Ewart S Williams: The MSME evolution

Address by Mr Ewart S Williams, Governor of the Central Bank of Trinidad & Tobago, at the Micro, Small and Medium-sized Enterprises Conference, Port-of-Spain, 16 September 2009.

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Let me first of all thank the Chamber of Industry and Commerce and the Nova Committee for the invitation to participate in and to make a few remarks at this 2009 Conference on Micro, Small and Medium-sized Enterprises. I want to say from the outset that the Central Bank considers micro, small and medium-sized enterprises (MSMEs) as critical to Trinidad and Tobago's current and future prospects. Last year, we engaged a local firm to examine the structure, performance and networks of MSME and to make recommendations for improving its performance.

This firm has since submitted its draft final report along with a set of recommendations which we are currently assessing. I should also add that the Financial Literacy Programme has also been actively involved in the small business sector and is spearheading a project on **Living the Entrepreneurial Dream**. This project has placed emphasis on three core areas: (a) starting a business, (b) keeping and managing financial records and (c) sourcing assistance for the business. To assist budding entrepreneurs, the project is currently finalizing three booklets, which are expected to be launched before the end of the year.

As I examine the agenda for today's proceedings, I can't help but notice that your speakers are far more ably qualified to address the **specific issues** affecting MSMEs in Trinidad and Tobago. Accordingly, in my brief remarks today, I want to focus on the bigger picture and specifically on how MSME development is becoming even more urgent given our current economic circumstances and prospects.

Over the past decade, Trinidad and Tobago has been doing relatively well in a macroeconomic sense. Real economic growth between 2000 and 2008 has averaged around 6.0 per cent a year; the fiscal position has been healthy; international reserve holdings have increased steadily and the exchange rate has remained stable. This vibrant economic performance has largely been built on the back of the energy sector which still remains the dominant sector accounting for approximately 40 per cent of GDP and around 60 and 90 per cent of government revenue and exports, respectively.

The energy sector growth facilitated a boom in fiscal revenues and expenditures, the latter providing the impetus for vibrant activity in the non-energy sector.

In these last few years, we have seen an explosion in construction activity, both public and private sector construction, in banking and finance as well as in retail distribution. As you know, **there was a significant growth in employment**, so much so that we have had to import labour from neighbouring countries and from further afield.

But, ladies and gentlemen, our economic climate is undergoing profound changes and **these changes may be structural**, not merely cyclical. Our economy has already begun to experience economic decline for the first time since 1993; while oil prices have begun to creep up from the lows reached in late 2008, **gas prices**, which directly determine about 80 per cent of our energy tax revenues are at their lowest level in several years. Moreover, the experts tell us that, given the chronic oversupply in world markets, gas prices could remain depressed for a while. And to top it all, there are downside risks as regards the level of our gas reserves.

While it can be argued that some degree of diversification has occurred over the years, **most of this has taken place within the energy sector**. Trinidad and Tobago has now moved

from simply being an oil-based economy to one that produces a relatively wide range of energy products including natural gas, methanol, iron and steel, urea and ammonia. **Outside of energy, the pace of diversification has been slow**.

In summary, notwithstanding our impressive achievements, it is clear that we are confronted with many challenges in sustaining our level of economic growth and in addressing rising economic and social inequalities. To meet these challenges, we urgently need to diversify our sources of economic growth and to raise the efficiency of resource allocation. **A potential source for growth is the micro, small and medium enterprises sector**, which **has contributed importantly to growth and job creation in the past**.

The MSME sector has made remarkable strides over the past few years. Data from the study commissioned by the IADB and the Central Bank estimate that there are now about 18,000 MSMEs, employing about 200,000 workers and contributing around 28 per cent of GDP. These figures testify to the Government's considerable efforts through NEDCO and BDC as well as to the work of private sector institutions such as the Nova Committee of the Chamber and various NGOs.

Notwithstanding these achievements, if we are to realize the full developmental potential of this very important sector we need to modify our approach somewhat – specifically, we need to introduce a more entrepreneurial model.

An article by the NOVA Committee, published in the latest issue of CONTACT, cited the case of India where the SME sector is being challenged to move to the next level of development. The same article lamented that many of our SMEs seem to have no interest in moving beyond the micro and small classifications, preferring instead to remain in their comfort zones.

The new model for MSME development requires a shift in thinking by policy makers. It requires a change whereby the goal is not merely to earn a minimum income but to create jobs and wealth. It requires that our policy makers look beyond simply the creation of new MSMEs to encouraging a concentrated focus on productivity and competitiveness. The new model requires small businesses to broaden their view of the available economic space from the neighbourhood and the community to the country and even the region.

An essential aspect of the new model is the active promotion of an entrepreneurial culture. More small business people need to see themselves as entrepreneurs, prepared to take risks and with an interest in innovation and competitiveness, which, as you know, are integral features of entrepreneurial behaviour. Some of this could be learned late but empirical evidence suggests that there is a strong case for making business education a more integral part of our high school curriculum. And as I heard one commentator say a few days ago, "we need more people to come out of tertiary education, not looking for the security of a job but actually prepared to use the ideas that they have acquired in their studies and through research at university, to get involved in entrepreneurial behaviour".

One step in this direction is for our **tertiary institutions to become more actively involved in promoting innovation** and in transforming these applications into viable businesses. I would acknowledge that some of this has begun to happen on a limited scale through programmes being introduced by the University of Trinidad and Tobago (UTT) and E-Teck that provide a business incubator for innovative ideas. However, if **entrepreneurship is to take deeper roots, this process has to become part and parcel of our entire tertiary education system and our MSME strategy**. The available evidence on a global scale suggests that entrepreneurship tends to flourish in those countries where there are strong and sustained linkages between innovations in Universities and the business environment. While we can all point to success stories in economies like the US and Japan, there is no reason why we cannot develop our own success stories here.

Obviously entrepreneurship and innovation would add up to very little if credit isn't available to finance their realisation.

In most countries, inadequate credit availability has been a major impediment to SME development. The reasons behind the chronic lack of access to finance for MSME sectors in most developing countries are well-known. One is the entrenched perception that lending to MSMEs is inherently risky. Another is a long-standing credit culture that is biased towards collateral. Regulatory policies also perpetuate the "collateral bias" as non-secured lending is often discouraged. The overemphasis on collateral constrains the availability of credit to MSMEs, even when cash flows are adequate to service bank loans at commercial interest rates.

This situation invariably leaves the sector exposed to public sector financing arrangements which are very often insufficient, unreliable and subject to non-commercial considerations.

Fortunately, our situation is changing. More finance is being made available by the public sector institutions – NEDCO and the Small Business Corporation. More importantly, some private sector institutions are also tailoring their operations to cater to the need of MSMEs, while maintaining high loan processing standards. In particular, one commercial bank has already recognized the potential of the small business sector and has developed a lending programme specifically targeted to this sector.

Let me end, Ladies and Gentlemen with yet another reference to the CONTACT Magazine which, incidentally, I think is an excellent issue. An article in the issue seems to suggest that we are deluding ourselves into believing that we are blessed with high levels of native creativity. Citing our carnival experience, the author asks whether we have done anything truly ground breaking recently and whether our music and architecture, the range of goods that we produce and our designs and services can legitimately be claimed as being truly creative.

I happen to disagree with the view that we are not blessed with high levels of natural creativity. I think that our challenge is to devise a framework that can deploy our creative ideas in innovative ways to develop new businesses that are sustainable, employment generating and even better still export earning.

Ladies and Gentlemen let me repeat my belief that building an entrepreneurial culture that harnesses the untapped potential of the MSME sector will provide a solid platform for the sustained diversification and development of our country in future years.

We need to rise to this challenge.

I am certain that this is going to be an excellent conference and I wish you every success in today's deliberations.

Andrew G Haldane: Credit is trust

Speech by Mr Andrew G Haldane, Executive Director, Financial Stability, Bank of England, at the Association of Corporate Treasurers, Leeds, 14 September 2009.

I would like to thank Paul Fullerton, Simon Hall and Salina Ladha for help in the preparation of this speech.

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It is good to be back in Yorkshire. I say back because I grew up around 10 miles north of here. When I left over 20 years ago, Leeds looked and felt very different to today. Nowhere is the contrast greater than in the financial sector. In 1995, almost 74,000 people were employed in financial and related business services, accounting for around 20% of employment in Leeds. By 2009 this had risen to over 116,000, or around 30% of

employment. Today, Leeds has a legitimate claim to be the UK's second largest financial centre.

A short history of banking in Yorkshire

The foundations for this success were laid much earlier. The history of banking in Yorkshire dates back over 250 years.[1] Pease and Co of Hull, established in 1754, are thought to be Yorkshire's oldest private bank. In the same decade, banks were founded in Leeds and Bradford. By the end of the 18th century, Yorkshire had a well-established network of over 40 banks in around 16 regional towns and cities.

In the first two decades of the 19th century, private banking in Yorkshire continued to thrive, spreading to around 30 towns and cities. The financial crisis of 1825 brought an end to this rapid growth. The crisis itself was interesting for its parallels with today. It was sourced in sub-prime lending in (in this case South) America. As fears of loan losses rose, runs began on banks throughout England, with more than a dozen institutions failing in Yorkshire alone.

The crisis brought reform of the banking industry in the form of the Joint Stock Banking Act of 1826. This removed the Bank of England's monopoly on joint stock banking. This had long been a bone of contention among country banks, not least in Yorkshire. The Bank of England itself opened its first branch in Yorkshire – here in Leeds, in fact – the following year in 1827. This was acknowledgement of Leeds' emerging importance as a financial centre. Yet the reception it received was, to say the least, somewhat mixed.

Local newspapers and businessmen attacked the Bank's attempt to spread its "pestilential branches" into the regions.[2] Bank of England notes were shunned by local shopkeepers. The landlady of the *Esk Inn* near Whitby did so with the words:

> "I'll ha' nought to do with them things, I know nought about them; now if it had been a Simpson I would ha' changed it with pleasure"[3]

It is easy to imagine, though probably impossible to print, what she might have made of Quantitative Easing.

In the period since, banking and finance in Yorkshire have grown steadily and successfully. Among the success stories would be the Yorkshire Penny Bank. This was founded in 1859 in Halifax as a means of saving for the working classes. In 1874, its first School Transfer Department was opened to encourage saving by school children. "Take care of the Pence and the Pounds will take care of themselves" intoned the bank's posters.

Such was the success of the school scheme that, by the end of the nineteenth century, the majority of schoolchildren in Yorkshire had a savings account. The scheme aimed to educate children from an early age on the benefits of thrift and financial planning. And having been nurtured early, the relationship between bank and customer often lasted a lifetime. In 1959, the Yorkshire Penny Bank became Yorkshire Bank which today remains one of the UK's most successful medium-sized banks.

The mutual or building society sector's roots in Yorkshire are just as deep.[4] Although the first societies appeared in the Midlands in around 1775, within a decade Yorkshire had

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[1] W.C.E Hartley (1975), "Banking in Yorkshire", *Dalesman Books*. The author completed this work while a Houblon-Norman fellow at the Bank of England.

[2] Quoting Joseph Brook, a prominent Huddersfield banker, at a meeting of the Huddersfield Banking Corporation in January 1828.

[3] Hartley (*op.cit.*). A "Simpson" was a note offered by local bank Simpson, Chapman and Co of Whitby. Through a sequence of mergers, this subsequently became part of what is today Barclays Bank.

established its first society, the Hill House Bank Building Club in 1785. By the end of the century, numbers had swelled to around 50, mostly in the Midlands, Lancashire and Yorkshire.

The early mutuals pooled savings to buy property for members and terminated once all members' housing needs were satisfied – so-called "terminating societies". In 1844, "permanent societies" were permitted, which allowed for a revolving set of both savers and borrowers. But the mutuality principle remained – "to enable a working man to secure himself in the course of a few years a dwelling-house as his own freehold property, as a home for himself and family."[5]

Numbers of mutuals grew rapidly during the 19th century, reaching around 850 by 1850 and over 1500 by 1875, with almost 100 in Yorkshire alone. Here in Leeds, the Leeds and Holbeck Permanent Building Society was founded in 1875 and, having been renamed Leeds Building Society in 2005, it remains in the top 10 building societies by size nationally. Consolidation and, latterly, demutualization have reduced numbers over the past few decades. Today, there are only a handful of independent, indigenous mutuals in the region. But they remain some of the strongest in the country.

The success of Yorkshire's financial sector over this lengthy period is no fluke. A reading of history reveals the same successful recipe being repeated. An awareness of, and responsiveness to, the needs of the customer, whether saver or borrower. A focus on long-term relationship-building, often starting from the earliest age. A recognition of the benefits of mutualising both risks and returns. In short, the importance of banks being built, first and foremost, on *trust*.

The crisis of trust

From the past, then, to the present. A year ago almost to the day, the investment bank Lehman Brothers filed for bankruptcy in the United States. Activity across the globe, financial and non-financial, froze. Recently, there are indications of some thawing. But a year on, many economies around the world remain mired in recession. What explains the severity of this crisis and how much longer can it be expected to last?

The words "credit crunch" contain the seeds of an explanation. In Latin, credit means *trust*. So credit crunch is, in essence, a breakdown in trust. Between different parties at different times, that loss of trust has been the root cause of the devastating impact felt globally since the credit crunch began. It also explains why the road to recovery in credit, and thus in the real economy, may be long and winding. In essence, events of the past two years can be re-told as a story of the progressive breakdown in trust.

The proximate cause of the crisis was a breakdown of trust between *banks and households*, specifically sub-prime mortgage-holders in the United States. The upshot was a loss of credit, and in many cases the homes, of these borrowers from 2006 onwards. Repossession rates on US mortgages have more than tripled in the past two years (Chart 1). UK arrears and default rates, although lower, are rising. Some borrowers are now rationed out of the mortgage market. In July 2007, there were around 9500 sub-prime mortgage products being advertised in the UK. Today, there are virtually none (Chart 2).

As losses on these mortgages and other toxic assets accumulated, trust among *banks* was impaired. This saw a seizing-up of inter-bank money markets from the second half of 2007 onwards. Before the crisis, banks required about 10 basis points of compensation for making

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[4] See E.J. Cleary (1965), "The Building Society Movement", *Elek Books*. See also S.J. Price (1958), "Building Societies, their origin and history", *Franey and Company*.

[5] S.J. Price (1958), "Building Societies: Their Origin and History", *Franey and Company*.

a three-month loan to one another (Chart 3). By September 2007, that compensation premium had risen tenfold to around 100 basis points. By September 2008, it had risen more than thirty-fold from pre-crisis levels. It has since fallen back to around 35 basis points. These persistent funding pressures have constrained banks' ability to lend to the real economy.

Damaged by losses on assets and constrained by funding costs, questions began to be raised during 2008 about banks' future profitability and, in some cases, viability. The equity prices of banks tumbled, falling 86% on average for the major UK banks between February 2007 and March this year (Chart 4). In money terms, that is a loss of market capitalisation of around £300bn, equivalent to 20% of annual UK GDP. Underlying these price falls was a generalised loss of trust between *banks and investors* in banks, such as sovereign wealth funds and mutual funds.

What explained this wholesale loss of trust? In the run-up to the crisis, banks' business models were increasingly predicated on making loans for onward sale. Loans became tradable securities and long-term relationships gave way to short-term transactions. The perils of this practice were well understood by Michael Marks, founder of Marks and Spencer and of course one of the region's greatest-ever entrepreneurs: "You either make things or you sell them. Don't try both".

Banks tried both, making loans with an eye to subsequently selling them. This had unintended, but in fact entirely predictable, consequences. Without skin in the game, banks' due diligence became slipshod. The quality of tradable loans fell as their quantity rose.

Investors in these securities were not as canny as the landlady of the *Esk Inn*: they purchased them in size even though "they knew nought about them". By the time the penny had dropped for these investors, the pounds had not taken care of themselves. Global losses on these securitised assets are now believed to lie anywhere up to £3 trillion.[6] As losses accumulated, trust in these securities was undermined and with it trust in the banks issuing them.

As credit was cut, trust in the viability of some non-financial companies was questioned. Corporate distress began to rise internationally during the course of 2008. And as corporate distress rose, in particular after the failure of Lehman Brothers, distrust between *companies* mounted. The stream of trade credit extended between firms dried to a trickle at the end 2008 and in the first part of 2009. At that time, a survey by the Bank's regional agents reported that around a quarter of contacts had had to turn down potentially profitable orders as a result of tighter trade credit.

This progressive hardening of the credit arteries also had dramatic effects between *countries*. Cross-border flows of credit have reversed dramatically in the past year. "Home bias" by investors – a lack of trust in foreign investments – has returned with a vengeance. Cross-border lending by international banks grew by 20% per year between 2003 and 2007. In 2008, it fell 5% (Chart 5). This has had adverse effects on UK companies, around a third of whose borrowing comes from foreign lenders.

Through these successive waves, the world financial system found itself with almost every link in the credit chain – in the chain of trust – having been weakened or broken. That is evident in surveys of the public's trust in industry: banking and finance are firmly rooted to the foot of the league table of trust, in the UK and internationally (Chart 6). That loss of trust is mirrored in aggregate bank lending in the UK, in particular to companies, where annual growth has fallen from a peak of 23% in March 2008 to around zero now (Chart 7). And this has in turn been reflected in the largest and most synchronous global economic slowdown since the Great Depression.

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[6] For example, Bank of England *Financial Stability Report*, June 2009.

Confidence and credit

So how is trust, and thereby credit, to be restored? To date, the answer has been to rely on the one sector whose credit has not been seriously questioned – governments and central banks. There has been large-scale provision of government and central bank credit over the past two years in an attempt to ease pressures and shore up breaks in the private sector credit chain.

These interventions have been unprecedented in size during peacetime. The total potentially on the table is in excess of $14 trillion.[7] That is roughly $2000 for every man, woman and child on the planet. Half of the world's 20 largest banks have needed direct government support. Central bank balance sheets in the major financial centres, including in the UK, have more than doubled in size. And deposit insurance schemes have been extended in at least 40 countries around the world.

Extending public sector credit on this scale relies on the deep pockets and prudence of our grandchildren. It can be no more than a stop-gap – a temporary bridge – until private sector trust can be restored. So far, the bridge has served its purpose. There are signs over recent months from surveys that confidence is returning to banks, non-financial companies and consumers. And there have been some signs of a turnaround in the housing, equity and some debt markets.

It has been said that every recession in history has been associated with a collapse in confidence.[8] This time's was plainly no exception. So with confidence turning can we anticipate an imminent return of credit to the economy?

Rising confidence among firms and consumers is a necessary condition for recovery. But it is questionable whether it is sufficient. That is because confidence and trust are subtly different concepts.[9] Confidence derives from observable, authoritative proof. At the time of the failure of Lehman Brothers, people struggled to make sense of the state of the economy and financial system. Without a compass, they lost their financial bearings. Lacking authoritative proof, confidence collapsed. As the banking system has since stabilised, people's bearings have returned and with them confidence.

Trust is an altogether different animal. It is based on beliefs, not observable proofs. It is grounded in perceptions rather than evidence. It is as much a psychological state as a financial one.[10] A clean balance sheet might instil confidence, but it need not repair trust. Because it is a moral judgement, repairing trust can be a slow and painstaking business. Moral compasses take rather longer to self-correct than magnetic ones. This has implications for the path of recovery in the period ahead.

Historically, credit has tended to lag the recovery in output in the majority of recessions, especially financial recessions. During the previous three major recessions in the UK – in the 1970s, 1980s and 1990s – credit to business recovered slowly and in some cases only several years after the recovery in activity (Charts 8, 9 and 10). This is consistent with trust between financial institutions and their customers being slower to recover than confidence more generally.

Moreover, unlike the situation today, earlier recessions in the UK were not primarily the result of financial factors. International evidence suggests that financial recessions have tended on

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[7] Bank of England *Financial Stability Report*, June 2009.

[8] "Animal Spirits", George Akerlof and Robert J Shiller (2009), *Princeton University Press.*

[9] For example, see "Restoring Confidence and Trust in UK PLC", *Henley Business School* (2009).

[10] David Tuckett provides a fascinating account of the crisis and its aftermath using psychological theories and evidence ("Addressing the Psychology of Financial Markets", *Institute for Public Policy Research*, May 2009).

average to be both costlier and lengthier.[11] Normal recessions have been associated with a recovery in output to its previous peak after around 3½ quarters. Recovery to peak output following financial recessions has on average taken around 5½ quarters (Chart 11).

Like its predecessors, lack of confidence may have "caused" this time's recession. But it is lack of trust – and hence credit – that may shape the recovery. Based on past evidence, as the Governor has noted recently, we might anticipate a protracted period of repair.

Repairing trust – the low road to reform

So what might be needed, beyond time, to repair trust in the financial system? A raft of reforms to the financial system, nationally and internationally, is currently being assembled. These measures will aim to strengthen banks' financial resources, risk management practices and governance. They are about bringing regulatory rules into the 21st century.

This is the *high* road to reform – for example, higher buffers of capital and liquidity and higher standards of risk management. If successful, these reforms will help cleanse bank balance sheets. It is an open question, however, whether these efforts will be sufficient to restore public trust in the financial system.

One reason why regulation might not be the whole answer is that trust in financial regulation is itself one of the casualties of crisis. Regulation is seen by some as part of the problem, not the solution. More generally, in repairing public trust, it would be preferable if banks were seen to be initiating root and branch reform themselves, rather than having it thrust upon them by regulators.

This would be the *low* road to reform. Low because it would not require any new or complex regulatory apparatus. Low because it would not need international negotiation or agreement on the contractual fineprint. Instead, what it would require is a self-generated sea-change in the structure and strategy of banking.

So what changes in structure and strategy might be desirable? Without suggesting definitive answers, let me discuss three areas where further debate might be useful: banks' *size* in relation to the services they provide; banks' *strategy* in relation to their resilience; and banks' *governance* in relation to the incentives this creates.

- ***Structure – size versus service provision***

Economies of scale typically arise in the production of goods and services which are homogenous and replicable. Henry Ford applied this principle to car manufacture through his Ford Motor Company, established almost a century ago. It was a success. That model has since served many industries well.

But manufacturing loans is not the same as manufacturing cars. Loans are neither homogenous nor replicable. Making loans relies on bespoke, customer-specific information. This information is not obtained by computer algorithm or credit rating agency but through a banking relationship, ideally a long-term one. Despite the advent of social networking, economies of scale are not something we typically associate with long-term relationships.

So the economics of banking do not suggest that bigger need be better. Indeed, if large-scale processing of loans risks economising on the collection of information, there might even be *dis*economies of scale in banking. The present crisis provides a case study. The desire to make loans a tradable commodity led to a loss of information, as transactions

[11] "Is the US Sub-Prime Crisis So Different? An International Comparison", Carmen Reinhart and Kenneth Rogoff (2008), *NBER Working Paper No.13761.*

replaced relationships and quantity trumped quality. Within the space of a decade, banks went from monogamy to speed-dating.

Evidence from a range of countries paints a revealing picture. There is not a scrap of evidence of economies of scale or scope in banking – of bigger or broader being better – beyond a low size threshold.[12] At least during this crisis, big banks have if anything been found to be less stable than their smaller counterparts, requiring on average larger-scale support.[13] It could be argued that big business needs big banks to supply their needs. But this is not an argument that big businesses themselves endorse, at least according to a recent survey by the Association of Corporate Treasurers.[14]

Take Grameen Bank – not a household name in the UK, I realise. This grew out of a micro-finance project in Bangladesh which began in 1976.[15] Grameen operates as a set of local credit cooperatives, often comprising as few as five members. The bank's relationship with its borrowers is bound not by legal contract but by trust. Like the Yorkshire Penny Bank a century earlier, it aims to encourage saving by the poor and supports the education of the children of borrowers and savers.

In some respects, Grameen Bank is about as basic and small-scale a set of banking arrangements as it is possible to conceive. But its success is only too clear. From the most modest of beginnings, Grameen Bank now operates in over 40 countries worldwide, with over 2000 branches and over 7.5 million borrowers. Grameen is a local bank gone global.

Henry Ford grew an empire on scale economies, centralisation and replication. For the Ford Motor Company, bigger was better. At around the same time, Alfred P Sloan of General Motors was following a different business model. Size still mattered. But production was decentralised and specialised. The focus was on customer needs supported by some of the first-ever market research on their tastes. In the end, it was Sloan and General Motors whose strategy was emulated around the world.

In meeting the future needs of the real economy, perhaps there is a case for more "Sloans" and fewer "Fords" in banking. Perhaps there is a case for a strategic focus on the "local" as much as the "global", for more micro-finance and less macro-finance. Perhaps it is time for relationship-banking to make a comeback.

- ***Strategy – diversity versus diversification***

Customers require a basket of banking services. The provision of some of these services is important for the wider economy; they are a quasi-public good. For example, the provision of monetary services – basic banking – has a strong public good element. That is why depositor protection, in the form of deposit insurance, is stipulated by the state in many countries. Lending to households and companies can also be thought to contain a public good element. Other functions performed by banks may provide more limited social benefits, though their private benefit may be significant – for example, proprietary trading in complex instruments.

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[12] See A. Saunders (1996), "Financial Institutions Management: A Modern Perspective", *Irwin Professional Publishing*. Also see D. Amel, C. Barnes, F. Panetta and C. Salleo (2004), "Consolidation and efficiency in the financial sector: A review of the international evidence", *Journal of Banking & Finance Volume 28, Issue 10*.

[13] Haldane (2009), "Small Lessons From a Big Crisis". See http://www.bankofengland.co.uk/publications/speeches/2009/speech397.pdf

[14] The Association of Corporate Treasurers (2009), "Comments in response to *Turner Review: a regulatory response to the global banking crisis and the accompanying FSA discussion paper DP 09/02 – A regulatory response to the global banking crisis*".

[15] David Bornstein (1996), "The Price of a Dream: The Story of the Grameen Bank", *Oxford University Press.*

If scale economies in banking are weak, banking services could probably be equally well provided by either a financial supermarket or a set of specialist banks. These different structures might not, however, be equivalent from a risk perspective. The supermarket model potentially does offer some risk benefits – the benefits of diversification. Profitable business lines can compensate for temporarily non-profitable ones. What is lost on the swings may be regained on the roundabouts.

This is a story about which we have heard much over the past few months, especially among the biggest global banks. In the first half of this year, big losses on the banking book swings have been more than offset by big gains on the trading book roundabouts. Diversification, we were told, was paying dividends – and, indeed, bonuses.

But memories can be deceptively short. Rewind the clock one year. Then, it was trading book losses that were eroding confidence in the banks. This in turn prompted fears about some banks' solvency, aggravating the very recession which is now generating banking book losses. Trading book gains may well be acting as a hedge today. But they are hedging a risk they helped create.

All of this implies that business line diversification can be a double-edged sword. During the upswing, banks enjoyed windfall gains from bets at the race-track. This boosted their buffers. But when those bets turned sour, these same activities put at risk banks' day job – the provision of loan and deposit services to the real economy. 9500 sub-prime mortgage products at the height of the boom might well have been too many. But zero is surely too few.

There is a second important downside to diversification. While it might be sensible for an individual firm to diversify its business lines to reduce its risk, if this same strategy is followed by all banks the end-result may be greater fragility across the whole system. Why? Because in their desire to look different than in the past, banks' business strategies may end up looking identical in the present. The financial system could then become more prone to herd-like upswings and lemming-like downswings.

There is more than a hint of this behaviour during the run-up to crisis. Banking strategies became a whirligig. Building societies transformed themselves into commercial banks. Commercial banks tried their hand at investment banking. Investment banks developed in-house hedge funds through large proprietary trading desks. Hedge funds competed with traditional investment funds. And to complete the circle, these investment funds imported the risk all of the others were shedding. In their desire to diversify, individual banks generated a lack of diversity, and thus resilience, for the financial system as a whole.

So recent crisis experience highlights some of the costs of bundling banking services. Given that, there is an intellectually defensible case for some unbundling of these services. This would reduce the risks of spill-over between privately and socially beneficial banking activities. And it would help prevent banks making individually rational but collectively calamitous strategic choices.

There are plenty of examples from the non-financial world, from genetics to geology, of diversity improving the robustness of systems. The financial system may be no different. The resulting financial landscape would, however, look rather different. There would be greater specialisation and diversity. The shopping experience for a banking customer would be more farmers' market than supermarket.

- ***Governance – stakeholders versus shareholders***

In deciding appropriate corporate governance arrangements, economists have tended to focus on the relationship between shareholders (as principal) and managers (as agent). Principal-agent problems arise when these two parties' incentives are misaligned. Profit-related pay is one means of achieving alignment, with managers remunerated in line with shareholder returns. In addressing one incentive problem, however, this approach may risk

worsening two others – between shareholders and depositors on the one hand and between shareholders and the public sector on the other.

Limited liability means that returns to shareholders are capped below at zero, but not above. That provides a natural incentive for owners to gamble, pursuing high risk/high return strategies from which they import the return upside but export the risk downside to depositors or the public sector. During this crisis, the pursuit of those strategies has resulted in the public sector picking up the cheque for the downside in an effort to reduce risks to depositors.

A mutual model of corporate governance gives rise to a rather different set of incentives. Instead of external shareholders, savers and borrowers become the owners, with profits remitted directly to them in the form of higher deposit rates and/or lower borrowing rates. For that reason, measured profit margins appear consistently lower for building societies than for banks.

Unlike in most industries, however, low margins for a mutual are very unlikely to result in shareholder revolt or a missive to management to gear-up or get-out. They are a reflection of corporate governance working for stakeholders, here defined broadly to include depositors and borrowers. In this way, mutuality reduces the scope for misaligned incentives between shareholders and depositors which might otherwise arise in a joint stock bank.

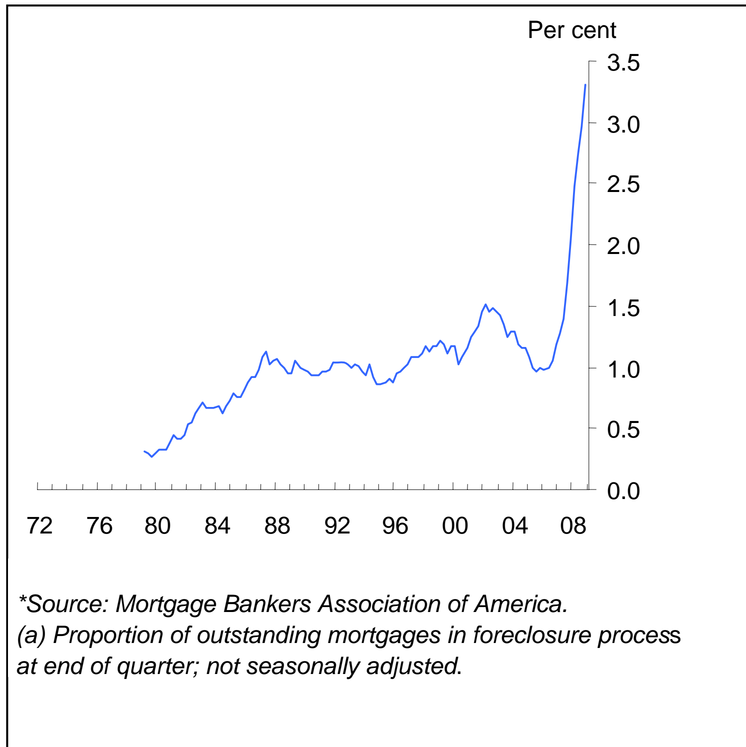
This is not to suggest that mutuality is a panacea. For example, it does not address the potential incentive problem between stakeholders and the public sector. Indeed, it could even potentially worsen this problem as shareholders and depositors are one and the same under mutuality and so must rank equally in the event of a payout from the public purse. Moreover, profit margins in the building society sector are currently under some pressure as a result of low Bank rate and increased competition for prime residential loans. Some building societies have also hit bad loan problems.

Although painful in the short-term, these margin pressures ought in time to abate. So in the heartland of mutuality, I am happy to say that reports of the death of the building society sector are greatly exaggerated. Indeed, mutuality may do a better job of aligning stakeholder incentives than some alternative forms of corporate governance. It is a depressing but telling fact that, of the demutualised former UK building societies, none is today in independent ownership.

Thrift, mutuality and relationship-building have long underpinned banking in Yorkshire. These principles went missing in the run-up to the present crisis. The costs of that vanishing act are now all too apparent. In rebuilding the financial system, to create one which is both stable and better able to meet the needs of the real economy, these principles need to be rediscovered. They offer a tried and tested – indeed, trusted – roadmap for the period ahead.

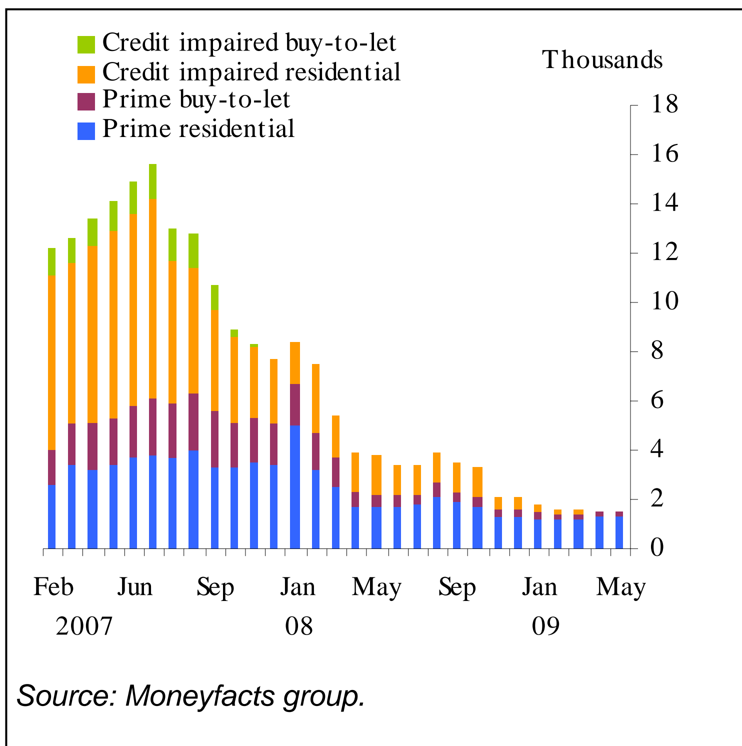
Charts

Chart 1: US mortgage foreclosure inventory rates [(a)]



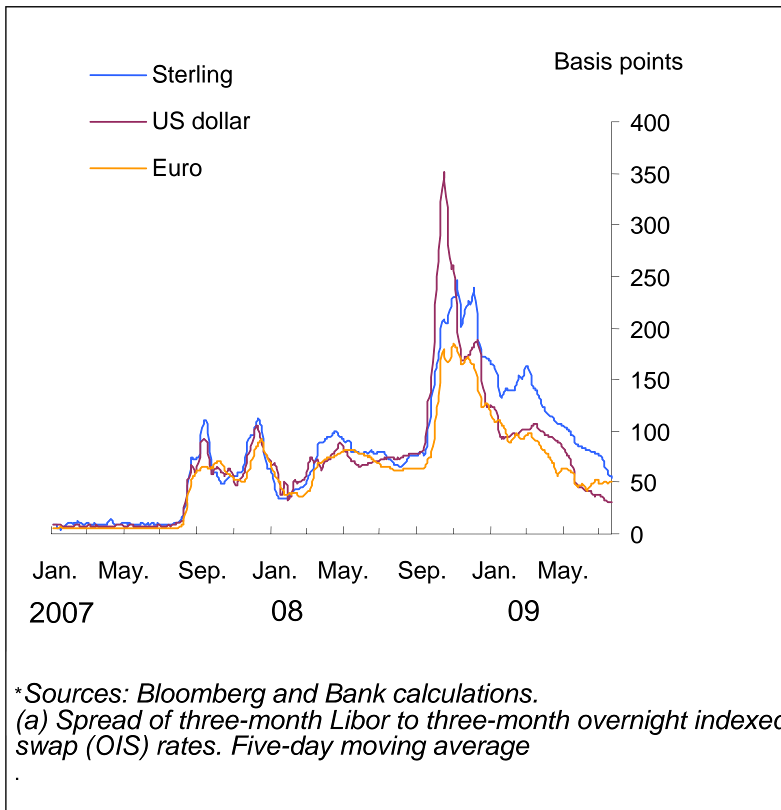
**Source: Mortgage Bankers Association of America.*
(a) Proportion of outstanding mortgages in foreclosure process at end of quarter; not seasonally adjusted.

Chart 2: Number of mortgage products advertised



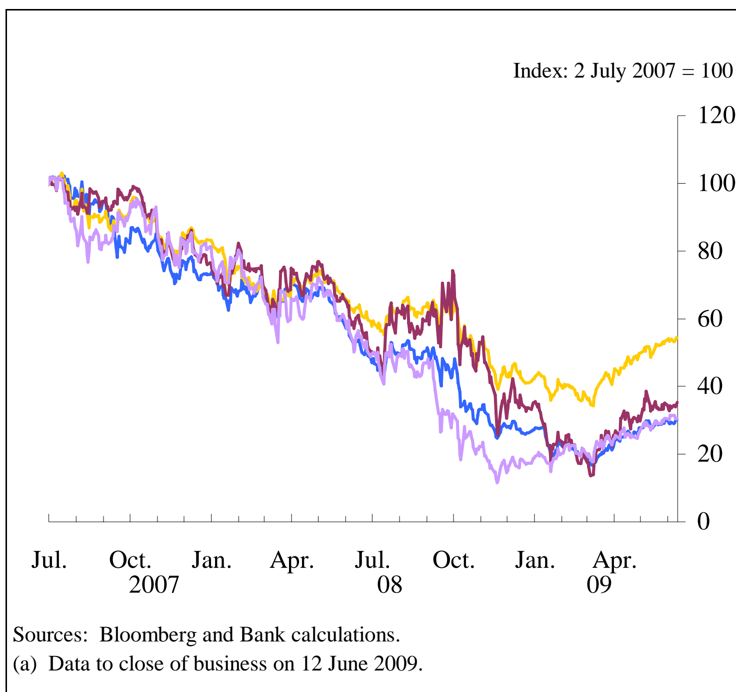
Source: Moneyfacts group.

Chart 3: Three-month inter-bank spreads [(a)]



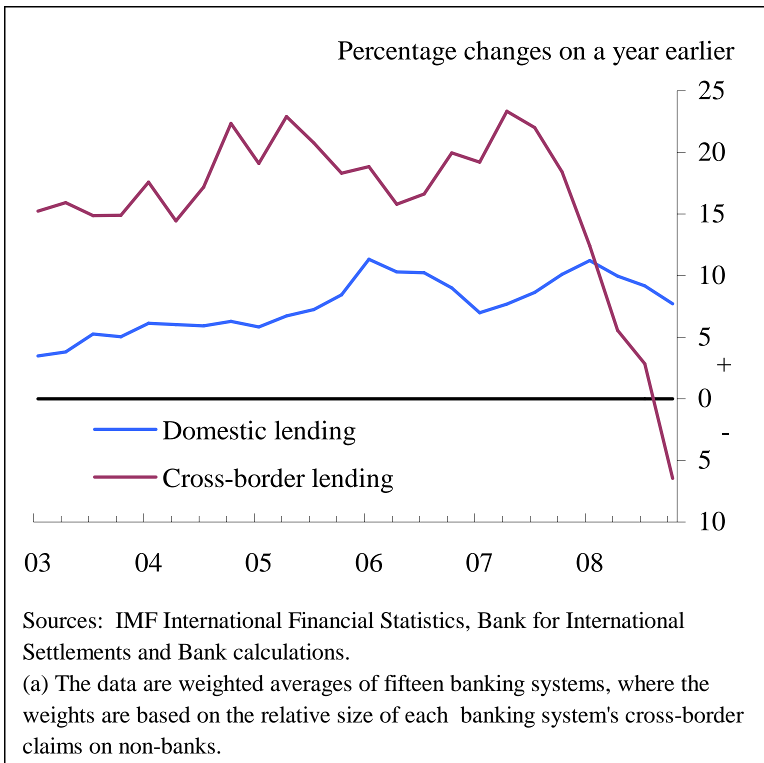
*Sources: Bloomberg and Bank calculations.
(a) Spread of three-month Libor to three-month overnight indexed swap (OIS) rates. Five-day moving average*

Chart 4: Major UK banks' and LCFIs' equity prices



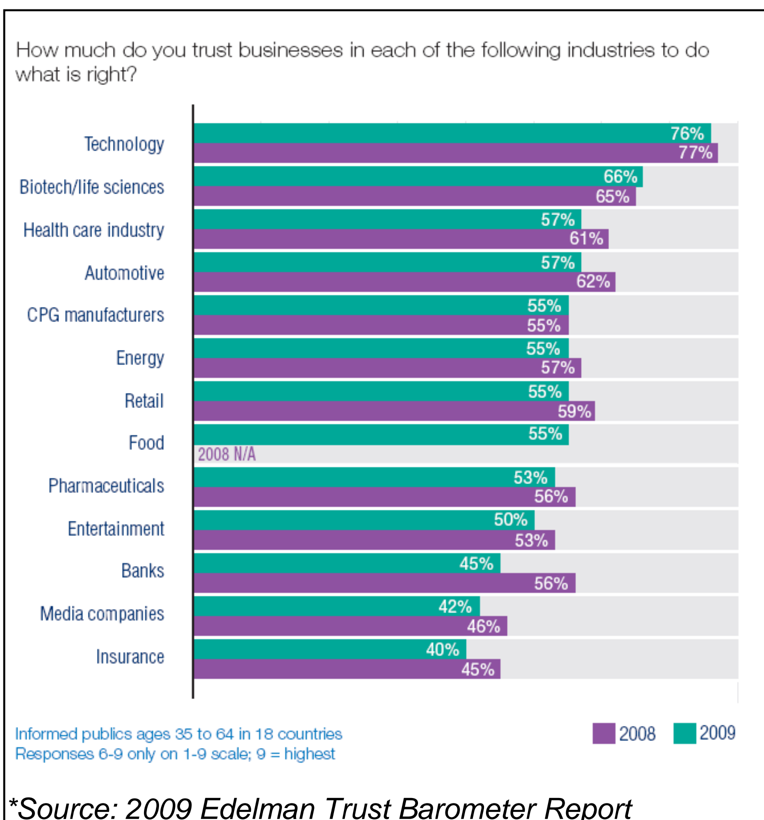
Sources: Bloomberg and Bank calculations.
(a) Data to close of business on 12 June 2009.

Chart 5: BIS banks' cross-border lending [(a)]



Sources: IMF International Financial Statistics, Bank for International Settlements and Bank calculations.
(a) The data are weighted averages of fifteen banking systems, where the weights are based on the relative size of each banking system's cross-border claims on non-banks.

Chart 6: Trust in different industries



Source: 2009 Edelman Trust Barometer Report

Chart 7: Contributions to annual lending growth to UK non-financial companies

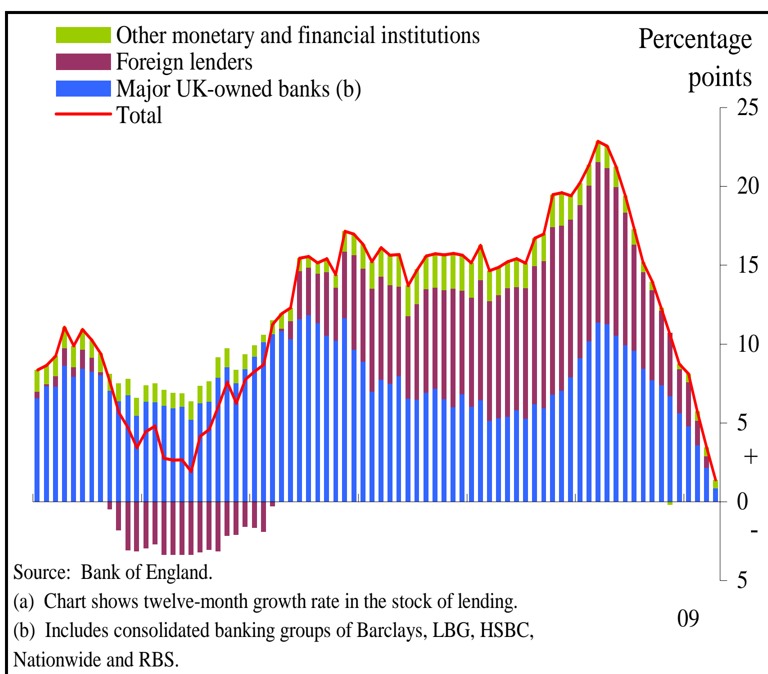
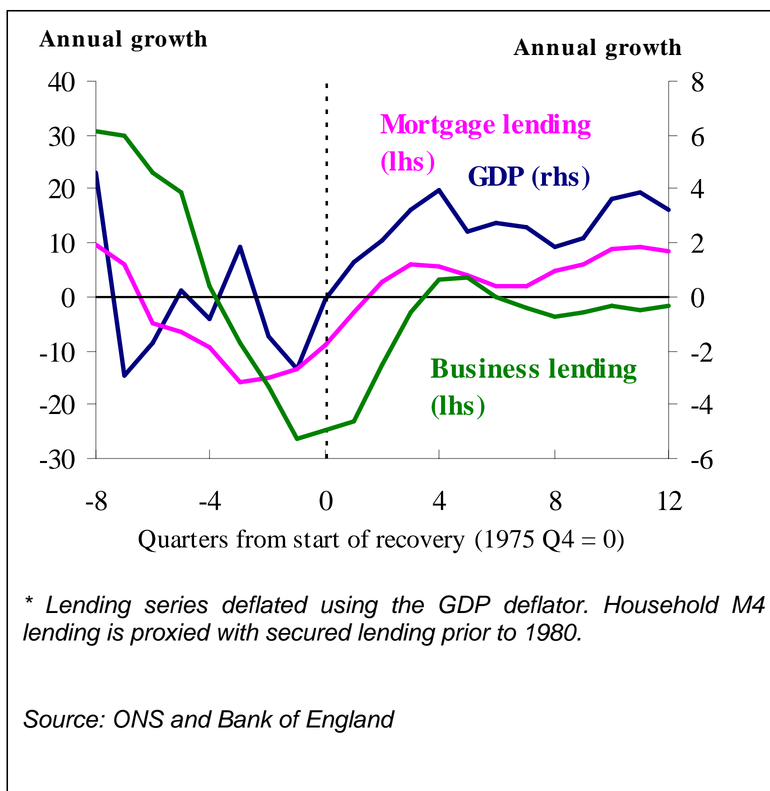


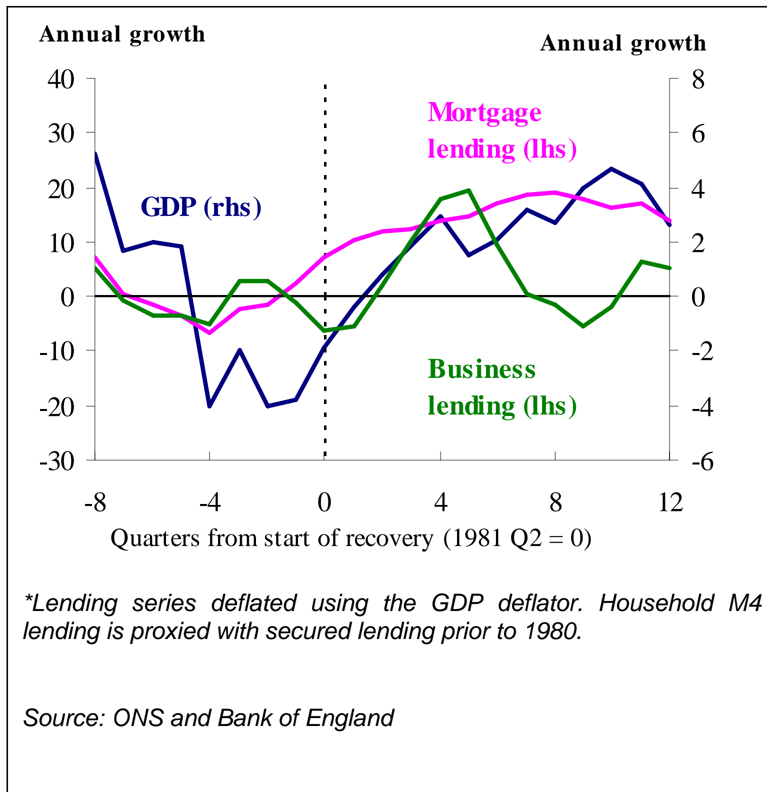
Chart 8: 1970s – Real GDP and real lending



** Lending series deflated using the GDP deflator. Household M4 lending is proxied with secured lending prior to 1980.*

Source: ONS and Bank of England

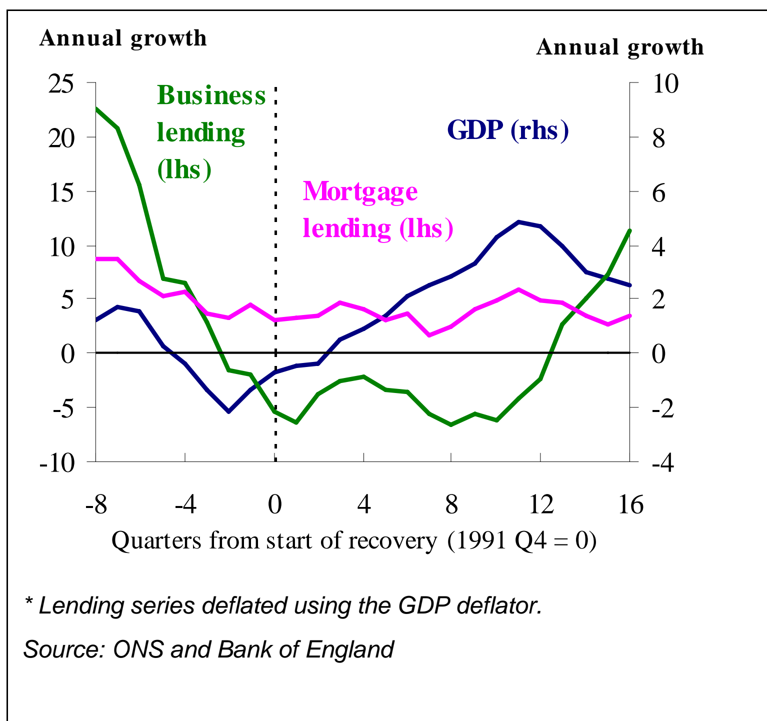
Chart 9: 1980s – Real GDP and real lending



**Lending series deflated using the GDP deflator. Household M4 lending is proxied with secured lending prior to 1980.*

Source: ONS and Bank of England

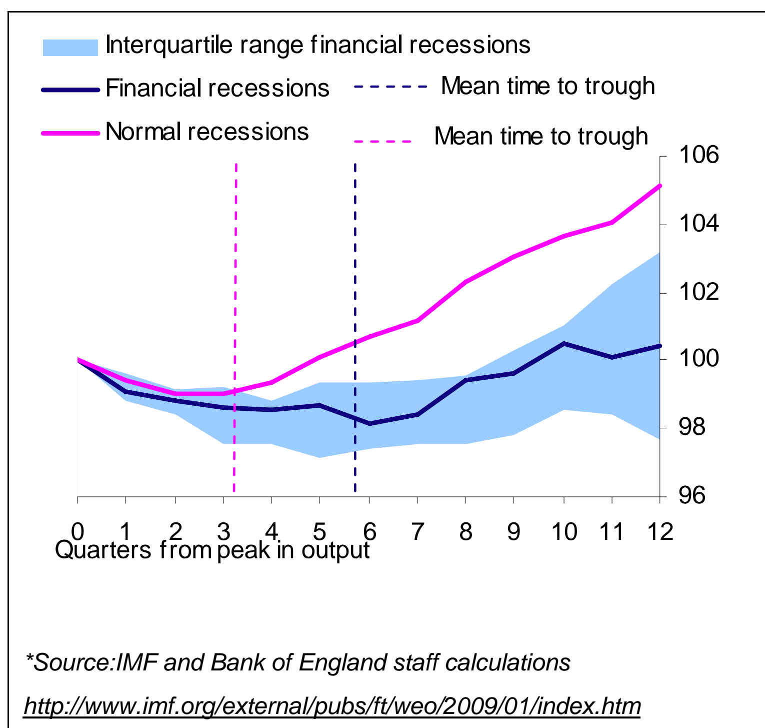
Chart 10: 1990s – Real GDP and real lending



** Lending series deflated using the GDP deflator.*

Source: ONS and Bank of England

Chart 11: Recessions and recoveries – median paths



**Source:IMF and Bank of England staff calculations*

http://www.imf.org/external/pubs/ft/weo/2009/01/index.htm

José Manuel González-Páramo: National Accounts for monetary policy making – reflections on the use of the Euro Area Accounts in the light of the financial crisis

Contribution by Mr José Manuel González-Páramo, Member of the Executive Board of the European Central Bank, to the Eurostat conference national account 2009 “Reading the present to prepare the future”, Session 2: Awakening from the financial and economic crisis Brussels, 16 September 2009.

*   *   *

Ladies and Gentlemen,[16]

It is just over two years ago that Commissioner Almunia and I spoke at the launch of the joint compilation of the integrated euro area accounts by Eurostat and the ECB. Only a couple of months later financial turmoil broke and turned into arguably the biggest financial and economic crisis since the Great Depression.

In my remarks, let me first share a few thoughts on why I believe the Euro Area Accounts are planted on particularly fertile grounds in the aftermath of the crisis. In my view, this has to do with new challenges arising after the crisis, as well as a noticeable shift in the intellectual climate. Indeed, the Euro Area Accounts underwent a baptism of fire, but they are now

[16] I am very grateful to Bernhard Winkler and Andreas Hertkorn for their valuable contributions.

growing up at a time, when fewer and fewer people need convincing that they provide critical information and a useful framework to underpin policy-making.

Second, I will briefly provide some examples where the accounts have already played a useful role in our policy making during the financial crisis. Perhaps unsurprisingly, I will mainly focus on the financial side of the accounts.

Third, I will argue how an expanded use of the accounts over time fits in well within the ECB's broad-based approach to monetary policy, in the context of enhancing our monetary analysis and enriching our economic analysis. No doubt, in the future we shall also explore the role that a flow-of-funds approach and the interaction of sectoral balance sheets can play in helping us think about systemic risk and macro-prudential issues as the ECB assumes responsibility in these fields.

Finally, I will close with a few remarks on statistical challenges ahead for further improvement of the accounts.

The EAA and the crisis fallout

The last two years have been a gruelling time for policy-makers. They have also been a humbling experience for the economics profession as a whole, and, no doubt, also a challenge for statisticians and national accountants.

Why has no-one seen this coming? This is a pertinent question.

It needs to be recalled that central bankers have time and again raised their voices to warn on fragilities and underpricing of risks, but they could not turn a tide of opinion. And some of us have pointed to excessive growth in money and credit, which others considered quite out of step with the tune of the time.

In addition, there have been a few economists, who spent their time looking deeply into the intricacies of the national accounts, before pronouncing themselves on the future course of events. Their simple message was: what cannot go on forever has to reverse.

How is it that these economists-accountants appear to have managed to read the writing on the wall? It has been recently argued that they got there by looking at the flow-of-funds and balance sheets.[17] Accounting identities are very useful reminders that things have to add up. Assets have to be matched by liabilities, expanding debt on balance sheets leads to rising payment flows, in a closed system any one sector will only make outsized profits at the expense of other sectors, the relationship between finance and the real economy cannot remain out of kilter for long … and so on and so forth.

I don't think the accounts by themselves give us a superior crystal ball to gauge the future. However, I do believe that the accounts – even if they cannot give all the answers – will be increasingly useful in helping economists to address the right questions, which will be no mean achievement.

Some economists, like Paul Krugman and Barry Eichengreen, have argued that the crisis has shown that the last 30 years of macroeconomics have, at best, been useless and, at worst, harmful. I don't quite agree with such a harsh verdict. It is certainly the case, though, that key elements for understanding the financial crisis, such as the role of financial intermediaries, the impact of balance sheets and leverage, the possibility of default and the disruption of markets, have hardly been on the map in the prevailing class of mainstream models. Against this background the euro area accounts can be useful as a comprehensive data source and by shaping "systemic" thinking in three dimensions:

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[17] See the recent survey by Bezemer (2009).

First, the accounts provide a detailed articulation of the economy in terms of institutional sectors and, importantly, the interaction across sectors. Over the last 30 years the prevailing macroeconomic paradigm has conceived of macroeconomics as tracing out the implications of the optimizing intertemporal behaviour of a rational representative agent. Much like in the 1930s, the crisis has powerfully driven home the point that macroeconomic outcomes are the result of the behaviour and interaction of heterogeneous agents in the economy, with scope for co-ordination failure, multiple equilibria or – disequilibria.

Second, the integrated sector accounts bring together data on the financial and non-financial side within a unified framework, which provides an enhanced basis for the analysis of interaction between financial and real variables as well as interrelations across institutional sectors. Looking at the flow-of-funds and the evolution of financial balance sheets in conjunction with savings, investment and consumption decisions more closely can help to better understand feedback loops between financial quantities and the real economy.

Third, the accounts are already immensely valuable as an organizing device and consistent framework which co-determines what we see and shapes how we see things.

At a deep level one can invoke Heisenberg's uncertainty principle (Unschärfe-Relation") of particle physics, which establishes that there is no reality independent of measurement. This underscores the responsibility of the integrity and independence of statisticians and national accountants – although they will never be independent of prior theory – in furnishing the lens through which reality is perceived. Indeed, we know from history that the development of national accounts is inextricably linked to advances in economic and monetary theory. This applies to the compilation of National Income and Production Accounts in the US to give expression to the new-born discipline of macroeconomics after the Keynesian revolution. This also applies to the first flow-of-funds tables, initially referred to as "money flows", compiled by Copeland at the Federal Reserve in the immediate post-war period. It is also no co-incidence that Irving Fisher, the father of the debt deflation hypothesis, was both an eminent economist and a first-rate statistician.

More prosaically, the accounts provide a comprehensive map of what we know, and – even more importantly – what we don't know. To give one example, as the financial crisis broke, the ECB was in the very fortunate position to have excellent and timely data on bank balance sheets at its disposal, regularly analysed as part of the ECB's ongoing monetary analysis. Much less was known about other financial intermediaries (OFI), which have remained at a smaller scale in the European context, and insurance corporations and pension funds (ICPF). However, within the financial accounts both the OFI and ICPF subsectors were firmly part of the picture in the context of our monetary analysis even in the absence of more detailed primary sources.[18]

Following the identification of important gaps, improved primary statistics will indeed soon be coming on stream in the context of ECB regulations on financial vehicle corporations, investment funds and enhanced information on securitisation activities by banks. I should stress that these gaps were identified as important priorities well before the outbreak of the financial crisis.

Some of the most insightful work on the origins and evolution of the financial crisis has been based on flow-of-funds data. For example, back in November 2006 at the ECB's Central Banking Conference on the role of money, H.S. Shin pointed to the leverage targeting behaviour by U.S. broker dealers (investment banks) as a crucial pro-cyclical element in the credit and asset boom at the time. Subsequently, in a string of papers he has highlighted the interaction of sectoral flows and balance sheets, as available from the flow-of-funds, in the propagation of the subprime crisis through financial intermediaries and feedback loops to the

[18] See e.g. Moutot et al. (2007).

wider economy (see Adrian and Shin, 2008a, 2008b, and Shin, 2009), with important implications also for the design of financial regulation as suggested in this year's Geneva report (Brunnermeier et al., 2009).

It is now widely argued that the Japanese experience of deflation during the 1990s, was driven by protracted balance sheet adjustment by firms and the financial sector in the wake of the prior bubble in asset markets (Koo, 2008, Hattori et al., 2009), much reminding us of Irving Fisher's debt deflation analysis of the Great Depression. In today's situation again, the health of non-financial and financial sector balance sheets is at the centre of attention as a possible constraint on borrowing and lending as well as agents' capacity to spend.

Looking at the flow-of-funds in conjunction with the international investment positions light can also be shed on the international dimension of the crisis. Brender and Pisani (2009) have argued that the appetite for borrowing by U.S. households had its counterpart in excess savings elsewhere, which resulted in a concomitant rise in the supply of and demand for securitised products globally. In the case of Asia excess savings was mainly channelled into US government bonds and agency debt as a result of exchange rate interventions with the public sector acting as intermediary in the presence of less developed and less open domestic financial markets. Securitised products were quite eagerly snapped up elsewhere, as we know, mainly remaining on the balance sheets of financial intermediaries, at least until the public sector had to step in as this episode of international risk sharing – or rather risk concentration – ended in tears.

The use of EAA during the financial crisis

As I have argued at the beginning of my talk, the euro area accounts may have seen the light of day at the best possible moment, as the financial crisis broke, which boosted the demand for this kind of data.

At the same time, in other respects it might have been the worst possible moment. In a crisis, attention is naturally focused on the latest data. By the time the EAA arrive, with a lag currently of around four months, the situation may have already changed dramatically. Thus the headline "news" content is limited in relation to complementing the monetary data, which comes out within a month, and with respect to euro area GDP and national account data available at national level.

Moreover, as a relatively new dataset, it is not "tried and tested" and, for now, the comparability with other data remains limited in some dimensions. The accounts are presented in nominal terms and as four-quarter-sums, in the absence of a split into prices and volumes and lacking seasonal adjustment for the time being. Other issues relate to the degree to which the principle of market valuation (rather than book values) can be applied across the accounts and the degree to which sectoral information consolidates intra-sectoral flows and balance sheets in practice.

Finally, the balancing of the accounts between the financial side and the non-financial side under the joint responsibility of Eurostat and the ECB truly represents a challenge of historic dimension. The remaining discrepancies for the household and non-financial corporations sectors provide a measure of additional efforts needed in reconciling the accounts. As I have stressed before, the national accounts are useful not only as a framework for putting together what we know, but also for identifying what we do not yet know and for pointing to gaps and inconsistencies in the primary data. Much of this is work in progress.

With these caveats in mind let me nevertheless give you just a few examples where the Euro Area Accounts have already come into play at the ECB during the crisis complementing and enriching our monetary and economic analysis.[19]

First and foremost, the euro area's financial structure was a key element in shaping the ECB's choice of non-standard measures. Our pre-dominantly bank-based system of financial intermediation in the euro area made it natural to concentrate efforts on easing the strains in the banking sector via the provision of liquidity and adapting our collateral requirements in our refinancing operations and to target an instrument, as is the case for covered bonds, that plays a significant role in securing longer-term funding for the banking sector. Information on financial structure was based, inter alia, on the Euro Area Accounts, such as the observation that banks accounted for around 70% of financing provided to non-financial corporations in the euro area over the period 2004-2008, while the figure was only around 20% in the case of the United States (see ECB Monthly Bulletin, April 2009).

Second, information on financial investment of the money holding sectors complements the analysis of portfolio behaviour in the context of our monetary analysis. Of particular interest has been to look into possible portfolio shifts from risky assets into money holdings by households, as had been the case in the wake of the bursting of the equity bubble and period of heightened uncertainty after 9/11.

Third, on the part of non-financial corporations the monetary data showed a decline in deposits, as companies drew down their liquidity buffers initially in the wake of the collapse of Lehman, while more recently deposit growth has picked up again. On the basis of the data available from the EAA until Q1 2009 the broad picture of a drawing down of liquid assets can be confirmed, when including debt securities and mutual fund shares in the picture. At the same time on the financing side, the broader perspective of the EAA suggests that corporations may have been partly able to buffer the impact of the financial crisis in the form of reduced cash flow (and thus less internal financing) and more difficult access to bank lending by greater recourse to market based funding, as corporate bond issuance picked up markedly, as well as recourse to inter-company loans (estimated on the basis of the EAA). In addition, trade credit extended between non-financial corporations suffered but still appeared to decline less than GDP.

Fourth, the regular macro-economic projection exercises include financial projections, which trace out the evolution of transactions and sectoral balance sheets consistent with the assumptions and growth and inflation profile provided by the real projections. Typically most attention is focused on the household and non-financial corporations sectors and the outlook for loan developments, indebtedness and debt service burden. Financial asset flows are also included (making use of accounting identities to enforce consistency within the system) and, in particular, developments in household net worth can have a bearing on macroeconomic developments via wealth effects on consumption. While derived to be consistent with the baseline, the financial projections can be used to assess potential risks to the projection of real variables stemming from financial developments.

Fifth, various balance sheet indicators / leverage ratios and estimates of debt service burden based on the EAA are also regularly analysed in the ECB's Financial Stability Reviews and more recently a risk-adjusted flow-of-funds model has been introduced as a tool to assess interlinkages between sectoral balance sheets and default risks (see Financial Stability Review, June 2009).

[19] For an overview of flow-of-funds analysis at the ECB prior to the introduction of the integrated accounts and prior to the financial crisis see Be Duc and Le Breton, 2009; for an introduction to the EAA see ECB Monthly Bulletin, 2007, and since May 2009 a regular Box on EAA releases at quarterly frequency in the ECB Monthly Bulletin.

The potential use of EAA for cross-checking

Much of what I have said, including the examples on the emerging use of the accounts at the ECB, point to the accounts as a suitable platform to link – some may say: bridge – analysis conducted under the two pillars of the ECB's approach. Indeed developing tools for cross-checking on the basis of the flow-of-funds and the encompassing and comprehensive framework of the EAA has been included as a means of enhancing monetary analysis, alongside cross-checking based on dynamic structural general equilibrium models that include financial frictions for scenario analysis.[20]

Analysis based on the financial accounts can, on the one hand, complement and enrich monetary analysis based on MFI balance sheets in the context of considering portfolio behaviour and financing decisions across a broader set of financial instruments and across a wider spectrum of financial intermediation channels. On the other hand, analysing the interaction of financial transactions and balance sheets with the behaviour of real variables and asset prices can contribute to economic analysis, drawing on the consistent sectoral framework of the integrated Euro Area Accounts.

The challenge remains to underpin and exploit the richness of the accounts by corresponding efforts in terms of modelling. There have been previous attempts at modelling the flow-of-funds. On the theoretical side, the sectoral balance sheet approach by Tobin (1969), Brainard and Tobin (1968) and others in the late 1960s remains the natural conceptual framework for examining portfolio choice and the interaction with savings behaviour and the real economy. However, attempts to incorporate asset demands and balance sheets into fully-fledged large scale econometric models have faced recurrent set-backs over recent decades. At the same time, a new generation of DSGE models could, in principle, also be extended to incorporate the interaction of multiple sectors and portfolio behaviour.

On the empirical side, VAR approaches can be a suitable way to establish stylized facts on how flow-of-funds variables interact with macroeconomic variables in the monetary policy transmission. Obviously, diverse financial structures and the impact of financial innovation are likely to affect relationships over time.

In terms of the practical use of the accounts, I do see a promising future ahead after the tsunami of the financial crisis. Among the broader lesson that we have learned: Two pillars are better than one pillar in underpinning a broad-based approach to monetary policy-making. This leaves ample scope for looking at facts and figures, digging deeper into the data jungle. National accounts remind us that a map is needed to put all the data together.

Further enhancements to the Euro Area Accounts

These insights show the wisdom of past efforts to build up Monetary Union Financial Accounts (MUFA) for the euro area and to pursue, jointly with Eurostat, the goal of fully fledged integrated Euro Area Accounts. I may also add that this major progress facilitated the comparison of financial and economic developments between the euro area and other economic areas. In particular comparisons with the US and UK, where companies and households have relied more on financing from outside the banking sector, benefited from the availability of complete financial accounts encompassing all financial instruments and institutional sectors. The joint work of Eurostat and the ECB on the integration of financial and non-financial accounts by institutional sector has become an important benchmark in the global statistical community.

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[20] See J. Stark "Enhancing the monetary analysis", speech at the conference "The ECB and its watchers IX", Frankfurt 7 September 2007 (http://www.ecb.europa.eu/press/key/date/2007/html/sp070907_1.en.html).

At the same time, the current financial crisis and economic recession has made some shortcomings in the availability of euro area macro data for monetary and economic analysis even more evident. In order to better monitor the transfer of risks, the Eurosystem is already compiling a complete counterpart sector breakdown for deposits and loans within the EAA and this will be enhanced in the future by counterpart sector information for security holdings.

It is essential that the accounts become available with a time lag of 90 days and that they can be linked to the main macro aggregates in a consistent and transparent manner. This would allow a more detailed economic analysis as well as a more thorough cross-checking with the financial transactions and balance sheets. To this aim, by mid 2010 the central banks of the Eurosystem will start reducing the transmission time lag of their input for financial accounts by one month, from 110 days to 80 days. Moreover, the transmission of the national non-financial sector accounts to Eurostat, which has currently a time lag of 90 days, needs to be further reduced by about 10 days, in order to enable the compilation of fully consistent Euro Area Accounts at t+90 days. In this context, I also look forward to the elimination of the last statistical discrepancies in these accounts, concerning the households' and non-financial corporations sector.

I would also like to outline two additional important areas for further improvements: (1) the timely availability of seasonal adjusted, price and volume change data; and (2) the integration of non-financial assets' balance sheets into the Euro Area Accounts.

In order to properly assess the latest quarterly developments the EAA need to be seasonally adjusted and price and volume data, starting with consumption and capital formation by institutional sector, needs to be made available. In addition, real income and saving estimates should be made available.

Furthermore, the links between households' wealth and consumption discussed earlier can only be properly understood if all household wealth components are covered. According to the estimates published separately by the ECB since 2006, around 2/3 of euro area households' wealth is held in housing, while net financial wealth comprises around 1/3. For that reason, I am happy to announce that the EAA will incorporate non-financial estimates from 2010 onwards. To achieve an even more complete picture, these accounts may in the future also provide information on the distribution of income and wealth items across euro area household groups based on the Eurosystem household surveys conducted, under the auspices of the ECB.

While I have focused so far on the use of Euro Area Accounts for monetary and economic analysis, they are also key to financial stability analysis, in particular when aiming to identify the risks and vulnerabilities in the various sectors of the economy and in the markets and infrastructures that link these sectors together. A new European Systemic Risk Board will be set up and will be in charge of identifying macro-prudential risks in the European Union. The euro area accounts with the improvements foreseen and extended to cover the European Union as a whole, will undoubtedly also be of great relevance to the work of the Board.

To conclude, a lot has happened in the two years ago since Commissioner Almunia and I spoke at the launch of the regular simultaneous compilation of euro area accounts by Eurostat and the ECB, which is still a unique cooperation world-wide. I would like to thank him for this invaluable support and trust that we will both witness the further elaboration and intensified usage of this crucial tool for European economic, financial and monetary policy-making.

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