

Industry issues and debates

APCA aspires to be the leading authority on the Australian payments system and internationally recognised for excellence in payments system evolution.

APCA CONTINUES TO DEVELOP ITS ROLE AS A NETWORK FOR IDEAS. THREE SHORT ARTICLES PROVIDE A SNAPSHOT OF CURRENT IDEAS THAT WILL SHAPE FUTURE INDUSTRY DYNAMICS.

International payments dynamics

The credit crunch has convulsed the global financial services industry. Bank failures have marred the outlook in Europe and the Americas. Governments and central banks debate rescue packages and brace for more to come. Amongst the turmoil, payment systems infrastructure has not only remained resilient and robust, but made some significant advances.

The international context is key to understanding local developments.

The world has entered an era of turmoil in financial services and financial markets. Investment banks have been hit hardest: their basic business model is under threat. But the credit crunch is challenging for commercial and retail banking as well. Despite these events, the international payments infrastructure has proven resilient and robust. The stability of global payments systems is not under question.

Payment systems continue to evolve and develop despite the turbulence. New entrants, new technology, regulatory developments and evolving customer demands are all shaping an international payments landscape which is increasingly global, dynamic and competitive.

Global payment trends

Cash is still king, at least for the time being. It makes up the majority of transactions in most developed economies despite healthy growth in non-cash payments. The 2008 World Payments Report notes that in the Eurozone, non-cash transactions per person grew at 6% compound annual growth rate (CAGR) between 2002 and 2006, but cash in circulation grew by 11% CAGR. However, there are large variations between countries in cash usage versus non-cash transactions.

In countries with well-developed non-cash payment mechanisms, electronic payments are substituting for cash payments. The UK Payments Council, in its 2008 Payments Market report, predicts the value of total non-cash payments by consumers will outstrip cash transactions in the Great Britain by 2017. In Australia, the Reserve Bank sees a similar trend, based on data indicating that cash withdrawals are declining relative to household consumption.

By contrast, cheque volumes globally continue to decline. Even in the traditionally strong cheque market of the US, research released by the US Federal Reserve System in December 2007, found usage had declined by over 6% per annum between 2004 and 2006. In late 2007, major UK retailers such as Sainsbury's and Boots announced they would no longer accept cheques from retail customers.

Globally, card and electronic payments continue to grow steadily, although experience varies markedly in different markets:

- North America, the Eurozone and the United Kingdom account for around 73% of global non-cash transactions, but less than 12% of global population. In these mature economies with well-developed payments infrastructure, growth is steady but unspectacular: 5% CAGR since 2001 for the USA and UK, 7% for the Eurozone and 6% for Canada.
- Brazil, Russia, India and China (the so-called "BRIC" economies) represent the future growth story. Comprising around 30% of the world's population, these markets are less than 12% of the world's non-cash payments market, indicating the scope for increased payments automation if the infrastructure can be developed to support it. China and Russia are already harnessing this potential with impressive CAGR in non-cash payments since 2001 of 46% and 32% respectively.
- Japan, South Korea and Australia are the surprise packets: mature economies that, through highly developed payments infrastructure, continue to enjoy high growth in non-cash payments. These markets are less than 4% of global population, but represent almost 8% of the global non-cash payments market. Growth since 2001 was an impressive 17% CAGR overall; Australia recorded 26% CAGR over this period.

Amongst non-cash payments, card transactions have been the fastest growing category. *The World Payments Report 2008* indicates that the share of non-cash payments made with cards has grown from 39% to 54% between 2001 and 2006. Recent statistics from the Bank of International Settlements from selected developed economies notes a CAGR for number of card payment transactions of slightly above 10% internationally from 2001 to 2006. The strongest area of growth has been cards with a debit function, which have seen a 15% CAGR over the same period.

Emerging players

Two of the most discussed global evolutions over the past decade have been the economic emergence of China and the development of the internet as a serious retail marketplace. Both of these mega-trends are having an impact in the payments world, with some newer players coming into their own.

2008 marked the 10th anniversary of PayPal. Riding the phenomenal growth of online auction provider eBay, PayPal now operates in 190 markets using 17 currencies, with 60 million active accounts. Total net payment volume has doubled in the past three years to over \$47 billion by calendar year 2007.

Another recent entrant starting to break through is China Union Pay. Founded as a domestic card association for China in 2002, some industry observers believe Union Pay's end game is to become a major competitor of the international card schemes. By 2007, CUP was putting up some staggering numbers; 1.5 billion cards issued, as well as 1.1 million POS terminals and 740,000 ATMs deployed.

Though PayPal and China Union Pay have a long way to go before they challenge global giants such as the major financial institutions or international card schemes, their recent success points to an increasingly competitive payments environment, both in cyberspace and in shopfronts worldwide. Both warrant close scrutiny in the emerging global payments marketplace.

New technology

Technology remains an important driver for change in the industry. Concern over rising levels of fraud has seen significant chip and PIN roll-outs in a number of jurisdictions. In Canada, for instance, a successful trial in Kitchener-Waterloo, Ontario is leading to an ambitious roll-out of 90% of cards chip-enabled by 2010, chip only ATMs by 2012 and chip only POS terminals by 2015.

Various contactless and micropayment card initiatives and trials have been rolled out, though to date the most successful schemes appear to be those, such as Oyster in London or Octopus in Hong Kong, that leverage off of mass transit card schemes. The highly successful Oyster card trialled EMV contactless technology in September 2007 and is aiming for this to be the basis for its next generation of card.

Regulatory and industry developments

After years of planning, January 2008 saw the Single European Payments Area (SEPA) go live with the SEPA Credit Transfer Regime. While the number of SEPA transactions has been relatively low, it is expected that SEPA will increasingly dominate the European payments environment. An important element of SEPA has been the embrace of the ISO 20022 standards framework for messaging. Some observers believe it is only a matter of time before this becomes the global standard for messaging in the consumer payments space.

After years of regulatory debate between the Government and the payments industry, the UK gave birth to some major developments in May 2008. The UK Payments Council, a widely representative body of payment industry stakeholders, released its National Payments Plan which provided an industry-wide roadmap for future development. Faster Payments was launched in the same month, permitting near real-time transfers between participating financial institutions – transfers that previously took up to 3 days. Though take-up, like SEPA, has been slow, there remains significant optimism that Faster Payments could provide a platform for long-term industry improvements.

Against these policy developments in electronic payments, global card payments policy remain focused on the role and future of interchange fees. In December 2007, the European Commission struck down MasterCard's cross-border interchange fee arrangements in Europe. Intense negotiations on the implications for domestic interchange fees and other forms of cost sharing continue. In the United States, the Credit Card Fair Fee Bill was introduced into Congress. The Bill contains proposals for collective bargaining by merchants and specialist judges to deal with the issue of interchange fees. The outcome of these developments is unclear, but further regulatory attention to the competitive implications of multilateral interchange fees seems very likely.

Customers

New entrants, new technology and regulatory pressures will only heighten the competitive pressures within payments. We are witnessing an increasingly frictionless and global payments market. Relentless pressure on pricing as well as meeting the ever-rising expectations for improved convenience, simplicity, security and speed will bring its own challenges for industry and greater choice and leverage by consumers.

Cycles of innovation in electronic payments

Australia has enjoyed a dozen years of payment product innovation, driven by the search for competitive advantage amongst financial service providers. This period has seen the advent of telephone banking, web banking and online business banking packages. Now there are signs that the underlying infrastructure that has adapted to support all these products, the direct entry system, itself needs an overhaul.

What will catalyse the next wave of payments system innovation?

Say “electronic payment” to most Australians and they will probably think of logging into their web banking service. This might involve using the “bill payment” screens to pay a bill, or directing a payment to someone else’s account using the “pay anyone” screens. But these are relatively recent evolutions. Of much longer standing are the arrangements that cause a salary to appear automatically in the account every fortnight, as well as the “set and forget” authority with a regular provider (energy company, local council or insurer) to draw funds out for regular bills.

The Direct Entry (DE) system: electronic payment highways

Few of us give much thought to the underlying network that ensures these instructions are reliably and cheaply carried out. But all these examples, and many others, use the direct entry (“DE”) system that connects banks, building societies and credit unions and provides the means for more than 5 million direct credits and direct debits to flow between accounts every day. APCA supports the system by providing the rules, procedures and standards that these parties must adhere to if the system is to work efficiently. This is the Bulk Electronic Clearing System.

DE is to commerce what highways are to communities: basic linking infrastructure used and re-used for diverse purposes. Financial institutions use DE to provide a wide range of different payment and related services to consumers, government and every size and shape of corporate customer. Customers will, in many cases, have no awareness of (and possibly not much interest in) the underlying network, but network configuration, capability and capacity directly affect the convenience and efficiency of the services they ultimately enjoy.

Australia’s DE system has proved a robust and adaptable piece of infrastructure. The system dates its evolution back to the early 90’s (APCA’s BECS system was formed from the merging of the bank, building society and credit unions direct entry systems in 1992). In those days, computers were mostly large, data-crunching mainframes, and the internet barely existed.

Despite this, the DE system has risen to the challenge of the internet age through front-end innovation by financial institutions – web-based business banking packages and “pay anyone” web banking for consumers. The number of registered users (that is, organisations able to inject credits or debits into the system through their financial institution) has ballooned to nearly 240,000. Perhaps most importantly, today’s system handles volumes and values well beyond anything envisaged by its original designers, and the system continues to enjoy double-digit growth.

The virtuous cycle of innovation

What we can see here is a virtuous cycle of innovation of the kind which must occur in any network industry if it is to develop successfully over the long term. The cycle, in broad terms, goes like this:

- \ Industry participants develop attractive new services for their customers that require some “networking” – ie, some interaction amongst the participants. Initially, this interaction may be ad hoc, and bilateral;
- \ As these services grow in popularity, the underlying network infrastructure needs to expand to service demand;
- \ In this way, a platform develops on which more new products and services can be offered by participants to their customers; and
- \ This leads to more customer demand for an expanded or improved network platform.

Perhaps it is easier to see the cycle in payment cards. ATMs developed in the 80’s as separate bank services, with each bank issuing cards useable only in that bank’s ATMs. Gradually, institutions gave reciprocal access to their systems (and smaller institutions joined larger networks) so that each cardholder had a wider range of ATMs to choose from. At the same time, growth in popularity of card payments in stores meant that EFTPOS devices were introduced and could support both credit card authorisations and EFTPOS transactions.

By 1990, there were two integrated ATM networks and a web of EFTPOS linkages. In this way, a virtuous cycle of development provided the basic infrastructure for an explosion in mag-stripe card services and products over a 15 year period.

Product innovation versus network innovation

One of the important things to observe about this cycle is that although both product innovation and network innovation are needed, these two types of innovation require quite different behaviour from industry participants. Product innovation is a function of competitive advantage: striving to get the jump on your competitors to have better, cheaper and/or more convenient services. Network innovation is a function of collaboration: industry players work together to define and build the basic infrastructure they all need in order to serve their customers better. Not too many organisations are good at competing aggressively in the product market while simultaneously collaborating with their rivals. Sometimes, competition laws make collaborative business case development very difficult.

For this reason, industries tend to cycle between bursts of collaborative infrastructure development and longer periods of competitive product development.

In electronic payments – and for that matter in payment cards – it can be argued that we are coming to the end of a long cycle of product innovation relying on stable, mature infrastructure. DE has been in place in more or less its current form since the early 90's – with basic standards like message formats even older than that. Customers probably haven't noticed, because in that time they have seen plenty of product enhancements. Consumers enjoy extensive phone and internet banking services with integrated "pay anyone" functionality; and businesses have access to web-based banking packages that integrate with their accounting systems, schedule bulk payments, handle authorisations and so on. This has occurred through product innovation, without fundamental network innovation.

Emerging issues

If the cycle holds true, ever-changing customer demand will ultimately require fundamental platform work. APCA sees some emerging issues for DE. In the early 90's, DE's delivery of value within 24-hours looked good against a 5 day cheque clearance cycle, and for that matter 3 to 5 day cycles for automated payments in other countries. In 2008, the world has moved on, and real-time value is often expected. Today's large values and volumes are necessarily accompanied by increased settlement risk: not directly a concern for customers so much as participants, but the problem arises from the sheer popularity and growth of DE payments.

There are even larger, more complex questions. Will the existing infrastructure be able to meet the unknowable new demands of the next decade or two, as it has done in the past? In particular, how is the basic payment to be integrated or seamlessly reconciled with each underlying transaction, no matter how complicated or diverse? And perhaps the ultimate challenge: how do we ensure that Australian payments integrate on a global basis as geographic barriers disappear in the world economy?

These considerations led APCA to undertake extensive analysis and consultation into low value payments in 2008. APCA's approach has been to focus on developing a "roadmap". In effect this is an industry strategy document; it does not mandate any course of action, but seeks to develop broad industry consensus around directions for the future. In some areas, a strong strategic consensus can become a self-fulfilling prophecy: for example, if we can achieve consensus on the likely message standards we will all need to use in the electronic payments infrastructure of the future, then participants make their own future technology choices with this in mind, and begin to identify product opportunities to take advantage of this envisioned future.

Another complex issue is the future for paper payment instruments, particularly cheques. Australia has already done much to optimise clearing procedures through electronic exchange of value on cheques and a 3 day clearing cycle. However cheque volumes are in steady decline and the dilemma we face, in common with many cheque friendly jurisdictions, is whether to invest in further (and increasingly costly) optimisation for fewer and fewer cheques.

In other areas, the roadmap will point to new and challenging industry collaboration that must be separately scoped, costed and agreed. For example, it seems clear that the long-standing x.25 communications protocol used extensively across the payments system is approaching its end of life, so that payments industry participants must invest in replacing legacy systems and links with Internet protocol alternatives.

This can be done by one-for-one replacement; but it also creates an opportunity for strategic network enhancement through reconfiguration. APCA expects to sponsor an industry debate to explore alternatives and recommend opportunities in the coming months.

This work has identified the challenge: industry responses seem to agree that some network collaboration will be needed if we are to see the next cycle of product innovation kick-started successfully. Now the question is, how do we organise fierce competitors, each rightly focused on their own bottom lines, to engage in collaborative effort on the network for the benefit of the entire economy?

APCA's conviction is that the Australian industry has done so with outstanding success in the past, and we will do so again.

The Australian competition landscape

In the midst of entrenched industry debates on interchange fees, the Reserve Bank (RBA) has proposed stepping back from direct regulation of card scheme interchange fees and instead seeking to promote competitive forces as a long-term means to address policy concerns.

In exploring the implications of the RBA's proposals, much can be learned from policy approaches in other network industries.

Payments system regulation: the bigger picture

Expert industry communities have a tendency to get caught up in the details of their own sub-segment of the economy. Dealing with the complex and specialised details of their particular activities, they can often overlook that structural controversies arising in the industry have almost always been met before, in some other industry. With this in mind, it is instructive to put current debates on Australian card payments system regulation in a broader context: what can we learn from outside the Australian payments industry?

The major regulatory focus in card payments in 2008 is on the 2007/2008 Payments System Review. This addresses the effect of regulatory reforms of the Australian card payments system introduced by the Reserve Bank (RBA) progressively from 2003, taking into account available evidence of the reforms' effect, extensive industry submissions and debate. The reforms cover:

- access seeking to ease the path for new industry entrants by making access to card payments infrastructure more transparent and objective;
- disclosure seeking to provide more information about competing services in the system so as to promote competitive markets;
- removal of merchant restrictions mainly comprising changes to merchants obligations to honour all cards, and to their ability to surcharge card transactions; and

interchange fee regulation which sets a cap, or a capping formula, on interchange fees for various products.

To generalise, the RBA's paper reaffirms the RBA's commitment to ongoing oversight. It finds that reforms relating to access, disclosure and merchant restrictions have been beneficial and should be retained and, in some specific respects, extended. However, the treatment of interchange fee regulation is quite different. The RBA's Payments System Board indicates a preference for removing direct regulation of interchange fees, on certain conditions designed to increase competitiveness in choice of payment instrument.

APCA, along with much of the payments industry, has strongly endorsed the underlying philosophy of promoting competition as the road to system efficiency. However, it might be suggested that the RBA paper contains a kind of ambivalence. There seems to be some doubt as to whether it is possible for competitive markets to achieve the desired policy result of system efficiency. In addressing this doubt, much can be learned from Australian industry policy experience outside the payments industry.

Australian competition policy

In 2005, the Organisation for Economic Cooperation and Development praised Australia for:

"...the tenacity and thoroughness with which deep-seated structural reforms were proposed, discussed, legislated, implemented and followed-up in virtually all markets, creating a deep-seated 'competition culture'."

At around this time, Australia enjoyed per capita GDP and productivity growth that was the envy of the developed world. In a recent speech, the chairman of Australia's Productivity Commission, Gary Banks, said that this strong performance was a direct consequence of two waves of pro-competitive microeconomic reform that gathered pace from the 1980's.

From this economy-wide perspective, competition works; it works across many industries, in many different contexts, and for the long term. Competitive markets are the best means we have so far found to increase productivity, promote industry growth and innovation, and ultimately, enhance community wealth.

In the regulation of large complex markets, there is often a two-step process. First, minimum public policy requirements (such as consumer protection and financial stability) must be met whether or not the market is functioning competitively.

But once this has happened, the ongoing promotion of efficiency, innovation and market development is seen as a function of competitive markets. In pursuit of these market development goals, regulatory intervention is justifiable only on the basis of market failure, and then only when regulation can reasonably be expected to address the failure efficiently. As stated by Gary Banks recently:

"Market failures are pervasive, but in order for them to become a rationale for intervention ('policy relevant') they need to be substantial and amenable to government action, without giving rise to even larger costs..."

So far, we in Australia have not yet found an industry segment where competition cannot be made to work as the driver of productivity, innovation and growth. Consider gas pipelines and railways through the desert, broadband telecommunications, grain marketing into global markets, and electricity generation to meet long-term future needs, to name just a few recent newsworthy examples. Each one has presented daunting challenges to competition policy: huge investment risk, political risks around the protection of local producers, huge economies of scale and much greater network effects than anything we experience in the payment system. And yet in all these sectors, the consistent debate is not about whether the market can work: it is about how we can make the market work.

The case for permanent price controls is usually only made when there is, in effect, only one set of train tracks: that is, basic infrastructure needed by all competitors is controlled by one or a few of them, and for various reasons it is simply not possible to duplicate it. A recent example is a mine railway carrying ore to port from an isolated mining area. In those circumstances, access to the railway may need to be mandated to all competitors on fair terms. But, at least since the RBA's earlier reforms, that is not the problem in payment services. There are several sets of tracks, and much lower barriers of entry to set up new ones.

From the broader perspective of infrastructure reform, it is difficult to see price regulation as a permanent solution. As the National Competition Policy articulated, whatever their benefits to businesses and consumers, the long-term effect of all forms of price regulation is to dampen competition by reducing incentives on market participants to respond to pricing signals. If we are really committed to long-term payments industry health and growth, promotion of payment industry competition seems to be a necessity.

Waves of competition policy reform

Outside the payments system world, competition policy reform has gone through multiple waves. In each wave, the transitional pain was apparent pretty quickly, but eventually dissipated. The longer term economic benefits took longer, were less obvious, but have been both substantial and enduring.

The first wave might be called "trust-busting" and arose as a response to the less attractive side effects of the first great era of globalisation before the First World War. In the early part of the 20th century, governments developed rules to prevent monopolistic abuses of market power such as those exhibited by the early railway barons in the United States.

Later, there was a cycle of broadly based competition reform around the introduction in Australia of the Trade Practices Act of 1974. This led over a period of years to a re-examination of many long-standing industry practices that were not intentionally anti-competitive, and had origins in quality standards and process efficiency. Cumulatively, however, these caused a drag on innovation and economic efficiency.

An example is stockbroking: in the 70's and early 80's, the Australian broking industry dismantled a hundred years of stock exchange practices such as black-balling new members, fixed broker commissions,

broker sponsorship of new listings and so on. Around the same time, share trading became nationally automated, pooling liquidity from six state exchanges and opening state-based broker communities to national and ultimately international competition. Without those often painful changes Australia would not have the kind of vibrant, globally competitive national stock market we take for granted today.

The next wave of reform took place in the 80's and 90's. It focused initially on opening the Australian economy to global markets and subsequently on opening Government and utility services to competition. Obvious examples are the deregulation of financial markets, the promotion of competitive markets in telecommunications, and more recently energy supply and distribution. These sustained efforts were outstandingly successful over the long term, as the productivity analysis referred to earlier attests; but there was substantial transitional pain and dislocation. For example, consumers enjoyed greater choice and flexibility, but often faced higher prices, and greater complexity.

In 2005, the Productivity Commission concluded that:

"National Competition Policy (NCP) has delivered substantial benefits to the Australian community which, overall, have greatly outweighed the costs. It has:

contributed to the productivity surge that has underpinned 13 years of continuous economic growth, and associated strong growth in household incomes."

National Competition Council 2005 Assessment, page vii.

There are two observations to draw from this brief history. First, competitive efficiency reform is unfortunately not simply a matter of letting the market sort it out; thought and effort is often required to promote effective, competitive market structures and then deal with the usually complex transitional issues that will arise. Secondly, industries, particularly complex networked ones, always take substantial time to respond to such significant structural change. The new market signals need to feed through the various industry linkages, new types of competitors need to emerge, technology needs to develop to fill new structural opportunities.

Payments policy challenges

If we apply this to payment systems, a difficulty in assessing the reforms since 2003 is that several different competition promoting reforms, such as changes to merchant restrictions, access improvements and increases in transparency, came in progressively alongside interchange fee

regulation. Whatever one's views about the merits of the various reforms, this complicates the assessment of reform efficiency: If there is an efficiency benefit, which reforms caused it?

There was certainly transitional pain and dislocation. This took the form of several court cases, some Government inquiries, and quite a bit of industry debate and controversy until industry repricing and other strategies emerged as a response to structural reform. In accordance with its commitment to the industry, the RBA began review of the total package in 2007, even though less than four years had elapsed from the first reforms.

Relying on the experience in infrastructure reform, this is not giving the market much time to respond. Structural change to increase competition takes time to flow through market eddies, competitive responses, market repositioning and ultimately, efficiency gain.

Nevertheless, by April 2008 the RBA was able to conclude that "the reforms have met a key objective of improving price signals consumers face when choosing between use of credit and debit cards".

In particular, the RBA's analysis of surcharging shows remarkable market response to the pro-competitive elements of the total package. The evidence presented in the RBA paper suggests that competition in payment instrument markets is substantial, and increasing. No doubt this is partly a consequence of the reforms, but also of substantial structural evolution as well. Given the short timeframes compared with competition reform in other sectors, it's hard to assess right now how much more needs to be done to enhance these positive trends.

It is very important for all those involved in the Australian card payments system to think about how to future proof the competitive environment. The message from other industries is loud and clear: there is no question that competition can be made to work – the only question is, how best to do it.

APCA believes that there is much to be gained from an active industry dialogue on the state of competition. We need to identify the indicators to monitor, generate some consensus on what we would as an industry regard as satisfactory levels of competition, and if necessary, debate the merits of other pro-competitive measures that could be taken, many of which will not be regulatory in nature.