply on the basis that they make the surplus money of the rich available for use by the poor.

Basil realised that merchants got rich from trade; so too we know that participants in capital markets often become wealthy, which irks many people. So perhaps we should start by thinking about the basic needs capital markets satisfy, and especially about why there needs to be a *market* for capital.

I have recently moved back to the United Kingdom from New Zealand. As part of that move, I needed to convert some money from New Zealand dollars to British pounds. At around the same time, a friend of mine wanted to convert some money from British pounds to New Zealand dollars in order to buy a house in New Zealand. At first sight this looks like the perfect opportunity for a direct economic relationship without the need for

a currency market. Two friends with broadly equal and opposite transactions could surely strike a deal by a direct relationship.

Yet without a market we would find it difficult to trade. The sharp move in the conversion rate between British pounds and New Zealand dollars as a result of the UK referendum vote to leave the EU means that my friend is not inclined to trade at the moment. I, on the other hand, am eager to take advantage of the currency movement. My friend might be willing to wait and see if rates improve for him – but if they do, perhaps I will no longer want to trade, as the same move that benefits him will adversely affect me.

‘Capital markets have a terrible public image’

What we need is a liquid, active market for currencies. Capital markets provide society with a useful service, helping people like me and my friend to trade when we need to, without simply relying on a coincidence of interests.

The problem is that capital markets have a terrible public image. Markets for shares, bonds and especially derivatives are widely seen as the arena in which investment banks carelessly inflict harm on society. Their main benefits seem to accrue to a small number of highly paid individuals. This seems perverse: a few are apparently rewarded while harming the common good. Some of the most strongly worded criticism of markets has come from religious figures.

Despite this public image, capital markets do have benefits, but since these benefits are somewhat obscure, society risks losing them. This risk has arisen through a perfectly understandable desire in the public sphere to treat the unpleasant side effects of many capital markets.

The benefits of capital markets are poorly understood partly because markets are complex and understanding of that complexity is confined to a few. What is more, those few are often highly involved in markets and already well compensated. As a result they are perhaps disinclined to spend time explaining this complexity to the general public, and because it seems apparent they are defending their own interests, they are certainly not trusted

voices. As a consequence, the negative side effects of capital markets, which can be severe and highly visible to the whole of society, dominate public discourse.

Capital markets do provide an important benefit, recognised even by some critics: 'the only proven way to lift people out of economic poverty is to make the entire pie bigger by creating new financial resources. Currently the only known economic system that accomplishes this is market-based capitalism.'[1] Similarly, Stephen Green rightly states that 'at its best [the market] is a highly efficient allocator of capital, and it has delivered huge advantages to humanity.'[2] As Lord Green goes on to note, the G20 enshrined this recognition of the value of markets – including capital markets – in their statement in April 2009: 'We believe that the only sure foundation for sustainable globalisation and rising prosperity for all is an open world economy based on market principles, effective regulation, and strong global institutions.'[3]

Despite this well-established recognition of the value of capital markets, underlying some of the distaste is a latent moral sense, an instinctive feeling that the aggregate benefits are not good enough if they do not accrue to the poorest in society; indeed, that capital markets help a few at the expense of the most vulnerable.

The end result is that the poorly understood benefits of capital markets are ignored or dismissed, while the obvious harm resulting from market failures is very influential in the formation of public policy. This publication presents a case for the benefits of capital markets to society. It uses metrics prompted by Christian theological reflection and gives priority to the effects of markets on the poor. This sets a high bar for measuring their social utility. It is a standard I believe many will consider a justified and relevant way of assessing capital markets, and reflects values widely held in secular Western societies.

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1 Kenman L. Wong and Scott B. Rae, *Business for the Common Good*, Downers Grove, IL: InterVarsity Press, 2011, p. 154.

2 Stephen Green, *Good Value: Reflections on Money, Morality and an Uncertain World*, London: Allen Lane, 2009, p. 127.

3 *G20 Communique: London Summit – Leaders' Statement; 2 April 2009*, 3 April 2009; www.imf.org/external/np/sec/pr/2009/pdf/g20_040209.pdf.

Chapter 1

Criticism of markets

One of the strangest features of working for a major financial institution was the way people reacted when they found out what I did for a living. Even now, when I have been in ordained Christian ministry for several years, people often assume I must have had a Pauline conversion experience from the darkness of markets and into the light of church work. They are puzzled to hear that I'm largely positive about my old line of work.

At times people tried to educate me about the dangers of derivatives, the reasons why we should return to the gold standard or about the latest conspiracy theory on international finance. The underlying assumption was that capital markets are a corrupt arena, and that it was incongruous for a devout person to be involved.

Before considering the utility that markets provide, it is salutary to consider some of the more considered criticisms of capital markets. These criticisms are instructive because they come from a wide range of political and religious perspectives. They are also notable for the sense of moral outrage that pervades them and seems to drive their authors.

Joris Luyendijk is an eloquent critic of the West's system of capital markets. *The Guardian* recently published extracts from his book, *Swimming with Sharks*, which describes the conclusions he has drawn from interviews with participants in London's capital markets. Luyendijk was writing in response to the aftermath of the financial crisis, and is deeply unconvinced by the narrative of a few bad apples ruining an otherwise virtuous banking system. He rightly points out the complexity of the crisis, the roles played by non-bank participants in the markets such as insurers and ratings agencies, and the many capital-market activities that were not implicated in the crisis. He concludes that we need systemic changes to capital markets, and especially the banking system, although his prescription for change is unlikely to persuade those not already in agreement with him.[1]

Thomas Piketty's influential book, *Capital in the Twenty-First Century*, makes a much broader claim about capital. He argues that in a market economy the long-run rate of return on capital will often exceed the rate of growth of an economy, leading to the owners of capital holding an increasingly unequal share of wealth. This can occur without capital markets (think of the accumulation of land in feudal societies), and so his argument is not an attack on capital markets per se. However, the existence of capital markets will 'sharpen the distinction between pure capital income and labour income'.[2] For Piketty, this sharpening of distinction is not the real problem.

Nonetheless, if Piketty is correct about the underlying economic law, then it is hard to see the social utility of capital markets, because they are tools for the efficient allocation of capital. For Piketty, any capitalist system is bound to suffer under the influence of this economic law, so his argument makes capital markets seem rather unattractive to society – if they work at all, they will simply mean more efficient progress to a socially undesirable outcome. Where Piketty differs from Luyendijk is that he has little room for positive influence from institutions, or through structural reform of the existing system. There is no doubt that his critique of capitalism has added to the sense that capital markets are a problem for society.

Angus Deaton is not an opponent of capitalism, and has a more measured criticism of aspects of capital markets:

> Financial services have played an important role in financing innovation throughout the economy, and the efficient allocation of capital is one of the most valuable tasks in a market economy. But there is widespread suspicion that some highly profitable financial activities are of little benefit to the population as a whole.[3]

Along similar lines, John Kay, an economist and the author of the government's review of equity markets in 2012, provides the damning criticism that 'much of the growth of the finance sector represents not the creation of new wealth but the sector's appropriation of wealth created elsewhere in the economy, mostly for the benefit of some of the people who work in the financial sector.'[4] My impression is that this captures a widespread sentiment: that markets exist primarily to benefit a few lucky participants,

'Much of this criticism of capital markets stems from limited understanding'

not even the whole sector – much less the economy or society as a whole.

More populist critics are less measured, seeing capital markets 'as giant casinos where thousands of ultra-wealthy traders and speculators go to place bets on the rise and fall of the price of commodities, including oil, gold, currencies, interest rates, and other exotic financial products'.[5] Banks are major participants in capital markets and provide an attractive target for other critics, especially investment banks. They have been called 'casinos' by Vince Cable, and venues for 'gambling' by both Hilary Clinton and Bernie Sanders.

Still other critiques of capital markets come from explicitly religious perspectives. According to Michael Schluter, a Christian writer, the ban on charging interest in the law codes of the Hebrew Bible 'points to the importance of directness in human relationships. There were not capital markets to divide saver and borrower.'[6] In this reading of the codes, a key facet of right economic structures is direct human relationship between economic actors. If this is true, then most modern capital markets are inherently unethical because they commoditise capital and impose requirements on market participants precisely to avoid the need for direct bilateral relationships between market counterparties.

While Pope Francis is considerably more balanced in his critiques of market economies, he suggests that the 'worship of the ancient golden calf (cf. Exodus 32.1–35) has returned in a new and ruthless guise in the idolatry of money and the dictatorship of an impersonal economy lacking a truly human purpose'.[7] His rejection of a 'financial system which rules rather than serves'[8] and description of the 'new tyranny' resulting from 'the absolute autonomy of the marketplace and financial speculation' have led a number of commentators to infer somewhat more than is explicit in the Papal Exhortation itself: for example, Emma Green, writing in *The Atlantic*, claims that with these words Francis has declared 'a new enemy for the Catholic Church: modern capitalism'.[9]

Arguably, much of this criticism of capital markets stems from limited understanding of the way they function, and is perhaps in many cases coloured by political expediency or assumptions. Irrespective of the validity of these questions, capital markets are for many people a nasty stain on Western society. Those whose religious beliefs help to make them particularly sensitive to the effects of societal failures on the poorest in society are especially critical.

But what if those concerns are misplaced? What if capital markets provide benefits that are being overlooked in the rush to blame them for the evident ills of Western society? If that is the case, by seeking their abolition or restraining them unnecessarily, we risk causing even more harm than they cause when they fail to operate well.

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1 For example, his call for a global political authority to strictly regulate the financial sector is simply unrealistic and probably undesirable.

2 Thomas Piketty, *Capital in the Twenty-First Century*, trans. Arthur Goldhammer, London: Belknap, 2014, p. 424.

3 Angus Deaton, *The Great Escape*, Princeton, NJ: Princeton University Press, 2013, p. 209

4 John Kay, *Other People's Money: Masters of the Universe of Servants of the People?*, London: Profile Books, 2015, p. 6.

5 Elizabeth Parisian, 'The Most Powerful Company You've Never Heard Of: Meet CME Group', *Huffington Post*, 4 April 2012; www.huffingtonpost.com/elizabeth-parisian/cme-group_b_1472694.html.

6 Michael Schluter, 'Relational Market Economics', Cambridge: Jubilee Centre, September 1992. See also Paul Mills, 'The Great Financial Crisis: A Biblical Diagnosis', in Paul Mills and Michael Schluter, *After Capitalism: Rethinking Economic Relationships*, Cambridge: Jubilee Centre, 2012, pp. 27–38 (p. 34).

7 Francis, *Apostolic Exhortation Evangelii Gaudium*, 24 November 2013, §55: AAS 105 (2013) 1043.

8 Francis, *Evangelii Gaudium*, §57: 1044.

9 Emma Green, 'The Vatican's Journey From Anti-Communism to Anti-Capitalism', *The Atlantic*, 26 November 2013; www.theatlantic.com/international/archive/2013/11/the-vaticans-journey-from-anti-communism-to-anti-capitalism/281874.

Chapter 2

Theology and utility

A particular problem is how to measure the usefulness to society of capital markets. This is partly because the same outcome might be seen as beneficial or harmful, depending on the metric used. One measure might focus on the effects of an outcome on a minority group in society, another on the aggregate effect on a whole country.

So it is hard to gain agreement on which metric to prioritise. Most assessments in the public sphere focus on rare systemic outcomes such as financial crises or peripheral issues such as bonuses, rather than on whether capital markets themselves are capable of providing society with some kind of useful service.

‘This publication examines the question of the social utility of capital markets’

Rather than focusing on their negative side effects, this publication examines the question of the social utility of capital markets themselves, when they are functioning as intended. The first step is to decide what metrics should be used to assess social utility.

Even in a secular Western society, Christian theology can identify useful metrics for assessing the social utility of capital markets. This is because historically many of the shared values that allow us to regard some social outcomes as good and others as harmful derive from Christian thought.

Economic theory has been a significant facet of Christian faith, as Stephen Barton affirms:

> economic practices are not at all marginal to Christianity either in its originating moments or subsequently. They are not some kind of secondary, material epiphenomenon of something fundamentally

> more 'spiritual.' On the contrary, they are at the heart of early Christian self-definition, moral formation, and sociality.[1]

Even though Western societies are now generally secular, many of the values embodied in them are derived from broadly Christian principles. Because of this, Christian theology is sometimes able to articulate those principles in ways that resonate with modern society, despite the growth of secularism. This includes the values that influence views on what is economically fair and just.

What is more, it is naive to think that regulatory controls on capital markets can be formed without giving consideration to their moral basis and effects. Oliver O'Donovan captures the essence of this by recognising that a political act – such as regulation of markets – gives 'moral form to a community by defining its commitment to the good'.[2] Indeed, O'Donovan argues that Christian theology ought to contribute to political discourse as part of the Church's mission to shape wider society in redemptive paths, not through coercion but through persuasion.[3]

This is particularly the case for issues relating to money. In the Christian tradition, money is not merely a neutral tool to be put to arbitrary human use, either good or bad. As Jacques Ellul rightly points out, there is a consistent biblical tendency to describe money as a 'power' with 'spiritual meaning and direction'.[4]

One problem for a Christian assessment of capital markets is that they are not envisaged or directly addressed in the Bible. Perhaps the more significant challenge is the resulting methodological blank slate that confronts anyone eager to assess capital markets from the viewpoint of public theology. These challenges, combined with considerable public interest in economic affairs among Christians (just as in wider secular society), have resulted in a variety of methodological approaches too diverse to survey here. They are variations of the problems that affect any theological discussion of economics. As Glen Stassen and David Gushee comment, 'Few issues in Christian ethics have generated a literature as massive or as polemical'[5] as economic issues, and there is little consensus about methodology in the broader field either.

In what follows, I will propose a methodology for identifying measures of social utility that are theologically driven, starting with ancient Israel as a paradigm and considering issues of Christian reflection on the Old Testament texts, and then identifying a set of biblical norms and some secular parallels.

2.1 Ancient Israel as a paradigm

Inevitably Christian reflection on economic issues turns to ancient Israel as encountered in the Old Testament, in legal codes, narrative, prophetic critique and so on. It is in these texts that we find systemic issues addressed and find the closest approximation to policy pronouncements on issues such as debt and property. As a result, Christians have much to learn from Jewish commentary, and Christian and Jewish thought have a lot in common on economic issues.[6] I will broadly follow the approach Chris Wright has pioneered, taking Israel as a paradigm of God's intentions for society.[7] Wright argues that it is vital to take into account Israel's story and to understand Israel in its context, always recognising that theology and ethics are inextricably linked.

Wright's paradigmatic approach looks for an enduring, normative force in biblical ethical injunctions[8] by locating them in their historical setting and applying the intent to a contemporary setting. A paradigmatic reading of Scripture gives weight to narrative setting and arc and avoids the blandness of inferring principles from a flat systematisation. The particularity of the critiques of wealth in the biblical prophets gives them a force that seems absent from a generalised principle such as 'property rights'.

One alternative approach involves an appeal to principles discovered outside the biblical texts, with a – devout – effort to identify biblical support for the position. For example, Eugene McCarraher claims that 'With capitalism – as with feudalism and all previous class societies – class conflict will end only with the abolition of the system that makes such struggle inevitable.'[9] This sort of analysis is far removed from that of the scriptural texts.

Another approach is to claim normative modern force for a 'face value' reading of some biblical ethical injunctions. Paul Mills, for example, refers to the ban on interest-bearing loans in Deuteronomy 23 – among other places

– as 'Old Testament economics' and claims that without a direct application of the ban on interest to modern finance, 'we have no cogent response to the financial chaos that rages around us'.[10]

The challenge of a paradigmatic reading is that it requires familiarity with the ancient contexts that apply to the relevant biblical texts, which is difficult to acquire. It is worth mentioning at this point that I agree with those scholars who suggest that the law codes are best understood as functioning in the context of a shared heritage of ancient Near Eastern law, rather than being comprehensible entirely on their own. This point is particularly significant for interpreting the biblical laws about debt.

'The Church has a responsibility to engage politically'

Fortunately, biblical studies scholarship gives us a window into the biblical world. I will propose three thematic components to a theological assessment of the utility of capital markets – creative purpose, justice and redemption. Alongside these themes I will also propose a small set of norms.

2.2 Christian extension of Israel's paradigm

Modern Christians face an additional challenge in applying the paradigm of Israel because they are part of two overlapping communities: the Church and the state. As Richard Bauckham points out, the Church is able to realise certain ideals '*more* fully than Old Testament Israel could',[11] in the awareness that we await the eschatological kingdom for an ideal society. In the meantime, the Church is able to bring influence to bear upon the state, but always in the recognition that a political community capable of genuinely realising the ideals of Israel would also have to be engaged in the worship of the God of Israel.

As a result, Bauckham argues, the Church's application of the political aspects of the Bible to the political community is complex, and deciding the relevance of a particular Old Testament law to a modern reality is not always straightforward. While the Church has a responsibility to engage politically, this 'will involve both cultural specificity and compromise', and in the Church's political engagement, 'the Old Testament law can be highly

instructive, but it cannot be straightforward instructions. Its relevance needs careful assessment in each case.'[12]

Due to the lack of political power held by the earliest Christians, later Christian theologians faced a considerable challenge in interpreting the Bible and applying it to situations in which Christians held increasing political influence. This hermeneutical challenge has never been entirely resolved and remains a reality to this day. However, it is instructive to observe the way some early Christian writers, in response to the influence of the Bible, made important modifications to the dominant idea of property rights within their own societies.

Charles Avila's analysis of some of the significant texts highlights themes that have remained part of the Christian tradition ever since.[13] Clement of Alexandria, for example, argues that Christians ought to have regard for the purposes of property, including self-sufficiency and 'fellowship' or 'sharing'.[14] Basil goes further in arguing that all things one might call 'my own' have a purpose beyond personal control, because everything is in fact given by God, who retains ultimate ownership. He gives the example of a person who finds himself in a theatre, and simply because of the accident of being there alone, arrives at the erroneous conclusion that it is his, instead of having a beneficial purpose for many people.

This understanding of property has a profound impact on ethical thinking about capital and markets for capital. If these early Christian thinkers are correct, a person's right to own capital is a contingent rather than an absolute right. The contingent right of ownership is conveyed by God and comes with obligations for the proper use of capital set by God. Under this frame of ethical reference, we ought to measure the utility of capital markets at least in part by the degree to which they make it simple and easy for the holders of capital to use capital well.

This line of ethical reasoning does not – despite Avila's conclusions – necessarily entail merely the permanent redistribution of capital or radical abandonment of property rights. Early Christian reflection still considers the use of property by its owner to be one of the rights God grants, much as contemporary Roman law did. As Luke Johnson argues, the experience

of the Church over the centuries has been that communal ownership 'has proven to work best when it is practiced by a small intentional community'[15] rather than becoming the primary way to express recognition of God's ultimate rights over property.

The Christian innovation was to recognise other purposes for property, alongside the owner's use and often with priority over it. And as Johnson suggests, the vital practice of almsgiving – charitable giving, including organised social welfare – is only possible with a degree of economic inequality. In his view this means that the ability to carry out redemptive economic acts is only possible in this age of the world if a degree of unequal distribution of property continues to exist. Nevertheless, the key point in Christian theology is that no person or group has an absolute right over capital; and it has always given consideration to the effects of economic acts on those without rights over the property being acted on.

'No person or group has an absolute right over capital'

A concrete example of where this line of reasoning might lead in the context of capital markets might be helpful. Without breadth of purpose, the utility of capital markets might reduce their ability to enable owners of capital to benefit from its use and users of capital to create capital of their own. Recognising purpose makes it possible, when assessing utility, to consider benefits that accrue to those beyond the primary participants in a capital-market transaction.

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1 Stephen C. Barton, 'Money Matters: Economic Relations and the Transformation of Value in Early Christianity', in Bruce W. Longenecker and Kelly D. Liebengood (eds), *Engaging Economics: New Testament Scenarios and Early Christian Reception*, Grand Rapids, MI: Eerdmans, 2009, pp. 37–59 (p. 56).

2 Oliver O'Donovan, *The Desire of Nations*, Cambridge: Cambridge University Press, 1996, p. 249.

3 Unfortunately a great deal of comment on economic matters by Christian theologians rightly acknowledges the importance of theological involvement,

but then turns to Marxist theory rather than biblical reflection for the source of theological critique of markets.

4 Jacques Ellul, *Money and Power*, reprint edn, Eugene, OR: Wipf & Stock, 2009, p. 76.

5 Glen H. Stassen and David P. Gushee, *Kingdom Ethics: Following Jesus in Contemporary Context*, Downers Grove, IL: InterVarsity Press, 2003, p. 409.

6 As Bauckham puts it: 'Much of the Old Testament is addressed to a people of God which was a political entity and for much of its history had at least some degree of political autonomy. The Old Testament is therefore directly concerned with the ordering of Israel's political life, the conduct of political affairs, the formulation of policies, the responsibilities of rulers as well as subjects, and so on' – Richard Bauckham, *The Bible in Politics: How to Read the Bible Politically*, 2nd edn, London: SPCK, 2010, p. 3.

7 Christopher J. H. Wright, *Old Testament Ethics for the People of God*, Nottingham: InterVarsity Press, 2004.

8 Wright, *Old Testament Ethics for the People of God*, pp. 62–4.

9 Eugene McCarraher, '"We Communists of the Old School"', in Adrian Pabst (ed.), *The Crisis of Global Capitalism: Pope Benedict XVI's Social Encyclical and the Future of Political Economy*, Eugene, OR: Cascade, 2011, pp. 89–120 (p. 101).

10 Paul Mills and Michael Schluter, *After Capitalism: Rethinking Economic Relationships*, Cambridge: Jubilee Centre, 2012, p. 126. Mills and Schluter refer to this as a paradigmatic reading, but their approach has methodological weaknesses and displays limited interaction with the ancient contexts of the legal codes. Mills acknowledges that Deuteronomy 15 and 23 make exceptions for foreigners, which show that 'lending at interest is not inherently immoral', but despite this he still claims that the ban on interest is indeed universal, based on two circular arguments: that the law is universally applicable, so 'we should observe that its contradiction yields bad fruit'; and that in our hermeneutical task we need to 'understand the priority of healthy relationships within public policy', which presupposes the conclusion he purports to draw from the text in its interpretation. Mills and Schluter do not give sufficient consideration to ancient context, which I consider essential.

11 Bauckham, *The Bible in Politics*, p. 29; emphasis in original.

12 Bauckham, *The Bible in Politics*, p. 30.

13 Charles Avila, *Ownership: Early Christian Teaching*, London: Sheed & Ward, 1983.

14 The Greek term is κοινωνία (*koinonia*), often read by modern Christians in exclusively spiritualised terms for collective prayer or religious conversation, but which in early Christianity almost universally referred to the sharing of material possessions such as food, property or money.

15 Luke Timothy Johnson, *Sharing Possessions: What Faith Demands*, 2nd edn, Grand Rapids, MI: Eerdmans, 2011, p. 143.

Chapter 3

Flourishing and justice in society

When I was working in capital markets, my wife and I – and eventually our children – lived in a poorer part of London. We spent several years involved in a small, wonderful local church that was located on the fringe of a large social housing area, reaching people from dreadfully deprived circumstances. Much of the church's work was directed towards healing the marks of deprivation in people's lives.

'Capital markets can serve these same biblical ideas'

What we tried to do was largely orientated towards bringing a Christian idea of justice into broken social situations: to see the hungry fed, the homeless housed and the marginalised given dignity. We were not doing anything unusual. We simply did what millions of churches around the world do, because Christians are motivated by the biblical ideas of human flourishing and divine justice.

Capital markets can serve these same biblical ideas, despite the apparent difference between the financial system and direct involvement in poverty relief.

3.1 Creative purpose and human flourishing

The positive theological starting point for thinking about human activity is the doctrine that humanity is made by God in his image. One aspect of *imago Dei* is human creativity; part of the divine purpose is human flourishing in the world.

A vital aspect of rightly orientated human activity is that it contributes to human flourishing. In the Western world we often identify flourishing with our own individual happiness, but as Miroslav Volf points out, we need to broaden our understanding to include the flourishing of others.[1] Volf's point is that from a Christian perspective, reality cannot be adequately described

without the recognition that God is the creator, and that our flourishing reflects God's purpose and identity. The world is an arena for discipleship and development within human society, not merely the flourishing of individuals. This impinges on finance particularly when money perhaps replaces God as an object of human worship in that its acquisition is directed towards the narrow end of our own satisfaction.

One aspect of human flourishing is recognising that creativity and craft within human endeavour have intrinsic worth. This is what Darrell Cosden calls the 'ontological' aspect of work: work does not exist merely for its usefulness.[2] The starting point for theological reflection about capital markets is that work is generally and intrinsically good, including work in capital markets.

So part of the utility of capital markets is found in the added scope they give human beings to engage in creative activity. Another aspect of utility is seen when human beings, by acting within capital markets, contribute to the growth and flourishing of the wider world beyond those markets.

Naturally, Christian theology also reflects considerable concern for those who might not benefit from this kind of growth and creative activity, and a distinct pessimism about the harmful actions and effects of human activity. We will return to those issues, but it is vital that we recognise there is a positive element to the biblical record of human activity, even in the midst of these serious concerns.

Personally, I think there is something compelling about the creativity that produces, to take one example, a new and improved pricing model for interest rates. I was involved in work around pricing and risk models prior to the 2008 financial crisis, and I found it fascinating to be involved in the craft of questioning the assumptions that underlay standard models, and to work with people far more mathematically able than I to create a better system – even if this marks me out as somewhat unusual, I found it intrinsically satisfying to execute a trade well. I knew the happiness of carrying out my craft with excellence on those occasions when I managed to bring together accurately all the elements of pricing, risk management and the near-chaos of executing a whole set of trades via voice and electronic trading systems

simultaneously. This is no different from someone skilled in manufacture or art.

When a craftsman makes a sofa we have no expectation that the sofa somehow must reduce inequality or alleviate poverty in order for the work to have utility. Indeed, one might ask whether the manufacture of such products is socially useful because it reduces inequality by providing cheap furniture, or socially harmful because it promotes an aesthetically homogenous world. However, mostly we assess the utility of the creative process through the usefulness of what is created.

Alongside this underlying positive view of human work we must consider the degree to which work encourages the 'shalom' or wholeness of the world. As John Stackhouse puts it: 'What must be asked instead is whether groups are improving the world and whether they are improving it as well as they could.'[3] Measuring improvement in the world needs to take into account the degree to which the world is not as it should be.

3.2 Justice and redemption

The world is a remarkably unfair place. At least some of this unfairness seems to result from systems that prevent everybody from participating in economic life on a level playing field. This cannot be reduced to inequality of income or wealth.

To Christians, unfairness is one reflection of a world in which God's intention has been disrupted by evil. This is not to say that each instance of economic poverty is directly traceable to a particular evil human act, but that the world is out of balance.

Within that broader sense of unfairness, there is a more specific and even less attractive reality: some poverty, and a great deal of unfairness, is directly traceable to particular human acts or failures. Societies usually act through legislation to limit these direct evils.

To take one example, when someone in poverty seeks to borrow money, they are often in a position of severely limited bargaining power, and might well accept terms for a loan that are crushingly unfair. Loan sharks prey on the economically weakest members of society, charging excessive rates of

interest, which can lead to a spiral of debt and sometimes even violence. Even in ancient societies, governments imposed limits on interest rates, recognising that lending and borrowing was in general a good thing but that if not checked by regulation it would tempt lenders to abuse the poor.

‘A great deal of unfairness, is directly traceable to particular human acts’

In secular usage, justice is in a sense a form of social pessimism, or at least a response to a pessimistic realism about society. Justice anticipates wrongdoing and discourages it, partly by making rules to prevent it and partly by threatening to punish wrongdoers. More broadly, justice establishes parity under some kind of legal norms, but it does so through compulsion and sets limits for wrong behaviour rather than expanding the horizons of society towards a better future.

In its biblical use, though, justice extends beyond the work of limiting ill-effects through compulsion, to include restoring society to a state better than could be achieved merely by compelling restitution for wrongs. Justice in the biblical narrative is achieved not only through judicial force but through voluntary activity, particularly voluntary economic activity. Biblical justice is not a counterpoint to redemption, but includes redemption in its very nature; and not only the spiritual redemption of individual persons but the economic redemption of entire social groups.

Stackhouse helpfully frames the redemptive aspect of justice in the light of creation:

> The redemption commandments serve the larger purpose of the creation commandments. They are emergency measures for an emergency situation. The world is fallen and needs redemption in order that it may resume its proper function as manifest at the creation.[4]

Similarly, Volf talks about the distinction between the ‘ethical minimum’, which ensures justice, and the ‘ethical maximum’, which demonstrates love.[5] Volf and Stackhouse both urge a degree of realism in practical attempts to

implement the ideal, and both also recognise the eschatological horizon for the ideal becoming a true reality. However, both also make the important point for an evaluation of utility: assessing the world as it should be in the light of its ultimate redemption.

This is why the prophets criticise economic injustice, such as the inequality of land ownership in ancient Israel, with such virulence. A landlord accumulating property is not merely breaking some technical limit on the number of fields and houses that can be legitimately owned but is dealing a death blow to the vision of Israel as a place of human flourishing, of economic growth and bounty beyond the hopes of the surrounding nations.

Justice and redemption are deeply bound up in each other in the biblical narrative. Economic justice cannot be achieved, in biblical terms, without including economic redemption, a redemption that goes beyond limiting wrongs and extends to creating a better, restored future for all of society. Kim Tan frames this in a dichotomy: 'If people are to be free to enjoy stewardship of God's creation, they need justice, not charity'[6] – although I would add 'not *just* charity'.

In Christian theology there always remains a degree of pessimistic realism about the extent to which redemption can be achieved in this world.[7] Nevertheless, throughout history Christians have found considerable inspiration to bring aspects of redemption to society, rather than being content merely to argue that evildoers should be punished. This is because the Christian community is portrayed in the New Testament as a microcosm of a redeemed, just society. As Bruce Longenecker argues, 'Paul imagined initiatives for the poor within their [Christian] communities to be incarnations of a divine order that was invading the very structures of the not-yet-restored world.'[8] This extended beyond the nascent Christian communities, in what Bruce Winter calls 'an unprecedented social revolution of the ancient benefaction tradition',[9] as Christians engaged in the political activities of their cities.

A final and vital aspect of Christian thought when assessing utility is that Christian theology rejects a zero-sum view of the economic world. In the world that God has made, despite the world's marring, we should not be

surprised to find that it is possible to undertake courses of action that benefit both others and ourselves.

The way God has ordered the world, in those situations not utterly marred by evil, is that right and loving actions benefit God, others – and ourselves. Justice and redemption return the world to its natural path, the path God intended it to follow. To establish justice and righteousness, we need to identify some specific norms that we can use to assess our progress.

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1 Miroslav Volf, *A Public Faith: How Followers of Christ Should Serve the Common Good*, Grand Rapids, MI: Brazos, 2011, p. 71.

2 Darrell Cosden, *A Theology of Work: Work and the New Creation*, Eugene, OR: Wipf & Stock, 2006, pp. 184–5.

3 John G. Stackhouse Jr, *Making the Best of It: Following Christ in the Real World*, Oxford: Oxford University Press, 2008, p. 228.

4 Stackhouse, *Making the Best of It*, p. 218.

5 Miroslav Volf, *Work in the Spirit: Toward a Theology of Work*, Oxford: Oxford University Press, 1991, p. 82.

6 Kim Tan, *The Jubilee Gospel: The Jubilee, Spirit and the Church*, Milton Keynes: Authentic Media, 2008, p. 116.

7 This is the tension laid bare in Deuteronomy 15, which holds out amazing optimism from God's generosity in verse 4, 'there need be no poor people among you', and a realistic pessimism in verse 11, 'There will always be poor people in the land.'

8 Bruce W. Longenecker, *Remember the Poor: Paul, Poverty, and the Greco-Roman World*, Grand Rapids, MI: Eerdmans, 2010, p. 290.

9 Bruce W. Winter, *Seek the Welfare of the City: Christians as Benefactors and Citizens*, Carlisle: Paternoster Press, 1994, p. 209.

Chapter 4

Christian economic fairness and effectiveness

One of the uniting concerns of the biblical texts is that some economic outcomes present an obstacle to loyalty to God. When Proverbs 22.7 asserts that 'the borrower is slave to the lender', it is making an evocative claim. Slave (עבד, *ebed*) also means worshipper in relation to God. In Exodus the people of Israel are *ebadim* (slaves) in Egypt, but God frees them to become *ebadim* (worshippers) of God.

The word indicates loyalty and service, and when a person borrows money it creates a second loyalty and obligation of service, which can interfere with the poor borrower's loyalty and obligation of service to God alone. The norms we are about to look at recognise the possible erosion of loyalty to God as a result of economic relations, and the alignment of political and economic power that is so often evident in this broken world, and present safeguards on economic relations so that the politically powerless are not tempted away from the worship of God by the abuse of economic power.[1] Perhaps the exploitation of the poor by loan sharks is a contemporary example of this sort of abuse.

4.1 Norms from Deuteronomy and beyond

Christian theological reflection on economic issues – in common with similar Jewish reflection – owes a great deal to the law code found in the book of Deuteronomy. Deuteronomy seems arcane to most modern readers, but among theologians it is noted for its social innovation within the setting of the ancient Near East.[2]

In saying this, it is important not to read the various laws as if they can be directly applied today. As Richard Bauckham points out, even in its ancient context the law was not intended to function like a modern statute book:

> Rather its purpose is to educate the people of God in the will of God for the whole of their life as his people, to create and develop the conscience of the community. It instructs the whole people in

> the values and principles of their social order, and as part of this instruction includes representative examples of the kind of laws which should be administered in the courts.[3]

So our task is to reflect on the ancient examples and derive principles from the paradigmatic laws. Andrew Hartropp has helpfully summarised the economic prescriptions of Deuteronomy under the idea of economic justice. He synthesises four principles of economic justice, which form a foundation for Christian economic theology:

1. 'Justice means appropriate treatment, according to the norms commanded by God.'
2. 'God's justice involves justice to the needy.'
3. 'Justice is not only allocational, but also concerns the quality of relationships.'
4. 'Justice in the allocation of resources means that everyone participates in God's blessing.'[4]

The final point about participation as an objective bears further consideration. A biblical ethic of wealth creation allows for differences in outcome, not least because of the signalling effect that differing outcomes provide to the members of society about how to adapt to a changing world.

Glen Stassen and David Gushee rightly point out that distributive justice ought not to be reduced to the distribution of cash. Distribution of opportunity, of work and of participation are significant and often overlooked biblical themes, along with provision for those whose ability to participate is limited. One important measure of the success of society's movement towards these goals is the degree to which people suffer from poverty – but it is not the only measure.

In order to measure the utility of capital markets against these four principles, we still need to identify the divinely commanded norms that govern 'appropriate treatment'.

4.2 Harmless credit for the poor

The first of these norms is a special concern for the effects of social constructs on the poor within a society. The debt code of Deuteronomy 15 is one of many biblical passages reflecting that concern: 'There will always be poor people in the land. Therefore I command you to be open-handed towards your fellow Israelites who are poor and needy in your land' (verse 11).

This chapter is one for which understanding ancient context is essential. In other Mesopotamian and Levantine societies, loans fell into a number of categories. There is no straightforward way to classify these loans in modern terms – for example, there is no direct parallel in a modern society to the classes of people to whom ancient Assyrian lending laws applied – but there was a clear distinction between subsistence loans to poor people in dire straits, and discretionary loans for various forms of commercial or state activity. It is also important to recognise that the other ancient law codes do not set out a complete prescription for society. They assume many prior aspects of law and often deal with interesting or difficult cases. For example, Hammurabi's famous law code begins with the case of a false accusation of murder, and never actually states that murder itself is prohibited. That is simply assumed. Similarly, contract law is never addressed in Deuteronomy, presumably because normal practice was sufficient in Israel.

Second, subsistence debt and debt slavery were particularly important measures of the status of an ancient Near Eastern king. It was especially through the treatment of poor people who were in debt, or debt slavery, that a king's 'justice and righteousness' were visible. A number of kings went to great lengths to document their reputation in inscriptions that boasted of their decrees compelling the forgiveness of poverty loans and emancipation of debt slaves. These decrees were seen as the hallmark of their righteous rule in creating a good society.[5]

When we come to Deuteronomy 15, both aspects of ancient context come into play. Only subsistence loans to people in poverty are addressed, presumably because these were the only laws needing modification from the common practice in the ancient Near East.[6]

And as a number of scholars have noted, just as the 'justice and righteousness' of kings in nearby countries were particularly visible in subsistence debt relief and debt slavery emancipation, so God's greater justice and righteousness were particularly visible in his prescriptions around subsistence debt and debt slavery in Deuteronomy 15. This is visible in the structural centrality given to the chapter,[7] and because the debt code 'makes care for the poor the litmus test of covenant obedience to the whole of the rest of the law'.[8] Walter Brueggemann goes even further, stating that the debt release laws are 'the central and signature affirmation of Yahweh's rule'.[9]

This was reinforced later in Israel's history. According to Jeremiah 34, God caused the final catastrophic exile of Jerusalem's king, not because of idol worship or any other 'spiritual' offence, but because the king and other wealthy people failed to carry out the commands of Deuteronomy 15. In Deuteronomy, the debt code is the litmus test of Israel's obedience to God's covenant; in Jeremiah 34, Israel's failure to free debt slaves is the crowning and final example of their failure to keep the covenant.

In other words, Deuteronomy 15 is central to any theological assessment of economic issues that takes the Old Testament Scriptures seriously. As a baseline, to be socially useful in a biblical sense, economic structures must benefit – or at least avoid harming – the poor in society. It is insufficient to show that society in aggregate is better off; we must also show that there is no structural bias against the poor.

To be more specific: a litmus test of a morally good capital-market system will be that poor people in need can access credit when needed, in a way that limits potential harm:

> If anyone is poor among your fellow Israelites in any of the towns of the land the Lord your God is giving you, do not be hard-hearted or tight-fisted towards them. Rather, be open-handed and freely lend them whatever they need. (Deuteronomy 15.7–8)

Personal responsibility by poor borrowers is given scant attention in the Scriptures; instead, the emphasis is placed on the personal responsibility of the wealthy to lend generously, and in ways that avoid harming the poor

borrowers.[10] In the New Testament, Jesus reiterates this emphasis (see Matthew 5.42, for example).

'Justice and righteousness' in the Old Testament are most visible when those in dire poverty are able to obtain credit on terms that do not harm them. So it becomes the Church's prophetic role to urge modern societies to establish justice and righteousness through both generous voluntary lending and regulation of harmful lending practices to the poor.

Contrast this with pre-crisis lending to the poor by modern banks, where loans were advanced without the protection of guaranteed debt forgiveness, where repossession of homes was a common consequence and where interest was not only charged but structured in harmful ways.

4.3 Personal economic freedom

Personal freedom to engage in economic activity is highly valued by most people. The system envisaged in Deuteronomy extends a great deal of personal freedom over economic matters to everyone in society. For example, not only can the poor borrow money easily (rather than merely receiving charitable gifts), the gleaning laws found in Deuteronomy 24 provide for the poor in a way that includes a considerable degree of individual freedom and dignity. They command those with productive land not to harvest all their crops, instead leaving some to be harvested by 'widows and orphans'[11] without cost. The command offers scope for dignified and productive economic activity to be engaged in by those without assets.

The society envisaged by Deuteronomy gives tremendous scope for entrepreneurial behaviour and the development of society along innovative lines, because the financial system does not limit the availability of financial resources to predetermined areas of perceived social need. Even the poor are still given opportunities to express economic creativity.

An important effect of the periodic debt relief in Deuteronomy 15 is that redistribution of wealth is closely tied to making credit available to poor individuals. This in turn reinforces the place of personal economic freedom of action for those poor people, because they have opportunities to be economically creative with the credit they obtain.

4.4 Visibly fair pricing

Finally, considerable attention is paid in the Hebrew Bible to the idea of a fair price. This is normally expressed in terms of 'accurate and honest weights and measures' because 'the Lord your God detests ... anyone who deals dishonestly' (Deuteronomy 25.13–16). The specific practice critiqued in this passage is that of using one weight to measure out money when buying and another when selling.

Behind this command is the idea that there should be visibly fair pricing, and profit should not be derived from dishonest practices or a power imbalance that prevents one party in a transaction having accurate information.

4.5 Application to modern capital markets

The economic norms outlined here are relatively straightforward: ensuring that the poor have access to harm-free credit; are given opportunities for personal economic freedom; are protected by visibly fair pricing. All of these need to be seen under the umbrella of a theological commitment to human creativity and flourishing, and in the light of the arc of human history as it bends towards the eschatological hope of a redeemed creation at the return of Christ.

The biblical commands reflect a realistic social optimism. Even though the commands in both the Hebrew Bible and the New Testament anticipate the continued existence of poverty, they enjoin behaviour that, if followed, is likely to alleviate poverty.

Alongside that social optimism and commitment to individual freedom of action is a deep-seated pessimism about individual moral behaviour. The root of social dysfunction is seen in the Christian tradition to lie not only in incorrect social structures but in the unethical behaviour of individuals. That unethical behaviour must be restrained and reversed by commands enjoining behaviour that will produce economic justice, backed up by sanctions for those who transgress the commands.

The utility of capital markets to society, in this view, can be measured by the degree to which they produce ethical and social change that reflects the idealised future Christians hope for, both in structural change and individual

moral reform – negatively through the restraint of law; positively through the transformation produced by the Holy Spirit in those who respond to the proclamation of the Christian gospel message.

While the last of these ideas is uniquely Christian, the other aspects of these Christian theological reflections have parallels in secular discussions of the utility of capital markets. This is not surprising, given that many of the ethical norms of Western societies can trace their descent from the religious ideals of Christianity and Judaism.

For example, the recent Fair and Effective Markets Review[12] focused on fairness and effectiveness, which involves making ethical judgements about capital markets. The report includes a careful identification of the characteristics of a market that make it effective; in other words, that mean it can fulfil its intended purposes. This includes the recognition that capital markets do not exist purely for their own sake but 'in support of the broader non-financial economy'.[13] The four elements of effectiveness in the report are:

1. allowing transactions to predictably support '(i) the channelling of savings to investment; and (ii) risk transfer';
2. enabling participants to 'source available liquidity';
3. allowing participants 'to form, discover and trade at competitive prices, via a price discovery process';
4. ensuring 'proper allocation of capital to productive uses'.

Taking all of this into account alongside the theological analysis, we might conclude that capital markets are socially useful if they:

- provide an arena for human activity and creativity;
- effectively intermediate providers and users of funds;
- involve appropriate treatment of individual members of society, according to a set of norms;
- involve appropriate treatment of poor members of society;

- can be measured not only in terms of useful allocation of economic resources but in terms of their effects on relationships within society;
- enable broader participation in the output of society; this is a different from seeking wealth or income equality, as participation can be distinct from ownership.

To take the last point as an example: one benefit to society of markets for capital is that wide participation tends to be attractive to those who provide or control capital-market access. This applies to markets where regulated exchanges are the main venue for trading, and for non-exchange markets where institutions or groups of institutions tend to provide access – retail or commercial lending, for example. This is chiefly because the incentives for providing widespread access tend to be straightforwardly aligned with the interests of market providers.

Consider the example of a regulated exchange. Exchanges typically collect a small fee for every trade executed on-exchange. This incentivises exchanges to increase trading volume, and one way to increase trading volume is to increase the number of market participants. In fact this is one of the simplest ways to increase revenue, as it is not always easy to induce existing participants to trade more, and those market participants who do trade heavily will generally seek – and receive – discounts on exchange fees in return for their provision of liquidity. Similar effects encourage those who make over-the-counter markets,[14] such as the foreign exchange market, to seek wide participation.

'Markets provide a democratic process for determining a fair price'

Wide participation increases liquidity, which in turn reduces transaction costs, and this in turn benefits the individual freedom of less powerful members of society most. Wealthier members of society generally wield sufficient power that their economic activities are relatively unconstrained, and in particular they have individual bargaining power that allows them to reduce their transaction costs even in illiquid markets. Poorer members of

society benefit disproportionately from broad participation, which reduces costs for all participants, rich or poor.

A significant benefit to society of capital markets is that they can provide a robust means of determining a fair price for capital. This is especially true of markets with large numbers of participants or large trading flows. Markets provide a democratic process for determining a fair price, for capital as for other goods. The public nature of the process prevents differing prices for those with differing market power.[15]

These principles and norms do not obviously favour vested capital-market interests, and give us a useful benchmark for assessing the social utility of those markets.

In fact this method of evaluating social utility sets a high bar for capital markets, as conventional arguments for their benefits tend to focus on aggregate measures of economic prosperity. Those aggregate benefits are well established – even if they are unappreciated at a popular level – but do not always persuade people that capital markets benefit society. This is because people have a moral compass. Most decent human beings care about the fate of the poorest in society, not just about the average person. If capital markets can be shown to provide utility to society on the basis outlined above, then the case for them is far stronger than has sometimes been appreciated.

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1 I think that this understanding of economic norms is preferable to those approaches, notably from Chris Wright, Michael Schluter and Paul Mills, that take at face value the direct, personal relationships in most of the normative material in the Pentateuch. Proverbs 22.7 envisages a direct, personal relationship but still identifies a theological tension arising from that economic relationship. The Pentateuch simply regulates a society in which *all* economic relationships were of necessity personal and direct, rather than ruling out corporate structures or intermediaries. The problem the Pentateuch regulates is not indirect or impersonal economic relations but the ever-present danger that economic transactions could lead to the poor being tempted away from the worship of God.

2 Other texts from the Bible, such as the prophets, provide sharp critiques of social practices but do not give a prescription for an ideal society.

3 Richard Bauckham, *The Bible in Politics: How to Read the Bible Politically*, 2nd edn, London: SPCK, 2010, p. 26.

4 Andy Hartropp, *What Is Economic Justice?*, Bletchley: Paternoster Press, 2008, pp. 65–72.

5 Moshe Weinfeld, *Social Justice in Ancient Israel and in the Ancient Near East*, Minneapolis, MN: Fortress Press, 1995.

6 See, for example, Peter Altmann, *Economics in Persian-period Biblical Texts: Their Interactions with Economic Developments in the Persian Period and Earlier Biblical Traditions*, Tübingen: Mohr Siebeck, 2016, p. 72. Although this point appears widely acknowledged in comparative scholarship, it has not always been so in the exegetical literature. By implication, there was no limitation intended on the various other forms of loans, such as those to people in commercial-type partnerships, to merchants generally or relating to palace or temple functions. Note that verses 4 and 7 specifically identify the borrowers as 'poor'. We know that borrowing by wealthy people was common in other societies, and there is no reason to believe that ancient Israel was any different or that the Deuteronomic law code intended to prohibit such loans or prevent them bearing interest.

7 Jeffries M. Hamilton, *Social Justice and Deuteronomy: The Case of Deuteronomy 15*, Atlanta, GA: Society of Biblical Literature, 1992, pp. 107–13.

8 Christopher J. H. Wright, *Old Testament Ethics for the People of God*, Nottingham: InterVarsity Press, 2004, p. 174.

9 Walter Brueggemann, *Theology of the Old Testament: Testimony, Dispute, Advocacy*, Minneapolis, MN: Fortress Press, 1997, p. 188.

10 Psalm 37.21, the only verse in the Bible that deals with the issue of a borrower not repaying debt, affirms that failure to repay a loan is indeed morally wrong, but the contrasting righteous behaviour is not a borrower's repayment but a rich person's generosity.

11 Within the context of the ancient Near East, widows and orphans is a kind of shorthand for those most in need.

12 *Fair and Effective Markets Review*, London: HM Treasury, Bank of England, Financial Conduct Authority, June 2015.

13 *Fair and Effective Markets Review*, p. 19.

14 That is, markets where trading typically happens outside of a regulated exchange environment, directly between the two parties involved in a transaction.

15 This view of the pricing function of markets finds its earliest exponents in the Salamanca School. For a popular argument that there are limits on the ability of markets to provide a pricing function, see Michael J. Sandel, *What Money Can't Buy: The Moral Limits of Markets*, London: Penguin, 2012.

Chapter 5

Kinds of capital markets

How might different types of capital market contribute to social utility?

5.1 Bond markets

Bond markets are less visible to the general public than equity markets but are arguably a more vital part of the modern capital-market system. Bonds exist in two main categories: government and corporate.

The principle involved is identical for government and corporate bonds. Bonds are a form of debt with a guaranteed rate of interest and (normally) a fixed maturity date. The total amount to be raised is broken down into smaller units. It is relatively simple for bond holders to trade their debt with other interested parties. A great part of the attraction of bonds is that a lender need not wait until the debt matures to recoup their capital, but can instead seek a buyer for their holding of bonds.

The basic distinction between bonds and equity is that equity confers a degree of ownership, whereas bonds merely create an obligation for the borrower to repay funds. All bonds involve the borrower paying some form of interest, although this can be disguised as a capital repayment (e.g. zero-coupon bonds) or as ownership (e.g. some *sukuk* bonds – Islamic bonds where bond holders have some degree of ownership in an underlying asset).

When the UK government wishes to fund a new infrastructure project (e.g. a hospital or railway), it typically lacks the funds to do so and hence needs to borrow the money through the government bond market. Bonds are sold to a group of intermediary market makers known as GEMMs, who in turn sell them on to other market counterparties, such as pension and investment fund managers, central banks and individual investors. The alternative to issuing debt through the bond markets would be to collect more tax revenue, which is often politically untenable.

The UK government bond market benefits society; that is, it provides utility.

1. First, the bond market increases participation in the output of society. Infrastructure projects benefit large numbers of people in society.

2. Second, by enabling the provision of universal welfare (among other things), the bond market enables appropriate treatment of the members of society (e.g. through the provision of a hospital). Poorer members of society benefit in particular, as they would otherwise be unable to afford to pay for health care.

3. By putting the financial resources of wealthy individuals, financial institutions and foreign states to use, the government bond market positively affects the relationships between wealthy and poor members of society, and indeed between countries.

4. Finally, a more complex side effect of government bond markets is that they aid redistribution of monetary wealth, particularly in times of economic difficulty. The ability of governments to borrow large sums of money during economic recessions, when tax revenues tend to decline sharply, allows public services and employment to be maintained at a far higher level than would otherwise be the case. Similar arguments can be made for the social utility of corporate bonds.

The existence of a market brings all of these participants together.

So, for example, the government's typical time horizons for borrowing and repaying money often differ from those of potential lenders. There is no particular reason to expect the lender's requirements to be aligned in time with the borrowing government's. The existence of a large, liquid market for bonds ensures that lenders have the confidence to lend, knowing they are likely to be able to sell the bonds they own when needed.

5.2 Equity markets

Unlike bonds, which are a form of debt, equities are a form of ownership in a company under the terms that the particular class of equity allows.[1]

When equities are made available 'publicly', rather than, for example, retained within a family, this involves at least a partial separation of ownership and control. The directors who manage a company on behalf of shareholders

may not be shareholders themselves or at least may have divergent interests (the agency problem). The agency problem is compounded in Western capital markets when equity ownership becomes dominated by investment funds, which add an additional link in the chain of ownership and further distance individual investors from control of the companies they apparently own. Despite this, equity markets remain exceptionally popular avenues for investment, and provide utility to society:

'The existence of a market brings all of these participants together'

- First, equity markets promote personal freedom to engage in economic activity. They enable both entrepreneurs and established companies to raise capital. They enable long-term investment for companies, even if investors have a shorter time horizon. It is no accident that many of the institutions that have most transformed our world are companies financed by the issuance of share capital.

- Second, equities, particularly equities listed on public exchanges ('stock markets'), democratise access to investment choices that would otherwise only be available to the elites in society. This is particularly the case through the pooling of funds (e.g. pension funds). Thus equity markets are open to those with only a small amount of capital.

- Third, equity markets relate monetary distribution of wealth to the provision of opportunities for participation in economic growth. They encourage efficient distribution of financial capital. In most societies, financial capital accrues inequitably, either through the vagaries of chance or the exercise of skill. The market enables this capital to be deployed for wider benefit. Those with capital need only engage with intermediaries – typically banking and fund management institutions – to place their excess savings. The complex web of capital markets provides the route for these savings to make their way to people who can put them to economically productive use. Equity markets also enable someone with no interest or expertise in, say, building aircraft to invest in an aircraft manufacturer. This provides a direct benefit to

society because capital that might otherwise not be invested is used to provide jobs, take raw materials and turn them into higher-value goods and services, and perhaps even to benefit the balance of trade by selling the finished product to other countries.

- Fourth, equity markets, especially publicly traded ones, promote fair pricing of capital. Publicly traded companies in particular are subject to stringent requirements around financial reporting – requirements that lead to increased clarity about the financial value of a company at any given time. Equity markets, like all markets, are based on imperfect information and so can reflect imperfect pricing, but they generate pressure to produce higher-quality information than would otherwise be available, and hence a tendency towards fairer pricing. This democratisation of information that might otherwise only be available to a few with connections, or sufficient wealth to obtain it, again leads to an increased degree of protection for a wider, poorer cross-section of society. This effect is recognised in Western legal systems, which explicitly protect democratic access to financial information of publicly traded companies, for example by prohibiting insider trading.

5.3 Commodity markets

Commodity markets are considerably less democratically accessible than equity markets, but the effects of price changes in some of them – such as oil or electricity – are even more visible to society. These markets are a key determinant of the pricing of the energy, physical materials and food, yet many consumers have little understanding of or ability to participate in them.[2]

This disconnect between participation in the market and the impact of commodity prices on society provides fertile soil in which disaffection about commodity markets can flourish. Speculators are often accused of controlling the prices of key commodities that affect daily life. However, commodity markets, like equity markets, enable the freedom to engage in economic activity, a degree of redistribution of wealth, and fair pricing.

To give just one example: commodities are often produced in less developed countries and purchased by wealthier ones. Trading in these commodities

often results in investment, job growth and wealth transfers directed towards those poorer countries. The efficiency and predictability of production in one part of a society or of the world is greatly enhanced by the existence of large-scale, easily accessible commodity markets.

Their role in establishing fair prices is especially important because, unlike in the case of bond or equity markets, almost every member of society consumes commodities in some form – everyone is affected by commodity pricing because everyone uses energy to light or heat their home, needs metals in the form of transport or a place to live, and food to eat. While bond and equity markets only peripherally affect most individuals unless they choose to engage in them, there is no way to isolate oneself from the effects of commodity pricing. While at first sight this might seem disturbing, the existence of commodity markets is in fact an important safeguard.

Hence it is vital that the price-setting function in a society is carried out in a fair and transparent way. Openly traded markets place the aggregate supply and demand of an entire society – indeed, of the entire world – in a single forum, visible to everyone. Standardised contracts mean that markets answer a single question, considered independently of all other issues of policy: at what price can I buy or sell such-and-such a commodity, taking into account all the possible information about aggregate supply and demand of that commodity?[3] No other considerations are taken into account in the market; there is no way for a large and powerful market participant to argue that because of their power they ought to be able to buy more cheaply or sell more expensively.

This means that the benefits of this price-setting function of commodity markets accrue disproportionately to those participants with the least economic power. Individually, I might have no ability as a coffee grower to raise my prices to a large corporate in the coffee-roasting business, but if global demand rises, then the existence of a publicly traded market for coffee reduces the power of the corporate in setting prices and enhances mine. The existence of the markets, and their public price-setting function, gives economic power disproportionately to those who would otherwise lack it.

Governments are sometimes tempted to intervene to alter commodity prices, for example by capping energy prices or imposing a floor on the price of basic agricultural produce or through subsidies. An illustration of the shortcomings of these policies in achieving genuine social utility can be found in a recent working paper from the Dallas Fed, which argues that the very existence of a price-altering fuel subsidy decreases overall social welfare.[4] The key point of these efforts is that they attempt to modify the value-neutral price information that markets produce in order to achieve a value-bound social outcome, and in doing so distort market information to achieve those social outcomes, in many cases perpetuating the underlying problem.[5]

In summary, commodity markets provide social utility through enhancing personal freedom to engage in economic activity, through the redistribution of wealth, particularly from rich countries to poorer countries, and through providing fair pricing information, particularly to social participants with limited economic power.

5.4 Currency markets

The currency market is the largest actively traded capital market of all, with trillions of dollars of currency changing hands every day, much of it in London but spread throughout all the financial centres of the world. Given state control of a country's currency, a right states are naturally reluctant to abandon, trying to force currency trading into regulated exchanges would be rather complicated. Instead transactions are generally carried out over the counter[6] and cleared through a system designed to ensure that both sides of each transaction proceed successfully.

One of the unusual facets of the currency market is that it is one of the few capital markets in which significant explicit price controls exist. For example, the Chinese renminbi is constrained by the Chinese state to trade only within certain narrow bands; the Swiss franc was until recently floored versus the Euro by the Swiss central bank; and the Argentine peso is supported versus the US dollar. The price controls can be maintained in a number of ways, including through direct market interventions (trading) by state institutions, or policy choices designed to influence the market

price (e.g. moving interest rates higher or lower). Nevertheless, most of the major developed world currencies are permitted to float freely to whatever price the currency market establishes through regular trading. Countries that do attempt to control the price of their currency often suffer unwanted side effects, such as reductions in foreign currency reserves or interest-rate policies that harm the economy.

Currency markets provide great utility to international trade (from goods and services to tourism), and the scale and liquidity of the markets enhance that social utility. For example, currency markets enhance social utility through enabling 'remittances' from one country to another. These payments are almost always from a richer country to a poorer one, where the richer country's economic power means that more and better-paid employment can be found there than in the poorer country. As a result, there is a flow of money from rich countries to poor people in poor countries, a flow that is efficiently enabled by currency markets.

'Money markets broaden access to credit'

The scale of wealth transfer involved is huge. The World Bank estimates that in 2015, even though the growth in the size of remittances is slowing, about $440 billion will be transferred from developed countries to developing countries. By way of comparison, in 2012, OECD countries provided about $126 billion in direct foreign aid to developing countries, much of which will have passed through bureaucratic government agencies and, indeed, much of which will have remained in donor countries paying for consultants or supplies. In the same year, over $400 billion in remittances were transferred to developing countries. Due to this huge scale, the aggregate efficiency that foreign currency markets deliver actually benefits the poor.

5.5 Money markets

While perhaps not widely understood, money markets are a vital part of the system of modern capital. Loans and deposits are traded, generally involving some well-known criteria to allow participants to compare prices, expressed in terms of interest rates. Money market loan/deposit trades typically have a

maturity ranging from one day to a few months – although there is no upper limit on the maturity.

The main advantage of money markets is that they broaden access to credit. Trades in these markets allow banks to balance their financing across the entire financial system, and not least for this reason, the money market is closely tied to central bank deposits and to the clearing system. With access to a country's money market, a bank is able to offer borrowers long-term credit, while continuing to function in the face of the huge day-to-day fluctuations in the bank's cash position that result from the mismatch between the cash flows of their various assets and liabilities. The net effect of an efficient money market is the availability of more and cheaper credit than would otherwise exist.

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1 Different types of equity vary in their allocation of the various rights of ownership, such as obtaining financial benefits, including dividends, or having the ability to control a company through mechanisms, including voting.

2 Individuals can use spread betting, index funds or in some cases physical holdings of commodities, but face much greater challenges with commodities compared to equities or bonds.

3 It might, of course, be considered beneficial for society to ask other questions about commodities, particularly around externalities, but markets are still unparalleled in their ability to provide price information from aggregate supply and demand.

4 Michael Plante, *The Long-Run Macroeconomic Impacts of Fuel Subsidies*, Federal Reserve Bank of Dallas, March 2013. The author suggests that altering the desired social outcomes through direct monetary transfers would be more effective.

5 Consider, for example, the effect of fuel subsidies in countries such as Venezuela.

6 Directly between market participants rather than through a regulated exchange.

Chapter 6

Issues across markets

On Sunday, 14 September 2008, my manager called me while I was on a bus heading to church and asked me to head over to the office to help plan for how we would trade through the Lehman bankruptcy the next morning. That Sunday morning marked the beginning of the gravest week of the financial crisis. For me it began with intense work overnight to help manage the largest unwind of derivatives contracts we'd ever undertaken. This went successfully for our part of the bank, and over the following days my manager and I worked on the derivatives exposure of our bank to other institutions as the contagion spread. In the end, the US government decided to bail out AIG, which as an insurance company was minimally regulated in its derivatives trading activities compared to banks, and was facing a collapse that would dwarf the previous bank failures in its effects on markets.

The most prominent issue is of course derivatives: markets that trade in financial contracts based on an underlying product of the types we have already considered (hence often referred to as secondary markets). Derivatives can be mathematically complex and difficult to understand.

People are often suspicious of derivatives because this complexity has been part of a number of high-profile financial disasters. An early example is the bankruptcy of Orange County, California in December 1994, after a number of large swap contracts entered into by the County Treasurer, Robert Clinton, lost money. The swap contracts were made possible by large loans (i.e. the swaps were financed through leverage), meaning that the losses resulted very quickly in bankruptcy.

6.1 Derivative markets

Derivatives are far more ancient than most people realise. They are financial contracts in which the eventual outcome is tied to something outside the contract. For example, there are records from the ancient Near East showing that derivatives contracts were written on the basis of the future price of agricultural products. They enable the management of price

uncertainty separate from the trade in the commodity itself. Hence they provide market participants with liquidity without disrupting the trade in the primary product.

Thus farmers might use derivatives contracts on wheat or pork-belly prices to reduce their financial risk over time. Farmers always face the risk that prices fall between the time they buy their input products (such as seed) and the time they can sell the finished product (wheat). Derivatives let individual farmers lock in a selling price at the point at which they are making their purchasing decisions. As a result, they can protect themselves against financial uncertainty over the intervening months.

Derivatives often function in a similar way to insurance. Some derivatives actually involve the payment of a fee ('option premium'), which purchases a contract insuring against a particular risk – often the risk of a falling commodity price. If the price does fall, the option contract pays out in proportion to the premium paid.

Warren Buffett famously described derivatives as 'financial weapons of mass destruction' and 'time bombs'.[1] In fact some of the less headline-worthy details of Buffett's criticisms of derivatives are accurate and known to many within the financial system, such as the collateral held against derivatives contracts, the risk models used and the funding arrangements involved.

'One particular problem is the repeated overreliance on quantitative risk models'

One particular problem is the repeated overreliance on quantitative risk models that do not adequately capture the range of risks involved, and give the uninformed unwarranted confidence. Nevertheless, even when the risks are well understood, the benefits outweigh the risks, at least in the eyes of many informed market participants, including Buffett himself.

In Buffett's case, he used derivatives to make a very large speculative bet on the future direction of equity markets. There are a number of ways of

expressing a view that equity markets will rise, and derivatives are only one such (the basic way is by using cash to buy shares). Derivatives gave Buffett three important advantages:

1. By selling options, he took in cash up front at the start of the bet instead of paying it out.
2. This form of the bet on rising equity markets required far less cash than purchasing shares outright, even taking into account the collateral he undoubtedly had to post against the options.
3. As well as benefiting if markets rose, he would benefit even if equity market volatility reduced.

The trade wasn't a simple bet on equity markets rising but on a particular combination of circumstances that primarily rested on rising equities.

The disadvantages of derivatives in this particular case are worth considering. Some derivatives trades have unlimited downside; in other words, the possible loss from getting the trade wrong is not limited to the nominal cash amount of the derivatives contract. In the case of an equity-market put option, however, the seller of the option in practice does have a limited maximum loss, in this case broadly equivalent to the maximum possible loss from a cash equity trade. A second disadvantage is more complex and generally impossible to avoid completely: when trading conditions worsen, derivatives trades become harder to value and the cost of providing collateral can become prohibitive. For a fund like Berkshire Hathaway, the costs of their derivatives position in a falling equity market could have spiralled and had consequences far worse for the fund than a simple cash equity position.

This example illustrates that derivatives have advantages that continue to make them attractive despite their risks, and that the disadvantages involved in derivatives markets are neither universal nor easy to understand. Individual transactions need to be understood on their own terms.

Our concern is whether these markets provide genuine social utility. First, derivatives markets broaden access to credit, particularly through the use of interest-rate derivatives such as swaps and options. These positions

have a direct impact on, for example, fixed-term mortgage interest rates. Most credit providers do business by, in broad terms, borrowing money from short-term lenders, such as individuals who deposit money in a bank account. They then lend this money out for longer terms, for example in business loans or residential mortgages. The profitability of this business activity is closely tied to two interest-rate differentials:

- The first is the gap between the cost of short-term funding over the lifetime of the longer-term loan and the interest charged on the longer-term loan, assuming that the path of longer-term interest rates can be accurately predicted.
- The second is the divergence between the predicted path of short-term rates and the actual path of those rates. If the divergence between the predicted and actual path could be eliminated, banks would face a straightforward business decision about commercial margin on lending rates.[2]

Interest-rate swaps and options provide the ability to offset – 'hedge' – the uncertainty about the difference between predicted and actual future interest rates. By offering lenders the ability to remove one source of uncertainty, they allow them to offer loans at lower rates than would otherwise be possible – if a lender has to factor uncertainty into their lending rates, the only way to do so is to charge a higher rate. There are other ways to hedge some of this uncertainty, but derivatives have two key advantages: they allow hedging to be precise rather than approximate, and the costs of hedging tend to be small in up-front cash terms. The main disadvantage is common to all derivative transactions: even the simplest derivatives have complexity that most market participants do not understand.[3] Derivatives broaden credit availability by making it obtainable at cheaper rates than would be possible without derivatives.

Second, in terms of providing genuine social utility, this benefits the poor particularly. Rich borrowers are generally in a position to offer high-quality security for their borrowing, and because of their enviable financial position are less likely to default than poor borrowers. The margin for error of a poor borrower is tiny compared to that of a rich borrower. This means that rich

borrowers typically have access to cheaper borrowing than poor borrowers. The magic of compound interest means that small differences in interest rates charged have a counterintuitively large impact on the financial cost of borrowing. Because derivatives lower overall borrowing costs, even if the discount in interest-rate terms is identical for rich and poor borrowers, the benefit is disproportionately high for less well-off borrowers.

‘Derivatives broaden credit availability by making it obtainable at cheaper rates’

Third, derivative markets help to ensure fair prices, primarily because of the lower amount of up-front cash required for a derivative trade than for a trade expressing a similar view in the underlying market instrument. This lower cash requirement means that markets where derivatives are available are much more active and involve many more participants than they otherwise would. As a result, the prices observable in the market reflect the collective views of a very large number of participants. No one person finds it easy to dominate the pricing that results from these trades, and price information is fairer as a result.

The pricing discovery service provided by derivatives markets provides benefits in the underlying markets and indeed to the whole system. Since derivatives often trade more frequently than the underlying market instruments, people who want to trade government bonds benefit from the price discovery function of bond and interest-rate futures markets – even if those people never actually trade a derivative instrument themselves. In fact, interest-rate futures and swaps provide vital economic information far beyond the arena of markets themselves.

Finally, despite their reputation, derivatives can increase the robustness of the financial system. For example, Adair Turner points out that:

> In principle it would be better if small and medium-sized banks did not hold undiversified credit exposure to particular sectors or regions and the use of credit default swaps to enable banks to adjust and diversify their credit risks can have an economic value. As a result,

> securitized credit and credit derivatives probably will and should play a significant role in the financial system of the future.[4]

Lord Turner makes this point in the middle of a description of the hazards of securitisation and associated credit derivatives – there are indeed hazards, which were exposed by the financial crisis and must be avoided in the future. Nevertheless, if the hazards can be avoided, there is genuine utility for society in continuing to use credit derivatives. A number of smaller retail banks, of precisely the kind so idealised by the popular press, failed during the financial crisis because they were too exposed to localised credit losses. Some of these failures could have been avoided by the judicious use of derivatives.

6.2 Harmful products

Some products, unlike derivatives, do appear to be genuinely harmful, with almost no redeeming features. For example, so-called NINJA and Option-ARM mortgages were available before the 2008 crisis and indeed contributed to the crisis. The 'NINJA' stands for 'No Income, Jobs or Assets', and describes the borrowers, while the 'ARM' in Option-ARM stands for 'Adjustable-Rate Mortgage' – a mortgage with a large initial discount built into the interest rate, making it possible for a poor borrower to service the mortgage during its initial period, but then a huge step up in the interest rate after the initial period. People borrowed using these mortgages in the expectation that they could remortgage with another lender at the end of the initial period with a new Option-ARM mortgage, and because of their NINJA status, the lenders often had little idea whether the borrower could service a non-discounted rate of interest. As a result, these mortgages had enormous potential to lead to bankruptcy, and little social value – they made credit available to the poor, but on terms that eventually resulted in many of those borrowers being worse off than before.

6.3 Scandals

On a number of recent occasions, individuals have been caught engaging in wrong behaviour, including the recent LIBOR-fixing and FX rate-rigging scandals. These appear to have largely involved individuals ('rogue traders'), although those who have been charged have – largely unsuccessfully –

alleged the complicity of more senior managers. Alongside these, there are more systemic scandals, such as the various money-laundering schemes that have been uncovered, and the fake account scandal at Wells Fargo.

These scandals undoubtedly add to the sense that those involved in capital markets are willing to misbehave to earn more money. However, only a small number of financial-sector employees engage in this kind of behaviour. Some of the offences were committed in an environment in which the people concerned should have known that their behaviour was unethical (even if they did not believe it to be criminal).

So long as these scandals keep occurring, it will be difficult to convince society that capital markets are useful. Standards have to rise in the industry, because the narrative of a scandal is more persuasive than the more complex story of the benefits capital markets provide.

6.4 Asymmetry of information

Recently, Michael Lewis has written about the rise of high-speed automated trading systems in his rather sensational book, *Flash Boys*. Lewis does highlight one instance of a broader issue: not all market participants enjoy the same access to information, ability to trade in the market, and market influence or power.

Even asymmetry of information and market access can have positive benefits for wider society. For example, the more accurate and the higher the quality of the information to which a market maker has access, the better able are they – in theory – to provide liquidity to end users at cheaper prices. The risk is, however, that the benefits accrue more to the market maker than to their clients. This risk can be reduced by the presence of competition. Asymmetry is both a benefit and a risk for society, and needs careful management – and the existence of genuine competition – to constrain the risks involved.

6.5 Technology and dark pools

Algorithmic trading involves computers carrying out trading autonomously. The computer software makes the decisions to trade – and manages the risk involved – using algorithms designed to exploit patterns in a market or arbitrage opportunities. These arbitrage opportunities might be complex

– requiring simultaneous trades in multiple financial instruments – or available for such brief moments in time that only a computer can execute the necessary trades swiftly enough.

The use of technology has been implicated in a number of 'flash crash' events, such as in May 2010, when the US equity market moved suddenly in one of the largest intra-day moves in the Dow Jones Index. However, the problem is often market manipulation or even human – 'fat finger'– error.

So it is not the case that technology causes these events, and in fact technology can be useful in catching mistakes. But the increasing automation of trading, whether in support of innovative products such as ETFs or for high-frequency trading or dark pools, has new and poorly understood risks.

'Asymmetry is both a benefit and a risk for society'

Dark pools are related because they often involve significant participation by algorithmic trading systems, although this is not in fact a necessity. The point of dark pools is that they limit the transparency of orders and executed trades and so, generally, exist off-exchange.

Their most prominent use is in the market for exchange-listed equities, where they allow customers to execute large trades without their activity being visible, at least until some time after their trade has gone through. They provide a valuable service, which is why customers use them. By pooling liquidity in the 'dark' – that is, by limiting the visibility of market activity – they protect the interests of customers who would otherwise risk having other market participants notice their activity and move the market against them. Effectively, they provide protection for market participants – generally end users – for whom the normal exchange rules around transparency can harm their trading interests.

Nevertheless, in general the increase in the use of technology provides benefits, especially by increasing liquidity. As technology progresses, it might

even begin to bring down the levels of compensation, as the involvement of star traders might be less significant.

6.6 Speculation and short selling

Speculation has a bad name because it looks like the speculative trader is making money out of nothing or is exercising hidden control over the price.

Often associated with speculation is short selling, which is when a person who does not own an instrument sells it, borrowing stock from an actual owner to settle the sale. If the price falls, the short seller can buy the stock back at a profit, but if prices rise the short seller will lose money. Short selling is a long-established part of capital markets, but again, to outsiders especially it looks odd. It is also a heavily regulated activity to prevent abuses.

Speculation and short selling provide a number of advantages. One is that they increase the amount of liquidity available. Thus a customer – such as a pension fund – desiring a stock that the market maker does not hold is enabled to trade in the stock. Another advantage of short selling is that it exposes a poor company to the market as its price falls.

Similarly, speculation, in its true form, is not necessarily wrong. Speculators provide liquidity in that, for example, a hedge fund would sell 'short' to meet demand, speculating that in the longer term, demand falls, price falls and hence they would profit. Those demanding the assets – pension funds, investment funds – benefit from being able to invest in the stocks they desire at an appropriate price. In this way all the beneficiaries of the pension fund benefit.

Speculators also help provide fair prices by eliminating short-term distortions. They are willing to take risk, and in doing so help to exert pricing pressure that prevents prices from moving to unrealistic levels for too long.

In fact it might well be that the most significant problem is not speculation per se but overleveraged speculation. In the Tulip mania of the 1600s, the Great Crash in the 1930s and in the 2008 financial crisis, the common thread has been the widespread use of borrowed money for investments. Economists such as George Cooper and Hyman Minsky have noted that

increased credit availability for speculative investment is a common theme in financial crises.[5]

People borrow to speculate because it multiplies their returns: like a lever multiplying force, borrowing multiplies both profits *and* losses. Therein lies the problem for speculators. Once losses start to take effect on a leveraged investment, the losses can grow extremely rapidly. In fact crashes tend to be the result of leveraged investors being forced to close out their investments when their creditors withdraw financing in the face of escalating losses. If a large proportion of the market has a similar position, this in turn means that other investors' losses also increase, again with great speed, and the market collapses.

6.7 Risk management and control

One of the significant challenges at any level of capital markets is risk management. People are often overreliant on quantitative models for risk without understanding the assumptions that lie behind those models, or their inherent limitations. This is a complex technical subject, and so I will simply note that it is an issue.

6.8 Compensation

No assessment of capital markets can be complete without discussing compensation. In some ways it ought not to matter. After all, the total amount of compensation paid to employees involved in the financial industry is only a small fraction of the aggregate economic benefits to society provided by efficient capital allocation.

The problem is that those benefits are opaque to most people, even to fairly informed observers. The comparison with pay elsewhere in the economy merely serves to reinforce dissent, as does ostentatious display or spending of this wealth.

As long as capital markets are evidently a means to personal wealth, those outside them will suspect that this is all they exist for – that capital markets are a bit of a confidence trick, taking money off the many and giving it to the lucky few who can work in the industry.

The problems are essentially around incentives and performance.[6] In some cases the close relationship between the profits an individual generates and compensation has produced perverse incentives, but most companies have already shifted their compensation structure to better align compensation and the objectives of the company. For example, delaying compensation for years after the initial profits are generated means that if it turns out later that the profits were illusory or the result of criminal behaviour, the money can be clawed back. Another method that helps is requiring an element of remuneration to be reinvested in the fund itself – hence the manager has 'skin in the game'.

One negative effect of so much deferred compensation is that it greatly increases the costs of hiring an employee from a competitor, because to hire them the new employer will need to buy out all the deferred compensation. This means that the market for employees is not able to function very efficiently.

Perhaps a bigger question to ask, though, is whether there are other ways to increase the supply of excellent employees. If supply increases, the cost of employees should decrease. So the issue of compensation might be mostly about whether the talent and work capacity required to be a good trader are really exceptionally rare, or whether there might be ways to teach and encourage more people into these roles. It's not possible to answer that question without companies trying innovative approaches to recruitment. It would be fascinating to see if a concerted effort to widen access to trading jobs would bring down pay in the long term.

There is nothing inherently wrong with high levels of pay for skill, demand, risk and specialist knowledge. However, lack of transparency, the appearance of high pay for mediocrity, together with potentially perverse incentives, do severely damage the public perception of capital markets and their usefulness.

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1 Berkshire Hathaway Inc., *Letter to Shareholders*, 7 March 2003, pp. 13, 15; www.berkshirehathaway.com/letters/2002pdf.pdf.

2 This commercial decision still has to take into account other aspects of lending, such as defaults and quality of security, but for the purposes of this discussion I am considering interest rates alone.

3 This applies even to some very large participants. After Lehman Brothers failed, I eventually learned more about their own quantitative tools for derivatives and was astonished at the crudity of the systems. Anecdotal evidence suggests that the same was true of other large market participants. There is no doubt that part of the reason for Barclays' relative strength during the financial crisis was the culture that senior management in the investment banking division fostered of in-depth product understanding and trader-developed risk-management tools.

4 Adair Turner, 'What do Banks do? Why do Credit Booms and Busts Occur? What can Public Policy do about it?', in *The Future of Finance: The LSE Report*, London: London School of Economics and Political Science, 2010, pp. 3–63 (p. 47).

5 George Cooper, *The Origin of Financial Crises: Central Banks, Credit Bubbles and the Efficient Market Fallacy*, Petersfield: Harriman House, 2008; Hyman Minsky, *Stabilizing an Unstable Economy*, 2nd edn, New York: McGraw-Hill Professional, 2008.

6 For an excellent discussion of the difficulty of distinguishing lucky traders from skilful traders, see Nassim Taleb, *Fooled by Randomness: The Hidden Role of Chance in Life and in the Markets*, London: Penguin, 2007.

Conclusion

> Many of our hopes for the future should be pinned on further development of the institutions representing financial capitalism ... The key to achieving our goals and enhancing human values is to maintain and continually improve a democratic financial system that takes account of the diversity of human motives and drives.
>
> Robert Schiller[1]

Until recently I chaired the board for my children's school, one of the poorest schools in New Zealand, with a predominantly Māori and Pacific Island constituency. It was a lovely school to be involved in and it was obvious that the outstanding efforts of the teachers were making a difference to the lives of children whose families were often enduring very difficult circumstances.

But it was also obvious that social mobility is not tied to education alone, and that without economic improvement the situation of many of the children in the school is likely to resemble that of their parents. Without economic changes, the poor remain poor, and it is the economic system of capitalism – including capital markets – that has done a better job of lifting people out of poverty than every other system the world has tried. Capital markets make it possible for investment capital to be placed in the right companies at the right time to deliver economic growth and its associated benefits.

Capital markets are capable of making a significant difference to society and offer us a way to help redeem the world, if the ways they benefit society are recognised and allowed to flourish. Alongside this, of course, is the widespread recognition that capital markets can be the venue for actions that lead to great social harm. The financial crisis is only the most recent example of this.

The reasons why capital markets have this Jekyll and Hyde effect on society are complex, and include the difficulty of quantifying or evaluating risk, the asymmetry of information available to different market participants,

the tendency of populist government policies to increase credit growth beyond sensible limits,[2] and the difficulty of constraining the moral choices of individuals within markets.

This last is perhaps the most significant. People do bad things in markets as in the rest of life, sometimes through choice and sometimes accidentally. The risk is, though, that the public and highly visible nature of these failures, which tend to occur at points in time and at a scale that makes them simple to examine in isolation, obscures the benefits of capital markets to society. What is more, companies can easily and unintentionally institutionalise a culture that makes these behaviours more likely – even though, ideally, they should encourage positive and ethical corporate cultures.

The benefits of capital markets accrue to society gradually, spread over countless individual transactions, each of them of little note. The chat logs of a trader whose work benefits society are of no interest to any reporter, and indeed are rather dull. When a small company is able to use derivatives to insure successfully against a risk that crystallises, that is less interesting than the reprehensible sale of derivatives to a customer to whom they ought not to have been sold – even if there might be many more instances of the former than of the latter. When a poor person is able to borrow money more cheaply than they could otherwise, because of the operations of capital markets, the outcome for that individual person is not exciting in aggregate to the press in the same way as a huge systemic failure.

‘Capital markets are capable of making a significant difference to society’

In addition there is a larger story, of the changes to the world so that ‘in spite of its inequalities and of the millions still left behind, it is a better place than at any time in history’.[3] While aid has made little difference to the world, enterprise and freedom of capital has been part of a dramatic improvement for the majority of the world.

The benefits of capital markets to society are compelling. These benefits have long been understood in terms of the aggregate increase in utility that capital markets enable, measured by crude tools such as GDP. In this publication I have put forward why I am persuaded that the social utility of capital markets is also evident in its effects on the poorest in society, across a range of measures. The issues of fair prices, of redistribution of wealth and of debt relief are not abstract. They affect real individuals, the people a just and fair society ought to provide for as a high priority. Capital markets are an effective tool in the never-ending struggle to provide economic justice – a tool that needs regulation but one that also needs to be valued.

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1 Robert Shiller, *Finance and the Good Society*, Princeton, NJ: Princeton University Press, 2012, p. 239.

2 For introductions to the typical forms of financial crises, including the part played by credit expansion, see for example Charles P. Kindleberger and Robert Z. Aliber, *Manias, Panics and Crashes: A History of Financial Crises*, Basingstoke: Palgrave Macmillan, 2005; or George Cooper, *The Origin of Financial Crises: Central Banks, Credit Bubbles and the Efficient Market Fallacy*, Petersfield: Harriman House, 2008.

3 Angus Deaton, *The Great Escape*, Princeton, NJ: Princeton University Press, 2013, p. 325.