

“Best practice in the regulation of payment services”

A thesis submitted in fulfilment of the requirements for the degree of Doctor of Philosophy (by Publication)

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February 2010

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I would like to acknowledge the invaluable support of my wife (Melanie) and my supervisor (Prof Supriya Singh) on this project

Abstract

Payment services are, at their simplest, services for moving money around the economy. These services carry risks for the provider and the customer, from credit and insolvency risk, through to fraud and 'mere' errors. Different societies deal with, manage and allocate these risks differently. There are a number of similarities in how these services are regulated, and the careful observer can identify patterns and themes.

As the economy continues to be heavily reliant on payment services for its efficient operation, commentators and governments have taken a keen interest in these services. This paper examines the six key regulatory risks for payment services: credit risk, efficiency risk, product mis-match, product failure, transactional failure and privacy.

Previous articles have considered recent industry and technological developments in the payments industry, many of which post-date the existing regulatory regime in most jurisdictions. This paper draws conclusions about how a best practice regime might address recent innovations such as mobile payments, online payment services and 'stored value' cards. While there is significant commonality between regulatory regimes, there is not yet a common approach to many payment services issues. The goal of this project (and this paper) is to develop a better or best practice framework for the regulation of payment services, drawing on the strengths and weaknesses of the existing regimes.

A best practice regime is identified – including both the elements or building blocks, and how and when they should be applied. The elements, based on analysis of key national regimes, are fair play rules, systemic stability, an active supervisor, broad scope, licensing, disclosure, obligations of the parties, liability, dispute resolution and privacy. The paper also explains how these elements can be combined to construct a coherent overall regime. The result is a recommended best practice model involving licensing, disclosure, conduct and redress standards in a three-tiered structure (thus providing a lighter-touch regime for low value products and a more intensive regime for more substantial banking-style products).

1 Introduction

Payment services are, at their simplest, services for moving money around the economy. Since ancient times, people have developed ways of transferring value between themselves, from barter, to precious metals, to paper-based systems and in recent years to electronic value transfer systems. Concepts of payment and money have evolved over time and between cultures. These services carry risks for the provider and the customer, from credit and insolvency risk, through to fraud and ‘mere’ errors. Different societies have dealt with, managed and allocated these risks differently. However, most use a combination of private contract, inter-bank rules, industry codes and legislation. There are many similarities in how these services are regulated, and the careful observer can identify a number of patterns and themes.

The purpose of this paper is to explore a best practice framework for the regulation of payment services. It will discuss and assess some models as potential law reform concepts to be further developed. Like any regulatory regimes, they are intended to promote social goals such as improving financial inclusion or addressing market failures.

Previous articles have considered recent industry and technological developments in the payments industry, many of which post-date the existing regulatory regime in key jurisdictions (eg the United Kingdom, United States, European Union and, to some extent, Australia). Newer payment services like mobile banking are most advanced in emerging markets like Kenya and the Philippines, and their regulatory approaches will also be discussed. The analysis in this paper will assist in drawing conclusions about how a best practice regime might address recent innovations such as mobile payments, online payment services and so-called ‘stored value’ cards. While there is significant commonality between the regulatory regimes in Australia, the UK, EU and US, there is not yet a common approach to many payment services issues. This paper will attempt to develop a best practice model for the regulation of payment services, drawing on the strengths and weaknesses of the existing regimes.

This paper will consider some possible models for the regulation of payment services involving the key elements of disclosure, minimum standards, prudential regulation and conduct licensing. It will also discuss supervision of the inter-bank payment system and a

basic fair play regime. A possible regulatory model will be suggested as a contribution to future debate.

2 Background

2.1 Underlying similarity of payment services

Payment services come in many shapes and sizes, but at their heart they are essentially variations on a theme. They all involve funds transfers using book entries maintained by one or more intermediaries.

There have been a few attempts to find a single unifying theory for non-cash payment services. Some cases and commentators follow an assignment analysis – that transfer of funds is essentially an assignment from payer to payee.¹ However, the assignment analysis was rejected in *Libyan Arab Foreign Bank v Banker's Trust Co*, and is now regarded as false.² Others have settled on two main groupings – stored value (variously defined – negotiable instruments and stored value cards) and bank-style funds transfer services.³

Most of the leading researchers argue that all non-cash payment services are essentially funds transfers.⁴ That is, all payment services other than cash work by increasing the payee's balance with one institution and reducing the payer's balance with another – in an effort to transfer value from the payer to payee. So long as the payee accepts this as valid payment, it *is* valid payment.

We have adopted this position in this research, and applied it as our unifying theory. It should lead towards greater uniformity in case-law, legislative and regulatory treatment of

¹ *Delbrueck v Manufacturers Hanover Trust Co* 609 F.2d 1047 (2d Cir.1979)

² [1989] QB 728

³ D Kreltshheim, "The Legal Nature of 'Electronic Money': Part 1" (2003) 14 *Journal Of Banking And Finance Law And Practice* 161; D Kreltshheim, "The Legal Nature of 'Electronic Money': Part 2" (2003) 14 *Journal Of Banking And Finance Law And Practice* 261

⁴ R Hooley and J Taylor, "Payment by Funds Transfer" in Brindle M and Cox R, *Law of Bank Payments* (3rd ed, Sweet and Maxwell, 2004); B Geva 'The Concept of Payment Mechanism' (1986) 24 *Osgoode Hall LJ* 1; Goode, *Commercial Law*, 3rd edition, 2004 (Ch 17 – Concepts of money and payment); B Geva, *Bank Collections and Payment Transactions – Comparative Study of Legal Aspects*; A Tyree, "The Legal Nature of Electronic Money" (1999) 10 *Journal Of Banking And Finance Law And Practice* 273 at 298; S Blay and E Clark, *Australian Law of Financial Institutions* (2nd ed, Harcourt Brace, 1996), at [9.02]

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these products. That is, if the products are fundamentally the same ‘underneath’, the law and regulators should adopt consistent approaches to them.⁵

The commentators identify and analyse a great variety of payment services. While the details vary, the underlying nature is quite similar. Recent research has focussed on how best to categorise payment services, often also criticising the distinctions drawn in the legislation.⁶ In our view, consistent treatment is both possible and preferable.

The nature of payment services means that there are a limited number of possible legal and regulatory approaches. Harmonisation is therefore a natural, although clearly not automatic, result of the evolution of these regimes and the globalisation of the industry. Sommer explains it thus:

most of the law and practice of financial transactions is more a matter of logical necessity than social choice. The law and practice of payment and security transfer resembles engineering. Bridges work much the same throughout St Petersburg, whether in Florida or Russia. Therefore, international harmonisation of engineering practice is the baseline rule, and local variations are the exception. The same is true for much of the law of financial transactions. As an example, consider the law of wholesale wire transfers. The UNCITRAL Model Law on International Credit Transfers is remarkably similar to Article 4A of the UCC. ... All engineering practice draws on universal laws of physics. This Article makes a similar assertion for financial transactions – that the laws of payments and securities transfer both flow from the same basic principle.⁷

Being at their essence the same, all payment services raise a similar set of risks. While there are some variations in the details, these recurring risks tend to be dealt with in similar ways by most legal regimes.⁸ At present there are a great variety of existing regimes, each with their own strengths and weaknesses. However, it is possible to isolate best, or at least better, practice in the regulation of payment services.

⁵ JH Sommer, “International securities holding and transfer law” (2001) *Arizona Journal of International and Comparative Law* 685, at 685

⁶ R Mann “Regulating Internet Payment Intermediaries” (2004) 82 *Texas Law Review* 681; G Hillebrand, “Before the grand rethinking: five things to do today With payments law and ten principles to guide new payments products and new payments law” (2008) 83 *Chicago-Kent Law Review* 770; M Budnitz, ‘Developments in payment law 2008’ (2008) 12 *Journal of Consumer and Commercial Law* 2; A Ramasastry, “Confusion and convergence in consumer payments: is coherence in error resolution appropriate” (2008) 83 *Chicago Kent Law Review* 813; C Gillette and S Walt, “Uniformity and diversity in payment systems” (2008) 83 *Chicago-Kent Law Review* 499

⁷ JH Sommer, “International securities holding and transfer law”, at 687-688

⁸ B Geva, *Bank Collections and Payment Transactions – Comparative Study of Legal Aspects*

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Just as there are limited ways in engineering theory to build a bridge, there are a limited number of possible regulatory responses to these common payment services issues and risks.⁹ There is little research yet on the best approaches to regulating these services or whether a best practice model can be constructed by taking the best elements from the existing regimes. (Of course, a regulatory regime is more than just the sum of its parts – the interaction between its elements and its ‘fit’ with the culture and circumstances of a given country also affect how effective it is likely to be.) Some research exists on the effectiveness of various national regimes, but little is yet available comparing the effectiveness of national regimes to each other. We are not aware of any research yet dealing with a possible best practice model. Our research hypothesis is that it is possible to isolate best, or at least better, practice in the regulation of payment services.

The regulation of payment services has some basic common issues regardless of the jurisdiction involved. “At its heart, payments law must resolve four fundamental questions: who bears the risk of unauthorised payments, what must be done about claims of error, when are payments completed so that they discharge the underlying liability, and when can they be reversed?”¹⁰ Dedicated payment services legislation, particularly focussing on consumer protection, has not been broadly implemented worldwide. Few jurisdictions outside the United States, Canada and the European Union have enacted consumer protection laws covering topics such as “the reversibility of consumer transactions and the allocation of losses caused by unauthorised transactions”.¹¹

2.2 Potential for best practice model

Technological developments and increasing globalisation have led to demands for more convenient and reliable international payment services. This in turn has led to calls for more predictable and consistent regulation of these services. For example, one part of the European common market project has been to develop a modern and consistent regime for regulating payment services. At the international level, UNCITRAL has also attempted to harmonise the law relating to international payments (but to limited success so far).

⁹ JH Sommer, “International securities holding and transfer law”, at 688

¹⁰ A Rosenberg, “Better than cash? Global proliferation of payment cards and consumer protection policy” (2006) 44 *Columbia Journal of Transnational Law* 520, at 563

¹¹ A Rosenberg, “Better than cash? Global proliferation of payment cards and consumer protection policy”, at 542. Such legislation does not yet exist in Australia.

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As discussed, there are a great variety of existing regimes regulating payment services. For example, the US regime is fragmented, with various state and federal regimes governing different aspects of payment services. The regimes are also somewhat dated, and fail to take into account recent developments in internet-based and stored value products. Further, many regimes are understandably ‘parochial’ and ill-suited to the growing use of international payment services by both businesses and consumers.

Convergence and coordination is a rational response by regulators and policy-makers in circumstances of uncertainty and incomplete information. No policy maker or regulator can be sure what a ‘perfect’ regulation should look like. “What is the ideal balancing of the environment, public health, and safety against the costs of a regulation? States strive to achieve this balance partly through research, and partly through expensive administrative procedures.”¹² This is the reason for detailed administrative rules requiring comprehensive consultation and impact analysis before major regulatory decisions.

It is not just the adoption of a standard, but actual practical operational experience using the standard, which generates vital information for other states. “In all, the development of regulations cost billions annually, and the accumulated stock of rules presumably reflects rulemaking costs of many tens of billions”.¹³ Therefore, it is natural to expect states to conduct international comparisons when considering new regulatory standards and in periodically revising existing standards. Because larger nations tend to invest more in regulatory research than smaller states, there is diffusion of regulatory ideas and practices from larger countries to smaller ones. Further, research on regulatory rules is a public good and will tend to be under-supplied.

Recent developments, particularly the globalisation of trade and advances in communications technology, have led to significant changes in the nature and form of commonly available payment services. A modern regulatory regime for payment services needs to take these factors into account. This is true whether the regime is an update to an existing regime or a new regime in a developing country that has not previously directly regulated payment services. In summary, the essential underlying similarity of payment services and the rapid developments in the industry means there is potential value in drawing together a modernised

¹² D Laser, “Regulatory interdependence and international governance” (2001) 8 *Journal of European Public Policy* 474, at 480

¹³ D Laser, “Regulatory interdependence and international governance”, at 480

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best practice model synthesising the various existing approaches worldwide to regulating these services. Given the underlying similarities, what is better or best practice in the regulation of payment services?

Identifying best practice in the regulation of payment services is useful for a number of reasons. Businesses benefit from a best practice model as it facilitates international harmonisation, thus greatly reducing the cost of taking a product to market across multiple jurisdictions (they currently have to comply with a different regime in each country, thus increasing their costs and creating unnecessary variations to their products). Policy-makers and legislatures benefit from having a reference source comparing the various approaches to payment services regulation and analysing their effectiveness in responding to the underlying issues with these services. This is particularly so for policy-makers in developing countries seeking to implement their country's first payment services regime. Consumers also benefit as a best practice model is likely to better protect their interests, drawing together the best aspects of the key international regimes to create a robust and cost effective model.¹⁴

With globalisation, business practice and law are increasingly international, and international law is increasing "sensitive to business needs".¹⁵ International payment transactions are frequent, high value and (at least perceived to be) low risk. Therefore, they have a great demand for legal certainty – payers and payees, particularly at the wholesale level, require timely and certain payments.

With consumer services, in most countries the government has recognised that pure contractual rules are inadequate. Often they are not enough to engender trust and confidence in the first place.¹⁶ And often they do not strike a satisfactory balance between the needs of consumers and industry.¹⁷

¹⁴ D Laser, "Regulatory interdependence and international governance", at 476

¹⁵ JH Sommer, "International Securities Holding and Transfer Law", at 687

¹⁶ M Budnitz "Stored value cards and the consumer: the need for regulation"; SJ Hughes, "Regulation of Electronic Commerce: A Case for Regulating Cyberpayments" (1999) 51 *Administrative Law Review* 809 ; J Winn, "Symposium: Clash of the Titans: Regulating the Competition Between Established and Emerging Electronic Payment Systems" (1999) 14 *Berkeley Technology Law Journal* 675; C Wilson "Banking on the Net: Extending Bank Regulation to Electronic Money and Beyond" (1997) 30 *Creighton Law Review* 671; W Effross "Putting The Cards Before The Purse?: Distinctions, Differences, And Dilemmas In The Regulation Of Stored Value Card Systems" (1997) 65 *UMKC L. Rev.* 319

¹⁷ A Tyree, "Regulating the Payment System – Part 1" (1999) 10 *Journal Of Banking And Finance Law And Practice* 66; A Tyree, "Regulating the Payment System – Part 2: Consumer Protection" (1999) 10 *Journal Of Banking And Finance Law And Practice* 161; A Tyree, "20+ Years of NZ and Australian Banking Law" (2003) ([http:// austlii.edu.au/~alan/20-years.html](http://austlii.edu.au/~alan/20-years.html), viewed 26 February 2005)

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Almost all commentators agree a mandatory point of sale and ongoing disclosure regime is appropriate.¹⁸ Most suggest it should cover disclosure of fees, key risks and operation of the service. Most also support disclosure of transaction histories and access to up-to-date balance information.

Some minimum conduct rules are commonly advocated. They tend to cover error resolution, payment times and loss allocation.¹⁹ Some form of licensing is also often advocated. The nature and intensity argued for varies, however; in some jurisdictions it resembles full banking regulation, in others it is a more tailored regime (eg a special money transmitters' regime).²⁰

The EU regime is the most modern and comprehensive.²¹ It is probably the best existing model. However, a best practice model would include a broader, more purposive scope – akin to the Australian financial services regime, together with a more fulsome set of rules for the underlying payment and settlement system (eg akin to the US UCC and UNCITRAL interbank rules).²²

This paper aims to identify and describe a best practice model for payment services regulation, based on the existing international precedents and literature. This type of analysis will be useful for new services and new regimes for countries that have not had one yet. For example, new services are coming onto the market such as mobile payments. Most established regimes pre-date these new products and find it difficult to respond to them adequately. And a number of jurisdictions are rapidly developing in this area and do not yet have a comprehensive payment services regulatory regime.

We believe a best practice model will be useful, with appropriate local adaptations, across the spectrum of developed and developing countries. As each country's circumstances are unique, we do not suggest a universal 'off the shelf' regulatory model. Rather, our goal is to

¹⁸ M Budnitz "Stored value cards and the consumer: the need for regulation"; SJ Hughes, "Regulation Of Electronic Commerce: A Case For Regulating Cyberpayments"

¹⁹ M Budnitz "Stored value cards and the consumer: the need for regulation"; SJ, " Regulation Of Electronic Commerce: A Case For Regulating Cyberpayments"

²⁰ R Mann "Regulating Internet Payment Intermediaries"

²¹ L Bojer, "International credit transfers, the proposed EC directive compared with the UNCITRAL Model Law" (1995) 10 *Journal of International Banking Law* 223; RFH Mertens and JGC Rinkes, "Cross-border payments and consumer protection" (1994) 13 *International banking and financial law* 72; EU Payment Services Directive, Official Journal L 319 , 05/12/2007 P. 0001 – 0036

²² L Bojer, "International credit transfers, the proposed EC directive compared with the UNCITRAL Model Law"; UNCITRAL Model Law on International Credit Transfers; Article 4A of the US Uniform Commercial Code

synthesise a better or best practice model that takes into account the lessons learnt internationally in the regulation of payment services. The model will conveniently collect together a logical and useful package of regulatory measures that will assist policy-makers in implementing an appropriate regulatory regime in their context.

3 Outline of previous articles

This chapter introduces and summarises the package of thirteen published articles being presented for this thesis program. Our research package of articles begins by introducing the concept of payment and looking at the history of payment services. It then examines a number of common domestic payment services, how they work, what risks they pose and how these risks are dealt with. At this point it introduces regulation of payment services, initially by looking at the Australian regime. Next it examines two key legal concepts in detail, ‘payment’ and ‘deposit-taking’. Building on this theoretical base, the package broadens its gaze and introduces international payment services. Again, it looks at a number of common international payment services, how they work, what risks they pose and how these risks are dealt with. The package also takes the opportunity here to examine some other key payment concepts that are particularly acute in the international payment context, such as revocation, finality, completion and netting. It then moves into a comparative phase, looking at payment services regulation in the following contexts:

- EU to date,
- EU in the future (under the new Payment Services Directive),
- US Uniform Commercial Code, and
- UNCITRAL Model Law.

Finally, it looks at two over-arching topics. The first is to introduce a recent addition to the payment services landscape – mobile banking – and to examine how the established principles apply. The second is to review the provision of banking and payment services in developing countries and the impact of local regulatory regimes.

3.1 History and development

Our research began with looking at what a payment is and how payment services work. This first article, “A review of the development and legal nature of payment facilities”, examined what it means to ‘pay’ someone, and the mechanisms that have evolved over time to achieve this.²³ It looked at the mechanics of a number of common payment services and considered how they transfer value from the payer to payee.

Money is a difficult concept to define and has multiple dimensions – sociological and economic.²⁴ Money in its wider sense is closely associated with payment services. This article explains that modern payment services almost always operate through the circulation of institutional liabilities, predominantly debt obligations. Due to their importance to the overall economy, commentators and governments have taken a keen interest in the operation of payment services. The article examines the development, operation and legal nature of non-cash payment services, in the context of the basic payment infrastructure in Australia. The core of each payment service, being the ledger or account kept relating to each payer and payee, is discussed in some detail.

Our research then looked at what risks exist with payment services and how they tend to be dealt with. The second article, “A review of the regulation of payment facilities”, looks at four significant risk areas for payment services – systemic risk, credit risk, product risk and customer risk.²⁵ We then reviewed how the common law (particularly contract law) has dealt with these services, and what legislation and other regulation (eg self-regulatory codes) have arisen to deal with the risks these services present. As part of this, the second article examined the rationale for regulatory intervention in the payment services market. At this stage, the research was focusing on Australian case-law and legislation.

This part of the package introduces the relevant Australian legislation on the topic, including the general financial services regime (Corporations Act), the banking legislation and the Reserve Bank (Payment Systems (Regulation) Act) regime. The potential regulatory and supervisory options are introduced and their advantages and disadvantages are discussed. Following further analysis, this article concludes that some form of regulation is justified.

²³ R Bollen, “A review of the development and legal nature of payment facilities” (2005) 16 *Journal of Banking and Finance Law and Practice* 130

²⁴ N Dodd, *The sociology of money: economics, reason and contemporary society*, Polity Press, UK, 1994, at xiv

²⁵ R Bollen, “A review of the regulation of payment facilities” (2005) 16 *Journal of Banking and Finance Law and Practice* 325

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The article goes on to outline the current regulatory regimes in Australia, the European Union, the United Kingdom and the United States.

The next portion of our research focused on two of the core concepts in banking and payments. The first was a detailed examination of the concept of ‘payment’. The third article, “What is a payment (and why does it continue to confuse lawyers)”, explains that payment is a familiar concept – we essentially know a payment when we see one.²⁶ But what makes something an effective payment – why does one set of facts involve an effective payment when another set does not? We reviewed the academic literature and the leading cases, and developed a theory as to the essence of a payment. Included in this article is a suggested definition of payment, which we then applied in the remainder of the research.²⁷

We instinctively know a payment when we get one. Our wallet bulges, or our bank balance looks a little healthier. But what is a payment really? How does it work? Unfortunately, as this article shows, payment services continue to confound us and the law. Recent cases, such as *R v Preddy*²⁸ and *Holmes*,²⁹ demonstrate the difficulty our legal systems have with payment services. This article begins with an analysis of what a payment is. It looks at the history of payments, their main modern forms and economic substance. This is followed by a discussion of the above cases and the legislative responses. The final chapter of this article discusses some shortcomings in the current legislation and possible approaches to reform.

The second part of this theoretical review was to examine the concepts of deposit and deposit-taking. As the fourth article, “Time to review the concept of deposit” explains, the main players in the payment services market have traditionally been deposit-takers.³⁰ The economic justification for the banking sector, and for the level of government interest in it, is more than its role in maintaining people’s savings (and indeed in recent years the proportion of people’s savings held in traditional banking products has fallen significantly). A key reason for the level of interest in the banking sector is its role in providing the economy’s fundamental payment infrastructure. No major payment systems exist outside the influence and involvement of the banking sector. Underlying the law and regulation of the banking

²⁶ R Bollen, “What is a payment (and why does it continue to confuse lawyers)” (2005) 2 *Macquarie Journal of Business Law* 189

²⁷ In our research we have defined a payment as a *transfer of buying power or economic value, often to discharge a debt obligation*.

²⁸ *R v Preddy* [1996] AC 815

²⁹ *R (Holmes) v Brixton Prison Governor* [2004] EWHC 2020

³⁰ R Bollen, “Time to review the concept of deposit” (2006) 17 *Journal of Banking and Finance Law and Practice* 283

sector is the concept of a deposit, and of deposit-taking (being, amongst other things, the business of taking deposits from the public). We reviewed the academic literature and the leading cases, and developed a theory as to the essence of a deposit. Included in this part of the thesis package is a suggested definition of deposit, which we then applied in the remainder of the research.³¹

Deposit-taking is an ancient business or profession. But far from being a term of art, ‘deposit’ and ‘deposit-taking’ have not always been defined. Recent developments, both in the legislation and industry practice, mean that the concept of a deposit needs to be reviewed. This article looks at the history of deposit-taking and the concept of a deposit. It considers the legal definitions of deposit-taking and banking business, under the common law and statute. It then examines the concept of a deposit, its character and implications, and concludes with a discussion of the regulation of deposit-taking, and the practical implications of modernising the concept of deposit for those regimes.

3.2 International payment services

Building on this theoretical base, the thesis package then turns to international payment services. The first article in this section of the thesis package, “A review of the history and operation of international payment systems”, introduces the concept of an international payment and looks at the history of these products.³² This article (article five) examines a number of common international payment services, how they work and interact.

In many ways, international payments are similar to domestic payments. They involve a payer using the services of one or more intermediaries to transfer money or value to a payee. However, they tend to involve a number of additional complexities as a result of the distance between the parties, the different time zones and currencies, and the need for additional intermediaries. This has led to the development of unique payment services specially catering for the needs of users of international payments. This article considers the history of international payments, and their current role and scope. It describes a number of common retail, wholesale and institutional payment services and examines their legal structure, before examining the inter-bank infrastructure supporting the international payment system.

³¹ In our research we defined a deposit as *a contractual debt arrangement between a financial institution and client where the client places funds with the institution for later withdrawal or use in making payments.*

³² R Bollen, “A review of the history and operation of international payment systems” (2007) 18 *Journal of Banking and Finance Law and Practice* 27

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Article six of the thesis package, “The legal nature of international payments”, builds on this introduction to international payments.³³ It examines the legal concepts and structures underlying international payments. In particular, it analyses the key payment law concepts of revocation, finality and completion. Although these are concepts in domestic payment law as well, they are particularly significant in the international payment context (due to the time and complexity involved in international payments). These concepts are examined by reference to the leading cases, and their application is reviewed using a number of worked examples.

This article reviews the law of international payments, being payments where at least two of the major players in the payment transaction are in different countries. The law in this area relies heavily on the law of agency and contract. Each institution acts as agent for its customer and within the confines of its customer and inter-bank contracts. Industry and the courts have built on this to establish the rights and responsibilities of each party to an international payment, and to deal with risk allocation, payment completion and finality issues. This article reviews the key cases on payment completion and finality, and associated issues of revocation or countermand. The article then looks at the practical implications for some common business models using international payments.

A major issue in both domestic and international payments is the treatment of sophisticated payment networks between large institutions. One key way to manage the risks involved in such networks is to set up a clearing house with some degree of netting or set-off to reduce the effective level of exposures between the participants. The next article, “Airlines and ‘queue-jumping’ in insolvency”, reviews the leading cases on this topic.³⁴ In particular, it discusses the recent High Court case dealing with the impact of the collapse of Ansett airlines on the airline industry clearing house.³⁵

Article seven in the package explains how the High Court upheld the International Air Transport Association’s claims about the effectiveness of its clearing house system in relation to the insolvency of Ansett Australia. This article examines this significant decision in the field of payment systems, multilateral netting and set-off. The case departs from the previous

³³ R Bollen, “The legal nature of international payments” (2007) 18 *Journal of Banking and Finance Law and Practice* 85

³⁴ R Bollen, “Airlines and “queue-jumping” in insolvency” (2008) 19 *Journal of Banking and Finance Law and Practice* 35

³⁵ *International Air Transport Assn v Ansett Australia Holdings Ltd* (2008) 82 ALJR 419; [2008] HCA 3

leading case in the area (*British Eagle*) and clarifies some of the legal uncertainty that prompted the passing of special netting legislation in a number of countries.³⁶

3.3 Comparative regulation

The thesis package then moves into its comparative phase. Building on the previous articles, the package now analyses in detail a number of different regimes for the regulation of payment services.

Article eight, “A review of European regulation of the payment system”, introduces the European common market and looks at how payment services have been regulated from the commencement of the common market until recently.³⁷ It recaps and updates the key risks arising in payment services and the rationale for regulatory intervention. It considers the licensing of credit institutions and electronic money issuers, in the context of EU mutual recognition concepts and the Basel II regime for harmonising international banking supervision. It then reviews the European conduct and disclosure regime for payment services, including the fees and charges rules.

Payments have been described as the “oil in the wheels of the Internal Market”.³⁸ As part of the wider internal market project, the European Commission has, over a number of years, pursued legislation and other measures to encourage a pan-European “Single Payment Area”. This article introduces the EU internal market, and examines the rationale for payment services regulation, the EU legislative model and their approach to payment services regulation to date. It includes a detailed review of the main current pieces of EU legislation dealing with payment services and institutions.

Article nine, “A review of recent developments in European payment system regulation (including the new Payment Services Directive)”, begins by considering some of the recent reviews of European payment services regulation.³⁹ The bulk of this article is taken up by a detailed examination of the new Payment Services Directive.⁴⁰ This Directive is the product of many years of work within the EU, reviewing the legal nature and operation of payment

³⁶ *British Eagle International Airlines Ltd v Compagnie Nationale Air France* [1975] 1 WLR 758; 2 All ER 390

³⁷ R Bollen, “A review of European regulation of the payment system” (2007) 18 *Journal of Banking and Finance Law and Practice* 167

³⁸ EU website, http://ec.europa.eu/internal_market/payments/dex_en.htm [accessed June 29, 2007]

³⁹ R Bollen, ‘A review of recent developments in European payment system regulation (including the proposed Payment Services Directive)’ (2008) 19 *Journal Of Banking And Finance Law And Practice* 47

⁴⁰ Payment Services Directive 2007/64/EC

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services (as this thesis has done) and how the existing legislation was working. The European Commission concluded that substantial improvement could be made and that the benefits of a modernised regime exceeded the cost of transferring from the current rules. The new Directive is the first major new piece of payment services legislation from a jurisdiction of this size in many years. As such, it provides a rich source of material to examine recent developments and how the European law-makers have addressed them.

The next article in the comparative section of the thesis package, “Harmonisation of international payment services law – part 1 (the UNCITRAL model law)”, reviews the main multinational attempt to harmonise the regulation of payment services.⁴¹ Article ten introduces the United Nations Commission on International Trade Law. Responding to similar developments to those discussed above in the EU, UNCITRAL commenced a project to review the law applying to payment services and to draft a model law that nations could implement as their payment services law (and thereby achieve a large degree of international harmonisation in this subject area). The UNCITRAL text is interesting material in its own right, and this article examines it in detail and looks at how it deals with the key regulatory issues of risk allocation, each party’s rights and obligations, and when payments are effective. This article then proceeds to a discussion about why international adoption of the Model Law has been so limited. It concludes with a comparison between the UNCITRAL Model Law and the EU regime for payment services.

The UNCITRAL Model Law on international credit transfers was adopted almost 20 years ago, and so it seemed timely to look back on its effectiveness and implementation. The article introduces the concept of harmonisation and how it has been applied in international payment services law.

The final article in the comparative section of the thesis package, “Harmonisation of international payment services law – part 2 (US Article 4A)”, reviews the US attempt to harmonise its domestic law regulating payment services.⁴² Article eleven introduces the Uniform Commercial Code and its drafters, the National Conference of Commissioners on Uniform State Laws and the American Law Institute. Responding to similar developments to those discussed above in the EU and UNCITRAL, the drafters commenced a project to

⁴¹ R Bollen, ‘Harmonisation of international payment services law – part 1 (the UNCITRAL model law)’ (2008) 19 *Journal of Banking and Finance Law and Practice* 186

⁴² R Bollen, ‘Harmonisation of international payment services law – part 2 (US Article 4A)’ (2008) 19 *Journal of Banking and Finance Law and Practice* 249

review the law applying to payment services and to draft a model law that US states could implement as their payment services law (and thereby achieve a large degree of national harmonisation). The UCC text (Article 4A) is interesting material in its own right, and this article examines it in detail and looks at how it deals with the key regulatory issues of risk allocation, each party's rights and obligations, and when payments are effective. In contrast to the UNCITRAL Model Law, UCC Article 4A has been well received and almost universally adopted. The article concludes with a comparison between Article 4A and the UNCITRAL Model Law.

3.4 Concluding and integrating papers

Article twelve of the thesis package, "Recent developments in mobile banking and payments", builds on the earlier articles and applies them to a new and developing sector.⁴³ It updates the previous research and demonstrates how the concepts apply to a brand-new service – mobile banking.⁴⁴

Mobile banking and payments are unlikely to herald the end of the cash era. There are important trust and cultural reasons that maintain the demand for cash; for example cash is an important gift in many cultures and an electronic payment is not an effective substitute.⁴⁵ But mobile banking and payments are an important development nonetheless for a number of reasons. They have the potential to broaden and deepen the reach of banking and payment services. They make possible cost effective banking services to the under-banked and unbanked, therefore greatly improving financial inclusion. And they deepen the reach of payment services to transactions not previously convenient or economic to pay for using non-cash payments.

This article shows mobile banking and payments are evolutionary, not revolutionary. They allow conventional intermediated payments to be used in more situations by more people. Admittedly they appear revolutionary in the sense that they open up the provision of banking services by non-banks. But this is likely to be a short-lived phenomenon – as regulators catch up, these services will eventually be regulated as financial services (if not as banks). This

⁴³ R Bollen, "Recent developments in mobile banking and payments" [2009] *Journal of International Banking Law and Regulation* 454

⁴⁴ For our purposes, mobile banking is an umbrella term for banking activities performed via a mobile device such as a Personal Digital Assistant (**PDA**) or mobile phone.

⁴⁵ S Singh, "Designing for Money Across Borders" 15 February 2005, RMIT University/Smart Internet Technology Cooperative Research Centre, [www.ucd.smartinternet.com.au/Documents/Designing_Money.pdf], accessed 1 October 2009] at 6

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article discusses early evidence of this in such diverse places as the EU and Kenya. This article examines the regulatory approach in Kenya and the Philippines. At its core this service is an example of the inevitable and logical convergence between the banking and communications industries.

These new devices and services follow the same payment services story. They are a new and convenient method by which a payer gives instructions to an intermediary to make value available to a payee. A modern and alternate funds transfer, albeit not necessarily using any established financial institution. The ‘new’ element is both the method of giving and receiving instructions and other information from the intermediary, and the identity of the intermediaries involved. It will permit faster and more convenient banking for more people from more providers.

Article thirteen, “Recent developments in banking services in developing countries”, builds on the previous twelve.⁴⁶ It focuses on the application of the practical and legal issues raised in the previous articles to the unique situation of a developing country banking system. It also discusses the political and regulatory issues in supervising the banking industry and encouraging broader outreach.

Economic development is a key part of poverty reduction. This article discusses how financial services can help enable economic development. Access to financial services is a fundamental tool for improving a family’s well-being and productive capacity. It empowers the poor by reducing their vulnerability and offering them opportunities to improve their lives by better managing their finances and increasing their income-generating abilities.

This article sets out the rationale for encouraging access to financial services as part of economic development programs in developing countries. It explains the key financial services that development agencies typically focus on and why. It considers the key practical and commercial challenges to increasing access to these services. Next it discusses recent industry developments and their impact. Finally, it looks at the regulation of financial services in developing countries and how this can assist or hinder economic development.

⁴⁶ R Bollen, “Recent developments in banking services in developing countries” [2009] *Journal of International Banking Law and Regulation* 509

4 Supporting regulatory theory

4.1 Introduction

Regulation is intended to influence market and business behaviour, to propel players to behave in ways they would not normally behave. Regulation at its simplest is a process of controlling people's behaviour through rules. It can take many forms – for example, legal restrictions imposed by the government, self-regulation and social constraints. Regulation is often distinguished from other types of law by the fact that a sanction may be applied for breach of the rules. Regulation is usually imposed by the state or another authoritative body to attempt to produce behavioural outcomes that the people subjected to the regulation may not have otherwise displayed (either at all or when desired). Hence, regulation is a method of implementing government policy positions.

Regulation is the use of law by government for social purposes, including planning an economy, remedying market failure, enriching well-connected firms or even benefiting politicians. Common examples of regulation include price controls, development approvals, occupational licences and pollution permits. Regulatory economics analyses the costs and benefits of regulatory action, as all regulation involves costs for some and benefits for others. An efficient regulation is where the total benefits exceed the total costs.

Like all regulation, financial services regulation is aimed at achieving public policy goals. Ultimately, it is aimed at improving overall community wellbeing. This broad concept includes improving social inclusion, reducing market failures, reducing poverty and inequality, and improving living standards.

For example, the Australian Treasury describes its mission as being to “improve the wellbeing of the Australian people” and considers wellbeing within a multidimensional framework, being

- (i) the level of opportunity and freedom that people enjoy; (ii) the level of consumption possibilities;
- (iii) the distribution of those consumption possibilities; (iv) the level of risk that people are required to bear; and (v) the level of complexity that people are required to deal with.⁴⁷

⁴⁷ Australian Treasury, “Policy advice and Treasury’s wellbeing framework”, 2004 [http://www.treasury.gov.au/documents/876/HTML/docshell.asp?URL=Policy_advice_Treasury_wellbeing_framework.htm, accessed 1 December 2009]

The basic concept is that all economic decisions (including regulatory decisions), affect community wellbeing along one or more of these dimensions. The framework enables a broad assessment of the costs and benefits of all policy options. Perhaps the most important insight is that policy decisions regularly involve trade-offs between these dimensions and that these trade-offs are significant public policy decisions for the government.⁴⁸

4.2 Money as a social construct

To an economist, money has different functions. The key ones are a measure of value, a medium of exchange and a means of holding and accumulating wealth.⁴⁹

Sociologists, however, take a broader approach and explain that money is fundamentally a social construct. According to Zelizer, “monetary phenomena consist of and depend on social practices”.⁵⁰ As with payment, money has no inherent substance or value in itself. Further, what constitutes money is inherently arbitrary. Dodd states, “any object could in principle be used as money as long as it is designated as such”.⁵¹ Its essence is that people trust in its value and usability. “Where once money did have substance-value (e.g. gold and silver coins), it has become a pure symbol to determine qualities quantitatively.”⁵² Notes, coins, cards and other medium of money and payment have little value in themselves – their value stems from what they are worth to those who need it and possess it – or are willing to swap it for goods, services, capital and labour. This is consistent with the third article in the thesis package discussed earlier which attempted to define payment – and concluded that what the parties agree is payment *is, by definition, payment*.⁵³

Modern sociologists understand money as a social phenomenon. Money is a means by which extended families show their care and support, even when geographically separated (eg via remittances). It connects people separated by time and distance.⁵⁴ Zelizer’s research showed

⁴⁸ Australian Treasury, “Policy advice and Treasury’s wellbeing framework”

⁴⁹ M Deflem, “The Sociology of the Sociology of Money” (2003) 3 *Journal of Classical Sociology* 67 [http://jcs.sagepub.com/cgi/content/abstract/3/1/67, accessed 1 October 2009], at 81; S Singh, “Designing for Money Across Borders” 15 Feb 2005, RMIT University/Smart Internet Technology Cooperative Research Centre, [www.ucd.smartinternet.com.au/Documents/Designing_Money.pdf, accessed 1 October 2009] at 1

⁵⁰ V Zelizer, “Pasts and Futures of Economic Sociology” (2007) 50 *American Behavioral Scientist* 1056, [http://abs.sagepub.com/cgi/content/abstract/50/8/1056, accessed 1 October 2009], at 1063; S Singh, “Towards a sociology of money and family in the Indian diaspora” (2006) 40 *Contributions to Indian Sociology* 375 [http://cis.sagepub.com/cgi/content/abstract/40/3/375, accessed 1 October 2009], at 379

⁵¹ N Dodd, *The sociology of money: economics, reason and contemporary society*, at xv

⁵² M Deflem, “The Sociology of the Sociology of Money”, at 71

⁵³ R Bollen, “What is a payment (and why does it continue to confuse lawyers)”

⁵⁴ N Dodd, *The sociology of money: economics, reason and contemporary society*, at x

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that instead of turning away from money or letting their social relations wither in the headlong pursuit of money, Americans actually incorporated money into their construction of new social ties and transformed money's meaning as they did so. More specifically, as money entered the household, gift exchanges, and charitable donations, individuals and organizations invented an extensive array of currencies, ranging from housekeeping allowances, pin money, and spending money to money gifts, gift certificates, remittances, tips, mother's pensions, and food stamps.⁵⁵

This is consistent with the usage of remittances and mobile banking discussed earlier.⁵⁶ Indeed, money is a “medium of relationships”.⁵⁷ Simmel, for example, “relates money to just about every imaginable social phenomenon and, indeed, argues for the inextricable links between money, the individual and, ultimately, modern society in its totality”.⁵⁸ Money and payment is best understood in the broad realm of human experience. “In Simmel, money is only loosely tied to its material basis and instead represents a sociological phenomenon, a form of human interaction.”⁵⁹

One important insight from sociology for our purposes is that not all money is equal. Different forms of money and payment have different features, benefits and consequences. One important aspect is the information dimension – is the form of money anonymous or does it create a record? If there is a record, is it instantaneous or delayed? Does it give information about current balance or only historical payments? Is the record sufficient for tax and other formal purposes?⁶⁰

Dodd, one of the leading sociologists on this topic, argued in 1994 that it is “a person's use and perception of money that distinguishes the nature of money, rather than function or the inherent characteristics of payment instruments”.⁶¹ Zelizer added to this and showed that there are multiple type of money – market and domestic for example – which are shaped by social relations and cultural values.⁶²

⁵⁵ V Zelizer, “Pasts and Futures of Economic Sociology”, at 1061

⁵⁶ R Bollen, “A review of the history and operation of international payment systems”

⁵⁷ S Singh, “Towards a sociology of money and family in the Indian diaspora”, at 379

⁵⁸ M Deflem, “The Sociology of the Sociology of Money”, at 71

⁵⁹ M Deflem, “The Sociology of the Sociology of Money”, at 80-81

⁶⁰ S Singh, “The use of Internet money”. (1996) *Journal of Internet Banking and Commerce* 1 (4) <http://www.arraydev.com/commerce/JIBC/>; S Singh “Electronic Commerce and the Sociology of Money” (2000) *Sociological Research Online*, vol. 4, no. 4, <http://www.socresonline.org.uk/4/4/singh.html>, at 3.9

⁶¹ N Dood, cited in S Singh, “Designing for Money Across Borders”, at 1; V Zelizer, “Pasts and Futures of Economic Sociology”, at 1064

⁶² V Zelizer, “Pasts and Futures of Economic Sociology”, at 1063; S Singh, “Designing for Money Across Borders”, at 1

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The different uses of money and payments are a key differentiator of the use of payment services. Different types of money are appropriate for regular bills, groceries, gifts and family support.⁶³

This has particular application for new payment media. As discussed earlier,⁶⁴ the end of cash has been announced numerous times, as new payment services are developed that the promoters (and many commentators) expect will replace the use of cash within a few years. For example, *The Economist's* cover story on 15 February 2007 was 'Digital money: the end of the cash era'. In it they reported "cash, after millennia as one of mankind's most versatile and enduring technologies, looks set over the next 15 years or so finally to melt away into an electronic stream of ones and zeros".⁶⁵

There are a number of reasons for the take-up of alternate forms of money being much slower than expected.⁶⁶ As discussed earlier, not all types of money are equal (albeit for sociological rather than economic reasons). One consequence of this is that some forms of money are culturally inappropriate for some purposes. The simplest example is gift giving. Cash is an important gift in many cultures and an electronic payment is not an effective substitute.⁶⁷ Secondly, the computer and telecommunications infrastructure in many countries is not sufficiently developed to support modern electronic payments, as discussed in the final article in the thesis package.⁶⁸

Another important insight from sociology into the use of money and payment is in the area of ownership and control. Western banking systems assume money is individually owned. This paradigm is often then applied to electronic payment services, with the result that electronic authentication systems assume a single owner of an account and allocate them a single PIN or password, in the context of a set of terms and conditions that prohibit them sharing these authentication codes. This is inconsistent with the approach to money ownership in many cultures, where shared family or community ownership is more common. Such products grate against this understanding, and put the customer in an untenable position of either breaching the service contract (by sharing authentication codes) or breaching important

⁶³ S Singh "Electronic Commerce and the Sociology of Money", at para 1.1

⁶⁴ R Bollen, "Recent developments in mobile banking and payments"

⁶⁵ The Economist, "Digital money: the end of the cash era", 15 February 2007, cover story

⁶⁶ S Singh, "Designing for Money Across Borders", at 3; S Singh, "Electronic Commerce and the Sociology of Money", at para 3.2

⁶⁷ S Singh, "Designing for Money Across Borders", at 6

⁶⁸ S Singh, "Designing for Money Across Borders", at 1; R Bollen, "Recent developments in banking services in developing countries"

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family and cultural practices.⁶⁹ It is vital that policy makers and payment services providers understand these sociological and cultural dimensions of money and take them into account in regulatory and product design. This may necessitate more complex transaction authentication procedures than presently exist, but unless this occurs the acceptance rate for these products will continue to be low in some cultures.⁷⁰

A recurring issue is how to engender sufficient consumer trust and confidence in a new form of payment service. As discussed earlier, payment and money are inherently intangible and abstract constructs.⁷¹ Payment and money are sociological and economic phenomena – certain things are accepted as money or payment by social consensus – and while this can change over time, trust in new forms of money takes time to develop. Singh explains: “There is nothing inherent in a piece of paper, a plastic card or electronic information that converts it into money. Money is money only when it is trusted that it will be honoured in your networks of use and exchange.”⁷² Creating and protecting trust therefore becomes a crucial issue in the regulation of payment services.⁷³ The national financial regulatory system will affect the development of new payment services⁷⁴ It is generally accepted that adequate regulation is a key pre-cursor to consumer acceptance of new payment methods, including mobile banking and payments.⁷⁵

Connected with this is the importance of ensuring adequate privacy protection in payment services. This is part of general notions of trust and security, a key issue for these services.

Banking rests on the promise that customers can trust their money will be kept safe and their financial information will remain private. Security, privacy, trust and use are interconnected. ... For the user, security means that the money will be kept safe and will only flow as directed by the user. Privacy is connected to security, as it rests in the user’s control over the information. The user decides which part

⁶⁹ S Singh, “Designing for Money Across Borders”, at 1

⁷⁰ S Singh “Electronic Commerce and the Sociology of Money”, at para 2.2

⁷¹ V Zelizer, “Pasts and Futures of Economic Sociology”, at 1060

⁷² S Singh, “Designing for Money Across Borders”, at 6

⁷³ S Singh “Electronic Commerce and the Sociology of Money”, at 3.4

⁷⁴ Choi, Collins, Urs and Lovelock, “Mobile payments: Asia Pacific report’ (2008) 2 *E-Finance and Payments Law and Policy* 10

⁷⁵ M Budnitz “Stored value cards and the consumer: the need for regulation”; SJ Hughes, “Regulation Of Electronic Commerce: A Case For Regulating Cyberpayments”; J Winn, “Symposium: Clash Of The Titans: Regulating The Competition Between Established And Emerging Electronic Payment Systems”; C Wilson “Banking On The Net: Extending Bank Regulation To Electronic Money And Beyond” (1997) 30 *Creighton Law Review* 671; W Effross “Putting The Cards Before The Purse?: Distinction S, Differences, And Dilemmas In The Regulation Of Stored Value Card Systems”

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of the information is confidential, and which part may be disclosed to particular persons under specified conditions. Hence privacy does not necessarily entail anonymity.⁷⁶

Another key insight from the sociology literature is that money depends on accounting systems at a number of different levels. As discussed earlier, the unifying theory for this research project has been that all payment services are generally forms of funds transfers by book entries by one or more financial intermediaries. Sociological theory adds to this by saying that as users we also contribute our own accounting systems to personalise and manage money.⁷⁷

4.3 Law and economics

As well as the sociological insights discussed above, our research relied heavily on law and economics theory. Law and economics uses economic concepts to explain the effects of laws, to assess which legal rules are economically efficient and to predict which legal rules will be promulgated. It analyses and critiques law from an economic perspective, seeking to identify to what extent law supports the economic efficiency and development of the body politic it is intended to serve. All things being equal, a law that promotes economic development or efficiency (eg greatest benefit at the lowest cost) should be preferred over a less economically efficient law.⁷⁸

The Australian Government has promoted a free market and pro-competition agenda for the financial services industry for many years. This is based on the notion, recognised as far back as the Wallis Committee, that

Free and competitive markets can produce an efficient allocation of resources and provide a strong foundation for economic growth and development. Governments also play a vital role in maintaining a healthy economic and social environment in which enterprises and their customers can interact with confidence.⁷⁹

A pro-competition rationale runs through the Corporate Law Economic Reform Program (CLERP) discussion of the design of the Australian financial services regime (ie what is now

⁷⁶ S Singh and C Morley, "Young Australians' privacy, security and trust in internet banking", paper presented at the 21st Annual Conference of the Australian Computer-Human Interaction Special Interest Group (CHISIG) of the Human Factors and Ergonomics Society of Australia (HFESA), November 2009, at 1

⁷⁷ V Zelizer, "Pasts and Futures of Economic Sociology", at 1065

⁷⁸ R Cooter and T Ulen, *Law and Economics* (5th Edition) (2007) Addison Wesley; D Friedman *Law's Order: What Economics Has to Do with Law and Why It Matters*, Princeton University Press, 2001

⁷⁹ Financial System Inquiry, *Final Report*, March 1997, (<http://fsi.treasury.gov.au/content/downloads/FinalReport>), at 177

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Chapter 7 of the Corporations Act). Its view was that market regulation should “facilitate the development of new products and promote competition between market providers and participants”.⁸⁰

In a market economy such as Australia’s, “consumers are assumed, for the most part, to be the best judges of their own interests”.⁸¹ The government’s role is therefore to facilitate an efficient and fair marketplace in which businesses can compete to serve the needs of consumers.

Why is a competitive market a goal for financial products and services? Competitive markets tend to lead to the following positive outcomes:

- downward pressure on prices,
- upward pressure on quality,
- efficient allocation of resources, and
- innovation in providing services that meet consumer needs.

One of the key rationales for favouring market solutions to pricing and production decisions is that, assuming individual consumers and businesses act in their own rational interests, producers will produce what consumers need and want. Resources will be allocated to the businesses that need them most (and are able to use them productively and therefore pay the highest price for them). Consumers will pay prices based on the value goods and services provide them, which will give businesses a strong incentive to produce goods and services that meet these needs. For this to be fully effective, a highly competitive market is needed.

A fully competitive market⁸² is one where:

- the decisions of consumers and businesses reflect all possible and relevant information (ie no ‘information asymmetry’),

⁸⁰ Commonwealth Treasury, *Financial Markets and Investment Products – Promoting competition, financial innovation and investment*, Corporate Law Economic Reform Program, Proposals for Reform: Paper No. 6 paper, 1997, p27

⁸¹ Financial System Inquiry, *Final Report*, at 191

⁸² ie: a perfectly competitive market

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- prices reflect all costs to the community (eg third party costs are included; there are no ‘externalities’), and
- “firms cannot profitably charge prices in excess of ‘marginal’ cost”.⁸³ That is, no market failures due to ‘market power’.⁸⁴

In an efficient market businesses tend to produce at the lowest possible cost and consumers buy the products they want at the lowest possible price for a given quality level. At this price, supply and demand are in balance. There is a welfare loss (a waste of resources) and therefore a market failure to the extent that transactions lack these characteristics. Regulation may be able to address this, but it “can only be justified by a market failure when it can improve on the market solution to that market failure”.⁸⁵

In practice, a number of things can inhibit the establishment and maintenance of competitive markets. These include:

- insufficient or asymmetric information,
- inability of consumers to effectively use information (eg bounded rationality),
- unbalanced market power, and
- fraud and other misconduct.⁸⁶

In the simplest sense, ‘market failures’ are “departures from the economists’ notion of a perfectly efficient market”.⁸⁷ As far back as the Wallis Committee’s review of the regulation of financial services, market failure and cost benefit analysis were key features of the Australian regulatory debate. In its Final Report, the Committee found that “the general case

⁸³ which is the saving in a firm’s total cost when output is lowered by a very small unit, and in the long run includes the cost of capital. See FSA, “Market Failure Analysis and High Level Cost Benefit Analysis, A guide for policy makers preparing papers for the Regulatory Policy Committee “, November 2006 (http://www.fsa.gov.uk/pubs/other/mfa_guide.pdf, accessed 1 May 2007), at 5

⁸⁴ FSA, “Market Failure Analysis and High Level Cost Benefit Analysis, A guide for policy makers preparing papers for the Regulatory Policy Committee “, at 5

⁸⁵ FSA, “Market Failure Analysis and High Level Cost Benefit Analysis, A guide for policy makers preparing papers for the Regulatory Policy Committee “, at 5

⁸⁶ FSA, “Market Failure Analysis and High Level Cost Benefit Analysis, A guide for policy makers preparing papers for the Regulatory Policy Committee “, at 42; N Ireland, ‘Information Asymmetries and Product-Quality Regulation’, chapter 8 in M Bishop, J Kay, and C Mayer (eds), *The Regulatory Challenge* (Oxford University Press, Oxford, 1995), at 193

⁸⁷ FSA, “Market Failure Analysis and High Level Cost Benefit Analysis, A guide for policy makers preparing papers for the Regulatory Policy Committee “, at 5

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for regulation is founded in market failure. This occurs when factors are present that prevent efficient market outcomes. The potential for market failure is a necessary but not sufficient condition for government intervention.”⁸⁸ Intervention is only justified where “there are clear regulatory objectives and the benefits of intervention outweigh the costs”.⁸⁹ Of course, the difficult question is whether, and what level and type, of government intervention is appropriate.

All markets (including financial markets) face potential challenges from the conduct of market participants, anti-competitive behaviour and incomplete information. The government has responded to these common forms of market failure with a minimum level of regulatory intervention on an economy-wide basis.⁹⁰ This is generally in the form of conduct and disclosure regulation (eg criminal sanctions for fraud and prohibitions on anti-competitive behaviour and false or misleading statements).⁹¹

In many markets, this minimum level of regulation is adequate. However, sometimes the characteristics of the market or the underlying products justify more specific disclosure and conduct rules. They may also justify a separate regulatory agency to administer these rules.⁹²

Neo-classical economics assumes that, “for markets to provide the most efficient allocation of resources, the parties to transactions need to have ‘perfect information’ about the relevant products and their cost”.⁹³ Consumers are unable to make rational choices about products if they have imperfect information, leading to market failure. In such situations, providers are able to “impose terms in consumer ... contracts which favour themselves without cost consequences in the market” because normal market disciplines are absent.⁹⁴

The Wallis Committee concluded that specialist regulation is warranted in the consumer financial services market. The complexity of financial products means that financially unsophisticated consumers may misunderstand or be misled about the nature of financial promises, particularly their obligations and risks. “This, combined with the potential consequences of dishonour, has led most countries to establish a disclosure regime for

⁸⁸ Financial System Inquiry, *Final Report*, at 177

⁸⁹ Butterworths, Australian Corporation Law Principles & Practice, para [7.1.0055]; Commonwealth Treasury, *Financial Markets and Investment Products – Promoting competition, financial innovation and investment*,

⁹⁰ Financial System Inquiry, *Final Report*, p186

⁹¹ FH Easterbrook and DR Fischel, ‘Mandatory Disclosure and the Protection of Investors’, at 283-284

⁹² Financial System Inquiry, *Final Report*, at 186

⁹³ P O’Shea and Dr C Finn, “Consumer Credit Code disclosure: does it work?”, (2005) 16 *Journal of Banking and Finance Law and Practice* 5, at 6

⁹⁴ P O’Shea and Dr C Finn, “Consumer Credit Code disclosure: does it work?”, at 6

financial products that is considerably more intense than disclosure rules for most non-financial products.”⁹⁵

4.4 Information asymmetry

The Wallis Committee identified two key economic rationales for regulatory intervention in the financial services market: systemic stability and information asymmetry issues. Information asymmetry relates to the inherent inability of consumers in some markets to act as the “best judges of their own interests”.⁹⁶ In the traditional formulation of information asymmetry, this is because consumers have substantially less information than the relevant businesses. However, economists have recognised in recent decades that for “many financial products, consumers lack (and cannot efficiently obtain) the knowledge, experience or judgment required to make informed decisions. ... a situation where further disclosure, no matter how high quality or comprehensive, cannot overcome market failure”.⁹⁷ In their Final Report, the Wallis Committee described this as a case of information asymmetry but it is probably better understood as an example of ‘bounded rationality’.⁹⁸

Disclosure is considered a fundamental market facilitation mechanism for most financial services products. Most researchers accept that on a conventional market failure analysis consumer financial products involve major information asymmetry issues between consumer and institution. Hence, most consumer financial products (including payment services) have a disclosure regime.⁹⁹

Behavioural finance research suggests disclosure is an incomplete and inadequate response to most issues in consumer finance. It is not necessarily rational for consumers to spend a great deal of time examining complex disclosures for consumer payment transactions. This has been demonstrated in various areas, including consumer credit, using field research.¹⁰⁰ The same findings are being applied to payments law in recent times.¹⁰¹

⁹⁵ Financial System Inquiry, *Final Report*, at 189

⁹⁶ Financial System Inquiry, *Final Report*, at 191

⁹⁷ Financial System Inquiry, *Final Report*, at 191

⁹⁸ Financial System Inquiry, *Final Report*, at 191

⁹⁹ Financial System Inquiry, *Final Report*

¹⁰⁰ R Deaves, C Dine and W Horton, ‘Research Study: How Are Investment Decisions Made?’, 24 May 2006, vol 2 of Canada Steps Up - Final Report, October 2006, The Task Force to Modernize Securities Legislation in Canada, Commissioned by the Task Force to Modernize Securities Legislation in Canada, ([http://www.tfmsl.ca/docs/V2\(3\)%20Deaves.pdf](http://www.tfmsl.ca/docs/V2(3)%20Deaves.pdf), accessed 5 May 2007), at 252

¹⁰¹ R Mann “Regulating Internet Payment Intermediaries”; Mark B, “Commentary: Technology as the driver of payment system rules: will consumers be provided seatbelts and air bags”; G Hillebrand, “Before the grand

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Referring back to the market failure analysis, the product disclosure regime has two main goals – to ensure adequate information is available *and* to assist consumers in effectively and efficiently *using* that information. The research shows that there are problems in both areas, but particularly in the latter.

Deaves *et al* argue that conventional economic models are formulated as if the

typical decision-maker is Mr. Spock (from Star Trek), an individual with almost unlimited cerebral RAM. Such a decision-maker considers all relevant information, including the motives of all parties (which can include the motive to deceive) and comes up with the best decision under the circumstances.¹⁰²

Recent research on information overload and bounded rationality casts substantial doubt on consumers' ability to process and effectively use the large amounts of information they receive about financial products and services.¹⁰³ The basic issue here is the distinction between the availability and processability of information.¹⁰⁴ Processability refers to the “cognitive ease with which information can be comprehended and used” and is a “function of the way the information is presented, the kind of processing to be undertaken, and the knowledge base of the consumer”.¹⁰⁵ Information must be both available *and* easily processable to be used effectively.

Information overload has also been researched in recent years.¹⁰⁶ One of the key findings is that large amounts of information (eg bulky and complex disclosures) tend to dissuade consumers from reading (at all). A longer document is likely to result in *less* comprehension

rethinking: five things to do today With payments law and ten principles to guide new payments products and new payments law”

¹⁰² R Deaves, C Dine & W Horton, “Research Study: How Are Investment Decisions Made?”, 24 May 2006 in volume 2 of *Canada Steps Up - Final Report*, October 2006, The Task Force to Modernize Securities Legislation in Canada, Commissioned by the Task Force to Modernize Securities Legislation in Canada, ([http://www.tfmsl.ca/docs/V2\(3\)%20Deaves.pdf](http://www.tfmsl.ca/docs/V2(3)%20Deaves.pdf), accessed 5 May 2007), at 252

¹⁰³ KC Engel & PA McCoy, “Turning a blind eye: Wall Street finance of predatory lending” (2007) 75 *Fordham Law Review* 2039, at 2080; Australian Consumers' Association, “Submission by CHOICE to the Inquiry into unfair terms in consumer contracts”, 13 October 2006, (<http://parliament.nsw.gov.au/>, accessed 1 June 2007); L Sylvan, “What we (actually) do in markets”, *New Matilda*, 21 July 2006 (<http://www.newmatilda.com/>, accessed 1 June 2007)

¹⁰⁴ MA Edwards, “Empirical and behavioral critiques of mandatory disclosure: Socioeconomics and the quest for truth in lending” (2005) 14 *Cornell Journal of Law and Public Policy* 199, at 221

¹⁰⁵ J D Cox and JW Payne, “Mutual Fund Expense Disclosures: A Behavioral Perspective” (2005) 83 *Washington University Law Quarterly* 907, at 930-31

¹⁰⁶ R A Prentice, ‘The Inevitability of a Strong SEC’ (2006) 91 *Cornell Law Review* 775, at 803; R Deaves, C Dine & W Horton, “Research Study: How Are Investment Decisions Made?”, 24 May 2006, vol 2 of *Canada Steps Up - Final Report*, October 2006, The Task Force to Modernize Securities Legislation in Canada, Commissioned by the Task Force to Modernize Securities Legislation in Canada, ([http://www.tfmsl.ca/docs/V2\(3\)%20Deaves.pdf](http://www.tfmsl.ca/docs/V2(3)%20Deaves.pdf), accessed 5 May 2007) 252, at 264

and understanding (and therefore less information absorption), even though in theory it contains more information overall. Excessive information and choice can result in decision-paralysis and the consumer simply giving up and opting out (or sticking with the default option if there is one).¹⁰⁷ More and more information will not “lead to better and better decisions”.¹⁰⁸

Research has shown that even with heavily prescribed consumer-centric disclosures, consumers find it difficult to understand and interpret point-of-sale disclosure for financial products. Recent research from Queensland University of Technology showed that with consumer credit products there was very little improvement in consumer understanding under mandated consumer-centric disclosure compared to consumers relying simply on the (legalistic) credit contract.¹⁰⁹ They found that the “disclosure regime makes very little difference in the comprehension levels of important features of the transaction for the participants in this experiment”.¹¹⁰

One implication of bounded rationality is that consumers “rationally trade off the costs of search with the benefits yielded by gaining extra information”.¹¹¹ Where the time and other costs of obtaining and using information are high because the contract or disclosure document “is long, complex, and full of legalese (as is the case for many consumer contracts, particularly in the financial services sector), the cost-benefit analysis will tend to operate in favour of not reading the contract”.¹¹² Further, low financial literacy and general numeracy and literacy levels mean that consumers may be “systemically unable to process the information they need to make good decisions”.¹¹³ Practical research and experiments have

¹⁰⁷ P Evans, ‘Assessing Consumer Detriment’ (2007) ECLR 26, at 35; R Deaves, C Dine & W Horton, “Research Study: How Are Investment Decisions Made?”, at 307; L Sylvan, “What we (actually) do in markets”

¹⁰⁸ J D Cox and JW Payne, “Mutual Fund Expense Disclosures: A Behavioral Perspective”, at 932

¹⁰⁹ P O’Shea and Dr C Finn, “Consumer Credit Code disclosure: does it work?”, at 14

¹¹⁰ P O’Shea and Dr C Finn, “Consumer Credit Code disclosure: does it work?”, at 14

¹¹¹ I McAuley, “Unfair contracts – an economic perspective, unpublished paper”, (2004), p 3, cited in N Howell, “Catching up with consumer realities: The need for legislation prohibiting unfair terms in consumer contracts” (2006) 34 *ABLR* 447, at 460

¹¹² N Howell, “Catching up with consumer realities: The need for legislation prohibiting unfair terms in consumer contracts”, at 460

¹¹³ G Hadfield, R Howse, and MJ Trebilcock, “Information-Based Principles for Rethinking Consumer Protection Policy” (1998) 21 *Journal of Consumer Policy* 131 at 145, cited in N Howell, “Catching up with consumer realities: The need for legislation prohibiting unfair terms in consumer contracts”, at 460

shown that (for example) consumers find comparing loan terms difficult and often only focus on key headline items (like the interest rate) to choose between loans.¹¹⁴

There are a number of possible responses to these market failures. Mandatory product disclosure is a necessary but insufficient response. To be a more effective solution, product disclosure should be simplified, harmonised and include additional comparability features. For example, a key device most consumers need to be able to make consistent and rational choices between complex products is consistent formatting and comparative information. Effective computation is clearly enhanced by “provid[ing] information in a relative or comparative format whenever possible”.¹¹⁵ Mandatory fees tables and worked examples are a step in the right direction, but true comparative information (not just comparable product-specific information) is required.¹¹⁶

4.5 Credit risk and externalities

The Wallis Committee concluded that it may be “desirable to substitute the opinion of a third party for that of consumers themselves”.¹¹⁷ This ‘consumer champion’ is “expected to behave paternalistically, looking out for the best interests of consumers when they are considered incapable of doing so alone”.¹¹⁸ There are a number of third parties that can play such a role, including market-based players (eg rating agencies). In many countries this role is carried out in part by a government prudential regulator.

One goal with regulatory intervention in financial markets is to minimise the externalities resulting from the activities of financial institutions.¹¹⁹ Financial institutions cause externalities when the results of their activities cause costs to the community beyond those borne by the firm itself.¹²⁰ This includes market misconduct (eg insider trading) and more dramatic situations such as financial collapses. “In the management of systemic risk the task of regulation is to ‘internalise the externality’, that is to ensure that, as far as possible, individual decision-makers

¹¹⁴ N Howell, “Catching up with consumer realities: The need for legislation prohibiting unfair terms in consumer contracts”, at 460. Howell refers also to J Malbon, *Taking Credit: A Survey of Consumer Behavior in the Australian Consumer Credit Market*, (1999) at 12-13

¹¹⁵ J D Cox and J W Payne, “Mutual Fund Expense Disclosures: A Behavioral Perspective”, at 934-35

¹¹⁶ ASIC “ASIC Preferred Model”; R J Mann and J Hawkins, ‘Just Until Payday’ (2007) 54 *UCLA Law Review* 855, at 905

¹¹⁷ Financial System Inquiry, *Final Report*, at 191

¹¹⁸ Financial System Inquiry, *Final Report*, at 191

¹¹⁹ J Eatwell and L Taylor, *Global finance at risk – the case for international regulation*, Polity Press, Oxford UK, 2000

¹²⁰ Costs borne by the firm itself include stamp duty and brokerage. An example of costs borne by others is the cost of sub-optimal product choice borne by a consumer due to information asymmetry or inappropriate financial advice.

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take into account not only their risk but also the risk which society as a whole faces as a result of the contemplated action”.¹²¹

The two key types of externalities associated with payment services are credit and systemic risk. Credit risk is at its simplest the risk that the customer loses the savings or pre-payments placed with the payment services provider. There is the direct loss of the funds involved, and the indirect losses and opportunity costs (ie the transactions forgone or hardship suffered through lack of access to day-to-day funds). The burden of these losses is borne by the customer directly, but also by the wider community if the customer becomes dependent on welfare or charity as a result of the lost savings (either temporarily or longer-term).

Systemic risk is the risk that financial stress in one institution can impose significant stress and costs on other financial institutions and therefore on the financial system as a whole (which then has a negative impact on the real economy).¹²² As the global financial crisis has highlighted, the global financial system is now highly interconnected. Financial disturbances in an internationally active financial institution can have significant negative externalities. Traditional economic and regulatory theory suggests that the government should seek to internalise the externalities that the potential failure of a large financial institution imposes on the rest of the financial system and the economy generally. While the appropriate level of regulatory intervention is hotly debated, if a large financial institution is going to present a potential claim on taxpayers if they get into financial difficulty (either directly or indirectly via public support to lenders or counter-parties of the financial institution), their regulation should not only reduce the likelihood of this occurring but also give the financial institution a strong incentive to avoid a disorderly wind-down situation in the first place.¹²³

The systemic risk a financial institution creates is a significant negative externality vis-a-vis the rest of society. The Financial Stability Board states “systemic events are associated with *negative externalities*. Every financial institution’s incentive is to manage its own risk-return trade off, but not necessarily the implications of its risk taking for the operation of the financial system as a whole”.¹²⁴ This is the concept behind much of the modern approach to regulating environmental pollution: a tax on pollution (to place on a firm the cost to society of that firm’s polluting

¹²¹ Eatwell and Taylor, 2000, p185

¹²² Financial System Inquiry, *Final Report*, 1997

¹²³ IOSCO, Hedge Funds Oversight – final report, IOSCO Technical Committee, June 2009 [www.iosco.org]; US Treasury, “Financial Regulatory Reform – A new foundation: Rebuilding financial supervision and regulation”, 2009 (http://www.financialstability.gov/docs/regs/FinalReport_web.pdf)

¹²⁴ Financial Stability Board, “Guidance to assess the systemic importance of financial institutions, markets and instruments” October 2009 [https://www.financialstabilityboard.org/publications/r_091107c.pdf, accessed 7 November 2009]

activities) is an effective method of dealing with negative externalities. For the same reason, a tax, or its regulatory equivalent, on systemic risk is justifiable. For example, under the recent US reform proposals, large financial institutions will be subject to capital requirements that “reflect the large negative externalities associated with financial distress and [will] be effective under extremely stressful economic conditions”.¹²⁵

4.6 Application to payment services regulation

With payment services, the economic approach suggests regulation should be based on both consumer protection and efficient risk allocation. As a general rule, parties to any payment system would (presumably):

prefer legal default rules that allocate any risk to the party in the best position to avoid it. Basically, that requires placing the loss on the party who can minimize the sum of loss avoidance costs and residual losses that remain even once cost-effective precautions are taken. That principle, well recognised in the literature and case law on payment systems, minimises transaction costs, because allocation of a risk to an inferior risk bearer will require that party to charge costs for risk bearing that could be reduced if the risk were assigned to the superior risk bearer. A legal rule that placed the loss on the superior risk bearer would avoid the costs of contracting around the inefficient rules or of absorbing excess social losses due to friction in the contracting process.¹²⁶

The economic logic is that, for example, placing the risk of loss from fraud on banks induces them to invest optimally in creating fraud prevention methods that can then be implemented by them and their customers.¹²⁷ That is, “with respect to these risks, legal rules should induce banks to take fraud detection and deterrence measures that they are best able to implement, and should induce customers to take those precautions that they are best able to implement”.¹²⁸

Commentators generally see the following as the significant baseline consumer protections that should be enacted for cyberpayments not already covered by existing consumer protection legislation or regulation: (1) initial disclosures; (2) verification or validation methods as appropriate to the particular cyberpayment product; (3) error resolution; and (4) limits on liability for loss, theft, or unauthorized use.¹²⁹

¹²⁵ US Treasury, “Financial Regulatory Reform – A new foundation: Rebuilding financial supervision and regulation”, at 24

¹²⁶ C Gillette and S Walt, “Uniformity and diversity in payment systems”, at 529-30

¹²⁷ C Gillette and S Walt, “Uniformity and diversity in payment systems”, at 530

¹²⁸ C Gillette and S Walt, “Uniformity and diversity in payment systems” at 530

¹²⁹ SJ Hughes, “Regulation Of Electronic Commerce: A Case For Regulating Cyberpayments”, at 823-24

5 Key risks with payment services

There has been some research into the main risks associated with payment services, both retail and wholesale services. The main risks associated with payment services have been broadly identified and agreed. These risks are common across most payment services.¹³⁰ Hooley and Taylor identify the following risks: credit, liquidity, systemic, mis-selling, fraud and unauthorised payments, and error or mistake.¹³¹ Some are more relevant for wholesale or international payment services (liquidity and Herstatt risk, for example); others are more relevant for retail products (mis-selling, for example).

Being at their essence the same, all payment services raise a similar set of risks. Our research identifies six key regulatory risks areas with payment services:

- credit risk (and systemic stability),
- efficiency risk (protecting competition),
- product mis-match,
- product failure,
- transactional failure, and
- privacy.¹³²

These are discussed in more detail elsewhere, but for the purposes of this paper a short description of each is below.¹³³ While there are some variations in the details, these recurring risks tend to be dealt with in similar ways by most legal regimes.

¹³⁰ G Hillebrand, “Before the grand rethinking: five things to do today With payments law and ten principles to guide new payments products and new payments law”; M Budnitz “Stored value cards and the consumer: the need for regulation”; SJ Hughes, “Regulation Of Electronic Commerce: A Case For Regulating Cyberpayments”; J Winn, “Symposium: Clash Of The Titans: Regulating The Competition Between Established And Emerging Electronic Payment Systems”

¹³¹ R Hooley and J Taylor, “Payment by Funds Transfer”

¹³² E Wentworth, “Direct Debits, Consumer Protection and Payment System Regulation – Issues of Policy and Reform”; cf J Winn, “Symposium: Clash of the Titans: Regulating the Competition Between Established and Emerging Electronic Payment Systems”, at 678, where the author breaks up the four risks as liquidity, finality, transaction risk and systemic risk; A Tyree and A Beatty, *The Law of Payment Systems*, at 82, where the authors break up the risks into two main groups – systemic and consumer protection.

¹³³ R Bollen, “A review of the regulation of payment facilities”, at 326; R Bollen, “A review of European regulation of the payment system”; R Bollen, “Recent developments in mobile banking and payments”

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Each system manages these risks in their own way. As discussed earlier, most services (and most providers) use a combination of contract and agency. Not surprisingly, the terms and conditions drafted by or on behalf of the institutions are quite ‘pro-institution’ in their detail (eg risks are often borne by the consumer).

Case-law has developed for the older services (eg cheques) that attempts to set out a fairer balance. Under the common law, each intermediary owes a duty of care to its own client.¹³⁴ Also with wholesale services, players with more equal bargaining power have set up more balanced rules (eg letters of credit).

Management of these risks needs to be balanced against other public policy objectives. For example, there may be tensions between poverty reduction and financial stability goals or between financial inclusion and competition goals. Governments need to balance these goals at a whole-of-government level – and decide on appropriate trade-offs between them, looking at the overall needs and interests of the society. Different balances will be appropriate in different countries, and even at different times in a country’s history. As discussed earlier, in the Australian context this is dealt with through models such as Treasury’s wellbeing framework.

5.1 Credit and systemic stability risk

Credit and systemic risk were introduced earlier. Each client of a financial intermediary (including phone companies providing mobile payment services) is exposed to the risk of the intermediary becoming insolvent and being unable to honour the promises it previously made. This financial or credit risk has a number of elements. One is the direct risk of losing the funds held with the intermediary. For example, in “2008, the economic downturn resulted in many retailers filing for bankruptcy. Consumers found themselves holding worthless gift cards”.¹³⁵ This risk may be greater (for example) with smaller phone companies compared to mainstream banking institutions. A second element is the risk of consequential non-performance resulting from the insolvency.

There is an associated contagion risk with the insolvency or potential insolvency of a financial intermediary.¹³⁶ Public confidence in the payment system is fundamental –

¹³⁴ R Hooley and J Taylor, “Payment by Funds Transfer”

¹³⁵ M Budnitz, ‘Developments in payment law 2008’, at 4

¹³⁶ A Tyree, “Regulating the Payment System – Part 3: Financial Stability” (1999) 10 *Journal Of Banking And Finance Law And Practice* 236

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otherwise users will be unwilling to rely on the intangible promises underlying the payments system.¹³⁷ This systemic risk is that the failure of one financial intermediary will result in a significant loss of confidence in financial intermediaries generally and therefore in the system as a whole.¹³⁸

The wider economy depends on the continuing viability of the payments system.¹³⁹ It is vital because it enables money to be lent and repaid, goods and services to be purchased, labour to be hired and capital to be invested.¹⁴⁰ Each element of the payments system is heavily interdependent; the payments system relies on banks being able to reliably and consistently make payments between each other when needed.

The overall payment system is therefore exposed to the risk that the inter-bank system could be disrupted. This is part of the systemic stability risk inherent in the payments system.¹⁴¹

These systemic risks have two main sources: functional and credit. The functional risks are those associated with failure within the infrastructure of the inter-bank payment system.¹⁴² The credit risk is the counterparty risk discussed earlier.

5.2 Efficiency risk (competition protection)

Concerns about payment system efficiency have long been a part of regulatory concerns in this area. The efficiency risk in this context is that an inefficient or overpriced payment system may cost society an excessive amount to move money around the economy.¹⁴³

¹³⁷ E Wentworth, "Direct Debits, Consumer Protection and Payment System Regulation – Issues of Policy and Reform", (2002) 13 *Journal Of Banking And Finance Law And Practice* 77, at 77; SJ Hughes, "Regulation of Electronic Commerce: A Case for Regulating Cyberpayments" (1999) 51 *Administrative Law Review* 809, at 810; A Tyree and A Beatty, *The Law of Payment Systems*, at 114; European Commission, *Communication from the Commission to the Council and the European Parliament Concerning a New Legal Framework for Payments in the Internal Market* (2003) (www.europa.eu.int, viewed 26 February 2005), at 11

¹³⁸ M Budnitz, "Stored Value Cards and the Consumer: The Need for Regulation" (1997) 46 *American University Law Review* 1,027, at 1,042, 1,068, 1,071.

¹³⁹ Wallis Committee, 'Financial System Inquiry, Final Report', Chapter 5, 8

¹⁴⁰ B Smith and R Wilson, "The Electronic Future of Cash: How Best to Guide the Evolution of Electronic Currency Law" (1997) 46 *American University Law Review* 1,105; J Winn, "Symposium: Clash of the Titans: Regulating the Competition Between Established and Emerging Electronic Payment Systems", at 678; D Oede, "The Electronic Future of Cash: Why Regulate Cybermoney?" (1997) 46 *American University Law Review* 1,075, at 1,101.

¹⁴¹ A Tyree, "Regulating the Payment System – Part 1" (1999) 10 *Journal Of Banking And Finance Law And Practice* 66; B Smith and R Wilson, "The Electronic Future of Cash: How Best to Guide the Evolution of Electronic Currency Law", at 1,127

¹⁴² R Bollen, "A review of the regulation of payment facilities", at 327

¹⁴³ Wallis Committee, 'Financial System Inquiry, Final Report', Chapter 6

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As discussed earlier, there is a fundamental information asymmetry and power imbalance with many financial products and services, and payment products are no exception.¹⁴⁴ Without freely available information about the price and features of available products, the market for payment services is unlikely to be fully competitive.¹⁴⁵ Such lack of competition is likely to result in a lack of downward pressure on prices.¹⁴⁶ Effective competition on price and quality requires meaningful and comparable product disclosure.¹⁴⁷ Put simply, “transparency enhances competition in payment services”.¹⁴⁸

Minimum fair play rules (eg prohibitions on misleading, deceptive, unfair and unconscionable conduct) are also important to protect competition. Regulation of all markets for goods and services across the economy generally aims to ensure that the market works efficiently and competitively. This type of regulation includes rules promoting adequate disclosure, preventing fraud or other unfair practices, and prohibiting anti-competitive behaviour such as collusion or monopolisation. These kinds of rules do not materially alter or prescribe the nature of goods or services that can be sold. Rather, they simply try to ensure that markets trading in these products are fair and efficient.¹⁴⁹

5.3 Product mis-match and product failure

Some major types of customer risk associated with payment facilities are mis-purchasing (or mis-selling), inequality of bargaining power and product failure. Without adequate disclosure there is a real risk of poor purchasing decisions.¹⁵⁰ Decisions based on inadequate information are more likely to result in sub-optimal choices and potential misallocation of resources.¹⁵¹

¹⁴⁴ Australian Treasury, *Financial Markets and Investment Products: Promoting Competition, Financial Innovation and Investment*, at 104

¹⁴⁵ Harvard Law Review, “Consumer Protection and Payment Systems: Regulatory Policy for the Technological Era” (1985) 98 *Harvard Law Review* 1,870 at 1,883; Commission of the European Communities, *Communication from the Commission to the Council and the European Parliament Concerning a New Legal Framework for Payments in the Internal Market*, 34

¹⁴⁶ Australian Treasury, *Financial Markets and Investment Products: Promoting Competition, Financial Innovation and Investment*, at 104

¹⁴⁷ Australian Treasury, *CLERP Paper No 6*, at 104; European Commission, *Communication from the Commission to the Council and the European Parliament Concerning a New Legal Framework for Payments in the Internal Market*, at 14, 32, 34

¹⁴⁸ European Commission, *Communication from the Commission to the Council and the European Parliament Concerning a New Legal Framework for Payments in the Internal Market*, at 26

¹⁴⁹ Wallis Committee, ‘Financial System Inquiry, Final Report’, Chapter 5

¹⁵⁰ Harvard Law Review, “Consumer Protection and Payment Systems: Regulatory Policy for the Technological Era”, at 1,880

¹⁵¹ D Lon, “A Re-examination of Unspecified Operating Expense Disclosure Requirements in New Zealand: Has FRS 9 Made a Difference?” (2001) University of Otago,

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“Most countries that regulate payment cards impose a disclosure regime on ... card issuers, requiring disclosure of various terms and conditions of the accounts.”¹⁵² However, even with full information, it is unrealistic to expect consumers to make a fully informed and sophisticated decision about, for example, which mobile payment services are most suitable for them.¹⁵³

Consumers should not need to know where the pipes go to get water – or to stay out of the financial hot water that may occur if a payment goes astray. ... it is not economically rational to expect consumers to sort through the legal nuances of various payment methods ...¹⁵⁴

Disclosure studies in recent years have showed that disclosure is not terribly effective in improving consumer choice.

The 1970s debate over simplification of TILA requirements that resulted in the Truth-in-Lending Simplification Act of 1980 was centered on cognitive psychology and the theory of information overload. The theory of information overload posits that if too much information is disclosed to consumers, they are easily confused, cannot use the information, and do not make better decisions as a result.¹⁵⁵

Due to the fundamental power imbalance discussed earlier, the product terms and conditions may not embody a fair balancing of the competing interests of two equals. Instead, they may be materially biased towards one party (ie the financial intermediary).¹⁵⁶ For this reason, some minimum standards (eg product safety rules) are appropriate for these products.

There is also the risk that the service will not perform as promised (ie product failure). Customers depend to some extent on representations made about the product being truthful

(http://www.business.otago.ac.nz/acty/research/pdf/a_re_examination_of_opera.pdf, viewed 26 February 2005) at 13; JA Caswell, “Consumer Choice Policy” (2001) University of Massachusetts at Amherst (http://www.farmfoundation.org/2002_farm_bill/caswell.pdf, viewed 26 February 2005), at 2; Professor Bainbridge, “The Fallout from Grasso? How About More Worthless Disclosure?” (2003) (http://www.professorbainbridge.com/2003/09/the_fallout_fro.html, viewed 26 February 2005; Australian Consumers’ Association, *Submission to the Review of the Code of Banking Practice* (2000) (July) (<http://www.reviewbankcode.com/pdfs/2.pdf>, viewed 26 February 2005), at 7

¹⁵² A Rosenberg, “Better than cash? Global proliferation of payment cards and consumer protection policy” (2006) 44 *Columbia Journal of Transnational Law* 520, at 591

¹⁵³ G Hillebrand, “Before the grand rethinking: five things to do today With payments law and ten principles to guide new payments products and new payments law”

¹⁵⁴ G Hillebrand, “Before the grand rethinking: five things to do today With payments law and ten principles to guide new payments products and new payments law”, at 785-786

¹⁵⁵ A Rosenberg, “Better than cash? Global proliferation of payment cards and consumer protection policy” (2006) 44 *Columbia Journal of Transnational Law* 520, at 592-3

¹⁵⁶ W Effross, “Putting the Cards Before the Purse? Distinctions, Differences and Dilemmas in the Regulation of Stored Value Card Systems”, at 376; JW Carter and DJ Harland, *Contract Law in Australia* (2nd ed, Butterworths, 1991), at [224].

and predictions having at least reasonable grounds.¹⁵⁷ Product failure risk is the risk that the service will not have all the features or qualities that it was held out to have. This may be because the service's qualities were oversold, or because the provider is unable to deliver the service as promised.

5.4 Transactional failure

Another major customer risk area with payment services is transactional failure. This is the risk that the service will as a whole function properly but that, in particular transactions, the payment will not take place as intended (eg the wrong amount, wrong payee, wrong time) or that unauthorised payments will occur.

Most payment services provide clear allocation of liability for unauthorised and unsuccessful payments. They also generally accept that customers need regular transaction reports, and a cheap and easily accessible form of error resolution.

The possibility of a fraudulent or unauthorised transaction is one of the major risks with any payment system. "Consistent with the common understanding that legal rules should minimise the costs of payment systems, each system should allocate the loss of unauthorised use to the party in the best position to avoid it."¹⁵⁸ It is also important that providers use robust security systems to ensure that only the actual owner is able to transact on a customer's account.

One aspect of security is ensuring that the customer is only responsible for payments authorised by them or using some security measure allocated to them (eg a PIN or password). This form of security is not totally impenetrable, however, so one aspect of engendering consumer confidence is ensuring that the level of security provided by the financial institution is reasonable. And in practice the level of overall security is as much a sociological and behavioural issue as it is a technological one. For example, a family who shares money and property may quite naturally share cards and passwords.¹⁵⁹ The security of internet-based services is only as reliable as the computer networks being used (so issues may arise with public access systems at libraries and cafés).

¹⁵⁷ For example, s 769C of the *Corporations Act 2001* (Cth) provides that in the context of financial services, a representation about a future matter is taken to be misleading if not based on reasonable grounds.

¹⁵⁸ C Gillette and S Walt, "Uniformity and diversity in payment systems", at 532

¹⁵⁹ S Singh, "Towards a sociology of money and family in the Indian diaspora" (2006) 40 *Contributions to Indian Sociology* 375 [<http://cis.sagepub.com/cgi/content/abstract/40/3/375>, accessed 1 October 2009], at 381

5.5 Privacy

Related to security is the level of privacy protection provided for customers. Confidence and trust in payment services depends in part on the degree of privacy protection provided. While customers do not expect absolute privacy, banking-type services are traditionally ones where customers expect a high level of privacy.¹⁶⁰

Customers may be willing to trade off some degree of privacy for increased convenience and service levels, or other benefits. For example, frequent flier and loyalty schemes often reward customers for regular shopping at a particular vendor in return for losing a degree of anonymity in their transactions. It is vital, however, that clear commitments are made about the degree of privacy being offered and that these commitments are enforceable and actually complied with.

6 Key elements and comparative analysis

6.1 Background

Previous articles have summarised the payment services regime in Australia, the United Kingdom, United States and Europe.¹⁶¹ While each of these regimes differs to some degree, they can be compared and contrasted on a number of spectrums. This chapter will compare how they address the key issues of scope, licensing, disclosure, obligations of the parties (conduct rules), liability, redress and dispute resolution, and privacy. It will then suggest best practice under each of these headings based on the comparative analysis. This chapter will also discuss some overall design principles. The following chapter will build on this, setting out some possible ways of arranging these regulatory elements into a coherent regime. It will consider four possible structures.

This chapter explores the basic elements or building blocks of any regulatory model for payment services (eg disclosure or licensing).¹⁶² Together, these are used to address the key risks outlined in the previous chapter. A combination of tools is used collectively to mitigate these risks – one tool may be used in response to multiple risks and vice versa.

¹⁶⁰ *Tournier v National Provincial and Union Bank of England* [1924] 1 KB 461

¹⁶¹ See 3.3 above, ‘Comparative regulation’

¹⁶² Commission of the European Communities, “Communication from the Commission to the Council and the European Parliament Concerning a New Legal Framework for Payments in the Internal Market” at 23. The Commission has also considered possible regulatory models in their recent consultation.

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Prudential oversight of at least the larger players in the payment system is one core element of most regulatory regimes for payment services. This may be integrated with some form of conduct and disclosure licensing. Initial and ongoing disclosures are further core elements of any regulatory regime for payment services.

Minimum conduct of business standards are another core ingredient of most regulatory regimes for payment services. At the least, payment service providers should be obliged to have an easily accessible dispute resolution process. To avoid frustrating such a process, they should be required to keep adequate records of transactions by their customers. The other core minimum standard that should be mandated is a set of rules dealing with the allocation of liabilities for mistaken or unauthorised payments, or service malfunctions (eg technological failure with the access card or smart card). Ideally, the rules should represent an objectively fair bargain and limit the consumer's liabilities. However, this may be too onerous for some services. Mandatory liability allocation rules can also be implemented as a disclosure requirement rather than a substantive minimum standard – at its most basic, the requirement could be simply to disclose *how* losses will be allocated if certain problems occur.¹⁶³ Rules regarding finality of payments are another common minimum standard.¹⁶⁴

A number of jurisdictions also apply financial inclusion, equity or accessibility regimes to financial services. This is on the basis that the market left alone is unlikely to provide a socially-desirable level of services to some members of society for various reasons (including those affected by poverty, disabilities or geographic isolation). For example, banks may be obliged to provide a basic account to all interested customers (regardless of their income or assets).

6.2 Regulatory design principles

It is important that any regulatory regime be as neutral in its impact as possible. A regime that favours one business model or technology over another is likely to distort the market's process of natural selection.¹⁶⁵ This may result in one group of products or issuers having a

¹⁶³ Banking and Financial Services Ombudsman, *Emerging Issues in Electronic Banking Dispute Resolution: Special Bulletin* (2003) [www.abio.org.au, viewed 26 February 2005] at 3\]. It can be assumed that, for all payment facilities, there will be some mistaken and unauthorised payments.

¹⁶⁴ However, in the models below, finality of payment is addressed as a disclosure issue. Instead of imposing a particular finality rule, the proposed models would require that the extent to which use of the facility results in final payment must be disclosed.

¹⁶⁵ SL Lelieveldt, "The Electronic Future of Cash: How to Regulate Electronic Cash – An Overview of Regulatory Issues and Strategies" (1997) 46 *American University Law Review* 1,163 at 1,166-1,167; B Smith and R Wilson, "The Electronic Future of Cash: How Best to Guide the Evolution of Electronic Currency Law"

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favoured status over others for reasons other than their ability to meet customers' needs. Rather, "regulation should be designed in a manner that will not impede further technological and marketing innovation".¹⁶⁶ As far as possible, the regulatory regime should not favour one technology or business model over another.

Governments and regulators also aim for technology-neutral rules to preserve their longevity. It is especially true for industries relying heavily on e-commerce and the internet, but even for other industries it is important that the rules are designed in a way that ensures they will remain meaningful and useful for an extended period. Regimes are more likely to be sustainable where they are designed around the behaviour they are trying to manage and are as neutral as possible about the mechanisms and technologies involved.¹⁶⁷

One commentator noted, "as nature abhors a vacuum, so do regulators".¹⁶⁸ In our view, the presence of a regulator with supervision and enforcement powers is an important part of any effective regulatory regime for payment services. We assume that for each of the regulatory models discussed in this and the following chapter, a regulatory agency of some sort would be involved.

Regulatory regimes are not generally self executing. They tend to need a regulator to supervise and enforce conduct of business rules. Relying on private citizens or competitors, who do not have sufficient expertise and incentive to take action, is unlikely to be a fully effective enforcement strategy. Law enforcement is a public good – it is likely to be undersupplied by private actors in a free market system.

An efficiency or competition protection regime is generally accepted as justifiable and necessary for payment services. Product disclosure is discussed below. Minimum fair play rules are also needed. As discussed in sections 3.3 and 5.2 above, they include prohibitions on misleading, deceptive, unconscionable and harassing conduct. For the purposes of these

(1997) 46 *American University Law Review* 1,105, at 1,127; R Sifers, "Regulating Electronic Money in Small-Value Payment Systems: Telecommunications Law as a Regulatory Model" (1997) 49 *Federal Communications Law Journal* 701, at 727; W Effross, "Putting the Cards Before the Purse? Distinctions, Differences and Dilemmas in the Regulation of Stored Value Card Systems", at 378; Commission of the European Communities, "Communication from the Commission to the Council and the European Parliament Concerning a New Legal Framework for Payments in the Internal Market" at 17.

¹⁶⁶ M Budnitz, "Stored Value Cards and the Consumer: The Need for Regulation", at 1,029.

¹⁶⁷ B Koops, "Should ICT Regulation be Technology-Neutral?", chapter 4 of Koops, Lips, Prins & Schellekens, eds., *Starting points for ICT regulation. Deconstructing prevalent policy one-liners, IT & law series*, The Hague: T.M.C. Asser Press, 2006

¹⁶⁸ J Rinearson, "Regulation of Electronic Stored Value Payment Products Issued by Non-Banks Under State 'Money Transmitter' Licensing Laws" (2002) 58 *The Business Lawyer* 317, at 321.

models, we assume that an economy-wide fair trading regime is in place. These generally include civil liability and criminal penalties for fraud, misleading and deceptive conduct.

6.3 Scope

One key issue in each jurisdiction is the scope of its regulatory regime. In some the answer differs depending on whether you are talking about the licensing or disclosure regime, and even within those categories (ie conduct of business and prudential licensing regimes may have different scopes).

The most modern and progressive regimes take a broad functional approach to scope. The Australian regime applies to issuers and distributors of facilities through which a person makes (or causes to be made) non-cash payments.¹⁶⁹ The EU *Payment Services Directive* applies to services for “depositing, withdrawing or transferring funds from a payer to a payee, irrespective of any underlying obligations between the payment service users”.¹⁷⁰ By contrast, the US Art 4A regime applies to services involving an “instruction of a sender to a receiving bank, transmitted orally, electronically, or in writing, to pay, or to cause another bank to pay, a fixed or determinable amount of money to a beneficiary”, where the instruction is unconditional and the instruction is transmitted by the payer to its bank or to an agent.¹⁷¹ The UNCITRAL Model Law has a similar scope to the EU regime, covering banks and others for whom an ordinary part of their business is executing payment orders. The Model Law covers both retail and wholesale transactions, but generally only credit transfers.

Broad functional definitions reduce the potential for artificial dividing lines between regulated and unregulated products, and the potential for regulatory arbitrage and ‘gaming’ the system. It also enables a more future-proof regime, where regulatory scope is not tied to historical business models or technologies. Regulatory regimes by their nature lag behind industry innovation, and generally the best that the regime can do is to be flexible and purposive to maximise its longevity.

Most regimes set up a layered set of rules, or tiers. Some products are fully excluded from all regulation (other than broad economy-wide regulation on topics such as fraud and misleading conduct). The next tier is a set of basic rules for low value products. Third is a set of general conduct and disclosure rules for the majority of products. The fourth tier is a set of intensive

¹⁶⁹ Chapter 7, *Corporations Act 2001* (Cth)

¹⁷⁰ *Payment Services Directive*, Art 2(1)

¹⁷¹ *Uniform Commercial Code* (US), § 4A-103(a)(1)

additional prudential rules for products which are of a deposit-taking nature (or can readily act as a substitute for a banking-style product). Deposit products for these purposes may be defined as a contractual debt arrangement between a financial institution and client where the client places funds with the institution for later withdrawal or use in making payments.¹⁷²

The EU and Australian definitions are probably closest to best practice in this field at present. Both are functional and technologically neutral. A definition along the Australian lines, being slightly more outcome rather than process centric, is probably preferable as it is inherently more future-proof. However, the downside is that it is over-inclusive and numerous specific exemptions have been required. Therefore, a suggested best practice approach is that the regime covers the ‘service of making money or funds available to a payee on the instructions (direct or indirect) of a payer’. This more substantive and purposive approach should include most services, but will hopefully exclude some marginal arrangements.

6.4 Licensing

Two levels of licensing are applied in most regimes. The first, a broad financial services licensing regime, applies to the majority of payment services. This generally includes a fit and proper (or competence) regime, some basic resource requirements, a compensation and dispute resolution regime and some ongoing surveillance by a regulatory authority with the power to de-licence or remove people from the industry.

Broader conduct licensing is an element in any hypothetical regulatory regime. This may be integrated with a prudential licensing regime – or the two licensing regimes may be separate. A conduct licensing regime will involve a regulatory agency conducting some kind of initial assessment of the competence and integrity of an entity before they commence a business of issuing or distributing payment services. It will also provide for an agency to supervise licensed intermediaries to ensure that they comply with, for example, their disclosure obligations and the minimum standards.

A more basic version of licensing for particularly low impact services is a registration regime. Firms have to register with the regulator, but do not have to pass any substantive entry tests (eg competency). This gives the regulator some information about participants in

¹⁷² R Bollen, “Time to review the concept of deposit”

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the market, and a mechanism to expel people from the market (eg by de-registration) if problems arise later (eg in response to customer complaints).

The Australian regime applies broader licensing to all non-cash payment facilities in scope (see 6.3 above) as does the EU Payment Services Directive. The US does not have a national licensing regime for payment services, and the UNCITRAL Model Law does not include any form of licensing regime.

Most then have a more intensive prudential licensing regime for firms which engage in deposit-taking and sometimes also those who provide products which are functionally *equivalent* to banking products. This type of licensing regime also deals with issues like whether an applicant is fit and proper. But it tends to go further and set minimum capital requirements (both in absolute and relative terms), liquidity benchmarks, an intensive reporting and auditing regime, and detailed rules about the ownership and governance of the firm.

The prudential element aims to minimise insolvency risk for financial intermediaries whose failure is likely to have a significant impact on individual customers or on the economy as a whole. This is true for intermediaries who provide a deposit-taking service, regardless of whether they are banks in the traditional sense. Intermediaries that accept the ‘deposit’ of funds on a large scale and promise to repay the money or make payments with it as the customer directs, ought to be supervised prudentially. Prudential supervision involves a combination of minimum capital or other financial resources together with mandatory risk management systems and controls. This can be implemented through a stand-alone licensing regime or as part of a wider conduct and disclosure licensing regime.¹⁷³

There is a good argument for excluding from the prudential regime any intermediary with only a small-scale payment services business.¹⁷⁴ While any definition of ‘small’ is arbitrary,

¹⁷³ Compare the Australian twin peaks model (separate prudential and conduct/disclosure regulators) with the single regulator model in the United Kingdom.

¹⁷⁴ Anti-money laundering regulators may draw the line differently here, as small value for money laundering purposes may be quite different to low value for prudential regulation purposes. Further, money limits for money laundering purposes are generally on a per-client basis rather than on a total funds at risk basis.

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examples of where to draw the line are the AUD 10 million exemption provided for by the Reserve Bank of Australia and €5 million by the UK Financial Services Authority.¹⁷⁵

Regardless, intermediaries who participate in the interbank payment system (or any other ‘core’ payment system) should be regulated under a prudential-type regime for systemic stability reasons. This is partly provided for by ensuring that the central bank operates and oversees the interbank payment system and its participants. A systemic stability regime is generally accepted as justifiable and necessary for payment services. Systemic stability level oversight of at least the largest players in the payment system is a core element of most modern regulatory regimes for payment services.

The Australian regime applies the banking-style regime to all firms conducting banking business, which includes traditional deposit-taking as well as some additional payment services if used widely enough to be of a systemic concern to the banking regulator. The EU credit institutions regime applies to “undertaking[s] whose business is to receive deposits or other repayable funds from the public and grant credit from its own account”¹⁷⁶ and their electronic money regime to issuers of monetary value represented by a claim on the issuer and which is stored on an electronic device, issued at par value and accepted as means of payment by third parties.¹⁷⁷ The scope of the US banking regime varies between its various state and federal banking regulators, so it is difficult to draw any overall conclusion.

Best practice would appear to be a regime where all services in scope (see 6.3 above) are caught by a basic licensing regime, and in addition all deposit and similar products above a *de minimus* value would be covered by a banking-style prudential regime. Both the basic licensing and prudential regimes should include some appropriate financial resource requirements. This needs to be scalable depending on the size and risk levels – for small payment services, it might be merely that client funds are segregated from general company funds (ie into a separate trust account), but for large operators it would need to be a risk-based capital adequacy requirement akin to the Basel banking regime.

¹⁷⁵ RBA, *Regulation Of Purchased Payment Facilities Under The Payment Systems (Regulation) Act 1998* (2004) [http://www.rba.gov.au/MediaReleases/mr_04_04.html, viewed 26 February 2005]; FSA, “FSA Handbook”, [<http://www.fsa.gov.uk/Pages/handbook/> viewed 26 February 2005]

¹⁷⁶ 2006 Directive, Art 4

¹⁷⁷ Article 1, E-money Directive

6.5 Disclosure

Substantial initial and ongoing disclosure is generally required to overcome the information asymmetry issues discussed at section 4.4 above. Most regimes require some upfront disclosure about the nature of the product, the applicable fees and charges, and how any problems with the product will be dealt with. Ongoing disclosures generally fulfil a reporting function – informing the customer of the current balance, and recording recent transactions and fees.

Two or three levels of disclosure are applied in most regimes. A more modest set of requirements apply to all (including low value) payment services and a more fulsome set to higher-value general purpose payment services.

In the EU, the required disclosures depend on whether the payment is a one-off transaction, part of a standing facility or a particularly low value transfer. In Australia, a number of different rule sets exist, depending on whether the product is fully exempt (eg a gift card), lightly regulated (eg a low value product), a 'regular' non-cash payment facility or a deposit product with a regulated banking institution.

The UNCITRAL Model Law and US Article 4A have very little to say about the disclosures that must be given to clients. This is probably a symptom of them being more general and not attempting to introduce a specialist consumer protection disclosure regime.

Best practice in initial disclosure appears to be providing consumer clients with the following information in a concise and readily understandable way:

- the name and contact details of the issuer,
- how the service works (eg how consumers can add to or withdraw from their balance) and whether it has an expiry date,
- whether the balance earns any type of return and whether it is insured, held in trust or otherwise protected (eg a bank guarantee),
- the amount and nature of any fees or charges,
- what to do if the service's security is compromised (eg the access card is lost or stolen),

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- how errors and disputes are resolved (eg if there is a mistaken or unauthorised transaction),
- how personal information about customers is treated,
- how the customer may obtain their balance and transaction history (eg a periodic statement),
- whether payments made using the service result in final discharge of the customer's debts to third parties, and
- whether (and how) the issuer may change the terms and conditions of the service.

Best practice would be for these upfront (eg point of sale) disclosures to be required for all consumer payment services (other than very small schemes)¹⁷⁸ and would be worth considering for non-consumer (ie business) facilities as well. “Disclosure regulation is at the core of any regulatory scheme to protect consumers as it enhances consumers’ ability to assess financial products and make informed decisions.”¹⁷⁹ However, “the quality and not the quantity of the information [is] the crucial factor”.¹⁸⁰

Four main types of ongoing disclosure are common to the regimes discussed. They are notice of changes to terms and conditions, transaction receipts, periodic statements and balance information on demand. The manner of notice can also vary. For example, notice of changes can be sent to clients by post, fax or email; balance information can be provided with each transaction or via some kind of at call facility (eg at an ATM, or via phone or internet facility). Some products require a different approach – some products are sold on an anonymous basis, so notices and statements need to be provided via a website also.

All four involve cost but on balance they are probably justified and should be included in a best practice model. Best practice is receipts, notice of changes of terms and conditions, periodic statements, and balance on request.

¹⁷⁸ M Budnitz, “Stored Value Cards and the Consumer: The Need for Regulation”, at 1,069

¹⁷⁹ Australian Treasury, *Financial Products, Service Providers, and Markets – An Integrated Framework: Implementing CLERP 6 Consultation Paper* (1999)
<http://www.treasury.gov.au/contentitem.asp?NavId=&ContentID=268> at [4.2]

¹⁸⁰ Commission of the European Communities, “Communication from the Commission to the Council and the European Parliament Concerning a New Legal Framework for Payments in the Internal Market”, at 26

6.6 Obligations of the parties (conduct rules)

The key players in a payment service are the payer and payee and their respective financial institutions. Also relevant to some transactions are intermediary / correspondent institutions. In most jurisdictions their duties are set out in a combination of contract, case law, legislation and codes of conduct.

Payment services are at their core a contractual arrangement where the provider and client are in a debtor-creditor relationship. Being a debt, the key terms are that the provider must repay the debt to the client, or make payments as directed by the client, up to the value of the client's balance plus any agreed overdraft. Such payments must be made promptly for the amount and to the person specified by the client, or else the provider is paying out their own money rather than the client's. The provider is also generally obliged to receive incoming payments on behalf of the client and promptly credit them to the client's account. Broad obligations also include general duties of care and confidentiality. For clients, it may include a duty to avoid or notify of frauds discovered on the account.¹⁸¹

The key obligations of the parties are essentially the same in each jurisdiction reviewed. The primary differences are in the levels of codification. In Australia, these issues are almost entirely left to industry codes and case law. In the UK and EU they are partly codified in legislation and in the US they are mostly codified (in Art 4A). These are important issues and ought to be codified in legislation.¹⁸² This allows for a transparent public debate about how best to balance the needs and interests of the various stakeholder groups, a task courts are not inherently equipped for. Therefore, a best practice regime would specifically set out the conduct rules (eg obligations of the parties) in statutory form (eg rules or regulations).

Under the UNCITRAL Model Law a payment order is only binding on the payer if 'authorised'. As opposed to some of the national regimes above, the Model Law focuses on the reasonableness of the authorisation method chosen by the financial institution. Under most regimes (including the Model Law), the payer must make funds available to their financial institution for them to carry out the payment.¹⁸³ The payer institution is then obliged to pass these funds on (directly or indirectly) to the payee institution within the relevant mandatory time period. The payee bank's primary obligation, as one would expect,

¹⁸¹ *London Joint Stock Bank Ltd v MacMillan and Arthur* [1918] AC 777

¹⁸² In Australia, that would mean the content of the EFT Code would be legislated.

¹⁸³ Article 5(6), Model Law; Article 41, 2007 Directive

is to make the funds available to the payee promptly after receiving and accepting a payment order.¹⁸⁴ The Model Law also has a set of completion or finality rules that set out when the overall payment is complete.¹⁸⁵

One subset of the obligations of the parties is the rules around when and how payments must be executed and when they are final. General contract and case law requires prompt execution and completion in most countries. Under the US and EU regime, and under the UNCITRAL Model Law, the receiving bank must execute the payment order promptly. Generally, the payment order must be executed on the day it is accepted.

In Australia the legislation and relevant codes of conduct do not specify time limits. As set out above, it is preferable that these important issues are set out in statutory form (probably in rules or regulations to provide for greater flexibility than primary legislation).

Best practice here appears to be clear specification of the duties of the parties, in outcome language (to ensure it is technology neutral and forward-looking). The regimes should set out the main obligations (eg to promptly make the funds available to the payee in full unless agreed otherwise) and leave the specific details to the participants.

6.7 Liability, redress and dispute resolution.

Free consumer-centric dispute resolution procedures are a part of most modern payment services regimes. They are available in the Australian and EU regimes.

The EU, US and UNCITRAL regimes have a broad obligation to make the funds available and a form of money-back guarantee or liability for failure to effect payment. Such a provision does not exist in the Australian statutory framework, but case-law might achieve a similar result.

The UNCITRAL Model Law's 'money back guarantee' is a powerful customer protection measure.¹⁸⁶ If a payment is not successfully completed, the payer is entitled to a refund plus interest. Under the Model Law, interest and other damages may also be available where one or more financial institutions are at fault. Dispute resolution arrangements are left to national law under the Model Law.

¹⁸⁴ Article 10(1), Model Law; Article 73, 2007 Directive

¹⁸⁵ Article 19, Model Law; Article 69, 2007 Directive

¹⁸⁶ Article 14, Model Law; Article 75, 2007 Directive

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Many regimes have a cap on the losses that consumers are exposed to in the case of fraudulent or unauthorised transactions. In most jurisdictions, the consumer is only responsible for payments that they authorise (or that are authorised by a security method invoked by using the customer's PIN or password). In Australia this goes further, and the consumer's losses are capped in all cases other than 'gross negligence'.

In the EU and US, the financial institution must utilise reasonably robust security measures (for customers authenticating transactions). No such rule applies in Australia, but a similar result may follow from the institution being liable for all unauthorised transactions other than in cases of gross negligence.

Best practice is that the customer is bound only by transactions authorised by them (or with their authority – such as by using their allocated password) and through a robust security measure. This should be reinforced by loss caps and a money back guarantee on unauthorised or unsuccessful payments.

Best practice, therefore, appears to be a:

- free independent dispute resolution scheme for consumers,
- requirement that security measures used for payment authentication are reasonably robust,
- cap on losses a consumer is exposed to for incidents they are not responsible for, and
- money-back guarantee for unsuccessful payments.

6.8 Privacy

Most jurisdictions have some privacy protections applying to payment services. While in some countries they are part of the financial services regulatory regime, in most they are part of a general set of privacy rules applied economy-wide. Australia's regime has been recently updated and provides broad protection around payment services, as does the EU regime.¹⁸⁷ The US regime, however, is somewhat more fragmented.

¹⁸⁷ *Privacy Act 1988* (Cth)

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In some (eg Australia) there is a specialist stand-alone privacy regulator. In others (eg the US), privacy is covered by each industry regulator as part of their overall supervision of their firms.

In many countries, privacy is dealt with under case law. For example, case law in the banking field has provided privacy and secrecy protection for centuries. The leading common law case in this area is *Tournier v National Provincial and Union Bank of England*.¹⁸⁸

Best practice here would appear to be a requirement that institutions publish a legally enforceable privacy policy and that they are restricted to using a customer's personal information only in ways expressly agreed to by the customer. Best practice also appears to be an economy-wide set of privacy rules, rather than a tailored set designed for payment services. The privacy issues raised in payments services are not dissimilar to those arising in most other financial services (or even in value-added services generally).

7 Regulatory structures

This chapter discusses how one might *assemble* the elements of a better or best practice regulatory regime identified in chapter 6 and apply them to the range of payment services present in a modern economy. Because the services range from small convenience gift cards to high value inter-bank payment systems, difficult questions have to be asked about what combination of rules apply to which services. Four possible structures are discussed below.

7.1 Unitary approach

The simplest structure is a unitary one. It would apply the core elements of the best practice regime above to all players. By necessity it would involve some of the moderately costly regulatory elements being imposed on all operators (even though it may be excessive for some lower-risk operations), but would also mean the most costly elements would not be applied at all (even though justified for some larger operations).

Our suggestion is that a unitary regime would probably involve the following elements:

¹⁸⁸ [1924] 1 KB 461

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- conduct and disclosure licensing, but no prudential regulation,
- initial product disclosure,
- some ongoing disclosure – receipts, notice of changes of terms and conditions, and balance and transaction history information on request only, and
- mandatory error resolution, record-keeping and liability allocation procedures.

In our view, such a unitary structure is unsatisfactory. Prudential regulation is clearly warranted for larger payment services and, because it is probably not realistic to apply to all services, this is a strong argument against a one-size-fits-all approach. At the same time, some of the requirements one would have to apply to very small-scale schemes under a unitary regime would probably be unduly onerous. For example, it is arguable that a positive licensing regime is excessive for very small-scale schemes.

7.2 Two-tiered

A two-tiered structure allows for a more tailored regulatory approach. It requires a somewhat arbitrary distinction between smaller (lower impact) and larger (higher impact) schemes. Different jurisdictions use different boundaries but the most practical and relevant here are probably either a monetary limit or a functional limit. An example of a monetary limit would be to set the boundary at payment services with capped total balances of (say) \$5,000,000 (all facilities issued by the intermediary). A \$5,000,000 capped scheme can be seen as a *de minimis* category – a category apparent in most comparable overseas regimes.¹⁸⁹ Possible functional limits would be to draw the line at services that can only be used for one-off transactions (eg gift vouchers), with a small group of payees (merchants) or for a small number of uses (eg a transit card or university card), or a combination of these.¹⁹⁰

A regulatory structure based on a two-tiered structure would involve all of the elements in chapter 6. Most would be applied to all services. The key structural variables in this model are:

¹⁸⁹ M Budnitz, “Stored Value Cards and the Consumer: The Need for Regulation”, at 1,043-1,044; FSA Handbook

¹⁹⁰ T Ehrlich, “To Regulate or Not? Managing the Risks of E-Money and its Potential Application in Money Laundering Schemes” (1998) 11 *Harvard Journal of Law and Technology* 83, at 841; W Effross, “Putting the Cards Before the Purse? Distinctions, Differences and Dilemmas in the Regulation of Stored Value Card Systems”, at 331; A Tyree and A Beatty, *The Law of Payment Systems*, at 17

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- a basic registration regime only would apply to lower impact products (limited functionality and/or capped balances), with a full licensing (conduct and prudential) applying to all other products; and
- periodic statements would apply to higher-impact products only.

A two-tiered regime provides some basic flexibility within a simple structure. This simplicity minimises the confusion amongst participants, including consumers. Complexity adds costs for industry (to understand and maintain their regulatory status) and can cause consumer confusion. As such, flexibility and tailoring needs to be balanced against simplicity and certainty.

7.3 Three-tiered

A three-tiered structure allows for a more proportionate regulatory approach.¹⁹¹ Again, it requires somewhat arbitrary distinctions between smaller, moderate and larger schemes. Different jurisdictions use different boundaries, but the most practical and relevant here are again probably monetary and functional limits. Examples of a monetary limit would be to set the boundary between:

- smaller (lower impact) and moderate (moderate impact) schemes at those with capped total balances of \$1,000,000 (all products issued by the intermediary); and
- moderate (moderate impact) and larger (higher impact) schemes at those with capped total balances of \$10,000,000 (all products issued by the intermediary).

Examples of functional limits would be to draw the line between smaller and moderate schemes at those services that can only be used for one-off transactions (eg gift vouchers), with a small group of payees (merchants) or for a small number of uses (eg a transit card or university card).¹⁹²

¹⁹¹ Commission of the European Communities, “Communication from the Commission to the Council and the European Parliament Concerning a New Legal Framework for Payments in the Internal Market”, at 24. A different three-tiered approach is floated in the EU’s recent paper.

¹⁹² T Ehrlich, “To Regulate or Not? Managing the Risks of E-Money and its Potential Application in Money Laundering Schemes” (1998) 11 *Harvard Journal of Law and Technology* 83, at 841; W Effross, “Putting the Cards Before the Purse? Distinctions, Differences and Dilemmas in the Regulation of Stored Value Card Systems”, at 331

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A three-tiered regulatory structure would differentiate smaller, moderate and larger schemes. It would involve all of the elements in the previous chapter. Many would be applied to all services. The key structural variables in this model are:

- a basic registration regime only for smaller and restricted-use schemes, a general licensing regime for moderate schemes, and both general and prudential licensing regimes for larger schemes,
- the provision of terms and conditions only for small and restricted-use schemes, but structured consumer product disclosure for moderate and larger schemes, and
- notice of changes of terms and conditions, and balance on request for all services, with receipts and periodic statements added for moderate and larger sized schemes.

A three-tiered structure provides reasonable flexibility within a fairly simple model. Whether the benefits of increased flexibility and tailoring are exceeded by the costs for industry (to understand and maintain their regulatory status) and any potential consumer confusion is unclear at this stage. On balance, we suggest that a three-tiered structure is a useful position to take forward for further consideration.

7.4 Scaled approach

A fourth possible regulatory structure would be to consider each class of services individually against each potential requirement. This would involve each class or subclass of payment service being considered in turn, and a decision made as to the appropriate regulatory regime. For example, one would take cheque accounts and consider which of the regulatory elements are appropriate and the details of the relevant rules to apply (eg exactly which disclosures to require etc). Then one would take off-line smart cards and consider each regulatory element in turn, and so on.

The advantage of such an approach is that each type of service would have a highly tailored regulatory regime. It would minimise the risk of under or over-regulating a class. However, it is likely to result in far greater complexity and may stifle innovation and product development. Revisions to existing services and the development of new services would be complicated due to questions about the applicable regulatory category for the revised or new service. Compliance costs are likely to be considerably higher under such a model.

Regimes that develop over a long period of time tend to resemble this structure. As each new service is developed, a new set of regulatory rules is devised. Depending on the prevailing regulatory and economic context, new services may inherit a more intrusive or a more 'light-touch' regime. Over time, the risk is that the differences and inconsistencies between the regulatory regimes applying to the different groups of services become both more pronounced and harder to justify. On balance, we suggest that a fully scaled regulatory structure for payment service is *not* ideal.

On balance, the three-tiered structure is probably preferable. It has the advantages of some level of graduation but still a high degree of simplicity. Of course, where the lines are drawn between the levels is inherently arbitrary. However, there is a fair degree of consistency between jurisdictions on where the lines are drawn at present.

8 Conclusions and best practice model

8.1 Best practice

The previous chapters explained our research into the development and regulation of payments services. We compared and contrasted the regulation of these services in a number of key countries, to develop an understanding of best practice.

This paper identifies a best practice regime on two levels. The first is the elements or building blocks (eg a licensing regime): see chapter 6. The second is how and when they should be applied: see chapter 7. The elements, based on analysis of key national regimes, are fair play rules, systemic stability, an active supervisor, broad scope, licensing, disclosure, obligations of the parties, liability, dispute resolution and privacy. The paper also explains how these elements can be combined to construct a coherent overall regime. The result is a recommended best practice model involving licensing, disclosure, conduct and redress standards in a three-tiered structure (thus providing a lighter-touch regime for low value products and a more intensive regime for more substantial banking-style products).

Regulation of payment services is a complex undertaking, and best practice involves a number of elements. We conclude that best practice would be a regime with the following elements:

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- a) economy-wide fair play rules (eg misleading & deceptive conduct prohibitions),
- b) a broad and technology-neutral scope (ie functional and purposive),¹⁹³
- c) an active, well-resourced, supervisor (to monitor the conduct, licensing and disclosure regime),
- d) basic conduct rules (based on duty of care and agency principles, eg the provider must make payments only as and when ordered),
- e) redress arrangements (eg free and easily accessible dispute resolution),
- f) privacy protections,
- g) a central bank overseeing the core payment system (for systemic stability purposes),
- h) general-purpose licensing for all but the smallest players (eg competence, compliance arrangements and training),
- i) prudential-style licensing for the larger players only (eg minimum capital, corporate governance, systems and controls),
- j) point of sale disclosure (eg of the product features, risks and fees), and
- k) ongoing disclosure (eg balance and transaction history).

Each of these elements exists in one or more countries presently. What our research adds, however, is to put them together in a unique and more effective way. It also contributes by varying the application point for these elements. The variation in regimes is not just in the elements used, but also where and when. For example, what value of fund, size of player or degree of product functionality should trigger the prudential regime?

Elements (a)-(g) should be applied to all payment services. Elements (h)-(k) would only apply to a sub-set of services. We suggest the following trigger points for these more intensive elements to the regime:

¹⁹³ see suggested scope in section 6.3

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- registration, but no periodic statements or point of sale disclosure – schemes with limited functionality and total balances (all customers) below \$1,000,000. These products would be subject to the economy-wide and primary requirements only,
- point of sale (**POS**) disclosure, ongoing disclosure and general licensing – schemes with total balances (all customers) above \$1,000,000. These products would be subject to the economy-wide, primary and secondary requirements, and
- prudential licensing – schemes with total balances (all customers) above \$10,000,000. These products would be subject to all of the requirements (economy-wide, primary, secondary and tertiary).

Our suggested best practice model is therefore modular. That is, some elements apply to all services, and some only to a sub-set. Some elements are actually economy-wide rules, and are not specific to the payment services industry at all (they are simply referred to here for completeness). It can be represented visually as set out below.

Tertiary	Licensing – prudential			
Secondary	Licensing - general	POS disclosure	Ongoing disclosure	
Primary	Scope	Government supervisor	Liability / redress	Conduct rules
Economy-wide	Fair play	Central bank	Privacy	

8.2 Conclusions

The previous articles looked at the history and development of payment services. An understanding of the legal nature of payment services is vital to designing an appropriate regulatory regime for what are often conceptually difficult products.

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As the economy continues to be heavily reliant on payment services for its efficient operation, commentators and governments have taken a keen interest in the operation of payment services. This paper has examined the six key regulatory risks arising from payment services: credit risk, efficiency risk, product mis-match, product failure, transactional failure, and privacy.

The case for regulating payment services was considered against each of these risks. On balance, it was shown that regulatory intervention is probably justified in relation to each of them. A simplified cost-benefit analysis for each form of intervention guided the regulatory structures discussion in chapter 7.

Best practice was identified on the following issues through analysis of these national regimes:

- scope,
- licensing,
- disclosure,
- obligations of the parties,
- liability, redress and dispute resolution, and
- privacy.

The EU regime is the most modern and comprehensive regime for payment services currently in operation.¹⁹⁴ It is probably the best existing model. However, a best practice model would include a broader, more purposive scope – akin to the Australian FSR regime, together with a more fulsome set of rules for the underlying payment and settlement system (eg based on the US UCC and UNCITRAL interbank rules).¹⁹⁵

¹⁹⁴ L Bojer, “International credit transfers, the proposed EC directive compared with the UNCITRAL Model Law”; RFH Mertens and JGC Rinkes, “Cross-border payments and consumer protection”; EU Payment Services Directive

¹⁹⁵ L Bojer, “International credit transfers, the proposed EC directive compared with the UNCITRAL Model Law”; UNCITRAL Model Law on International Credit Transfers; Article 4A of the US Uniform Commercial Code

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Chapter 7 considered some possible regulatory structures for payment services. This followed a brief discussion of the UNCITRAL Model Law and the current regulatory regimes applying in Australia, the European Union and the United States.

Four possible regulatory structures were discussed. On balance, we expressed a preference for a three-tiered structure.

Our research has taken the regulatory elements used in a number of countries and constructed a best practice model. First it relies on economy wide fair play and privacy rules, and the presence of a central bank supervising the core inter-bank payment system. Next it adds a primary layer of rules to all payment services (scope, an active supervisor, redress, and duties of care and agency). Third, it adds a general licensing regime, point of sale and ongoing disclosure for all services above a modest initial threshold (schemes with broad functionality and total balances (all customers) above \$1,000,000) (the secondary layer). Finally, it applies a tertiary layer – a prudential licensing system to all services about a higher threshold (schemes with broad functionality and total balances (all customers) above \$10,000,000).

This proposed best practice model should be beneficial for countries seeking to modernise their payment services regulatory regime, as well as those implementing such a regime for the first time. We believe a best practice model will be useful, with appropriate local adaptations, across the spectrum of developed and developing countries. As each country's circumstances are unique, we are not suggesting a universal 'off the shelf' regulatory model. Rather, we have synthesised a best practice model that takes into account the lessons learnt internationally in the regulation of payment services. The model conveniently collects together a logical and useful package of regulatory measures to assist governments and policy-makers to design and implement an appropriate regulatory regime in their context.

PhD by Publication

Publication list

1. R Bollen, “A review of the development and legal nature of payment facilities” (2005) 16 *Journal of Banking and Finance Law and Practice* 130
2. R Bollen, “A review of the regulation of payment facilities” (2005) 16 *Journal of Banking and Finance Law and Practice* 325
3. R Bollen, “What is a payment (and why does it continue to confuse lawyers)” (2005) 2 *Macquarie Journal of Business Law* 189
4. R Bollen, “Time to review the concept of deposit” (2006) 17 *Journal of Banking and Finance Law and Practice* 283
5. R Bollen, “A review of the history and operation of international payment systems” (2007) 18 *Journal of Banking and Finance Law and Practice* 27
6. R Bollen, “The legal nature of international payments” (2007) 18 *Journal of Banking and Finance Law and Practice* 85
7. R Bollen, “Airlines and “queue-jumping” in insolvency” (2008) 19 *Journal of Banking and Finance Law and Practice* 35
8. R Bollen, “A review of European regulation of the payment system” (2007) 18 *Journal of Banking and Finance Law and Practice* 167
9. R Bollen, “A review of recent developments in European payment system regulation (including the new Payment Services Directive)” (2008) 19 *Journal of Banking and Finance Law and Practice* 47
10. R Bollen, “Harmonisation of international payment services law – part 1 (the UNCITRAL model law)” (2008) 19 *Journal of Banking and Finance Law and Practice* 186
11. R Bollen, “Harmonisation of international payment services law – part 2 (US Article 4A)’ (2008) 19 *Journal of Banking and Finance Law and Practice* 249
12. R Bollen, “Recent developments in mobile banking and payments” [2009] *Journal of International Banking Law and Regulation* 454
13. R Bollen, “Recent developments in banking services in developing countries” [2009] *Journal of International Banking Law and Regulation* 509