

## **T T Mboweni: Origins and causes of recent financial market turbulence and its implications for the CMA**

Speech by Mr T T Mboweni, Governor of the South African Reserve Bank, at a public lecture, Windhoek, Namibia, 4 April 2008.

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### **Introduction**

Thank you for your kind invitation to speak to you about the recent financial market turbulence and its implications for the Common Monetary Area of Lesotho, Namibia, South Africa and Swaziland, or CMA. As you may know, this morning the Governors of the four CMA central banks had a meeting which was hosted by the Bank of Namibia to discuss matters of mutual interest and exchange observations on economic developments in the region. It is always a delight to visit Namibia, renowned for its friendliness, and this lecture gave me an excuse to extend my visit to your beautiful and super-tidy capital.

Unfortunately, one should add a footnote to the reference in the topic of my lecture to the "recent financial market turbulence": As we are all aware, the turbulence is still ongoing.

I will first touch upon the build-up to the turbulence in the international financial markets, and use a number of indicators to illustrate the turmoil. This will be followed by some observations regarding international policy reactions to the disturbances. Thereafter I will pinpoint a number of key implications for the CMA, before concluding.

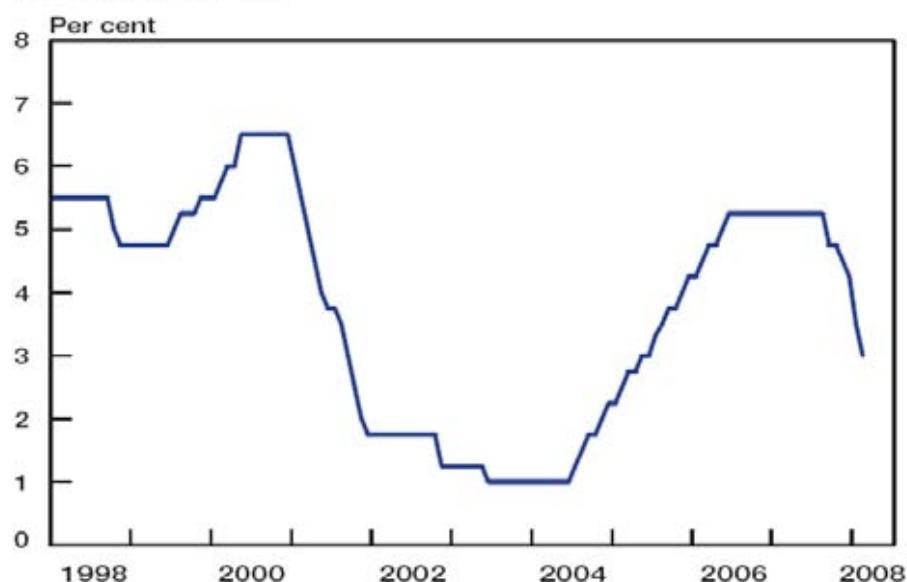
### **The development of the turbulence in the international financial markets**

Significant developments in the global economy seldom start in isolation. Rather, most episodes are extensions of or reactions to previous episodes. With any analysis, one has to start somewhere – but be mindful that important dimensions may be lost by doing so.

We can largely trace the origins of the current turmoil to the United States (US) housing market. I would like to go back to the mid-1990s, when property prices in the US started rising alongside increasing income levels and positive demographic influences on the demand for housing. This upward momentum continued, despite the sharp fall in prices in major share markets early in 2000.

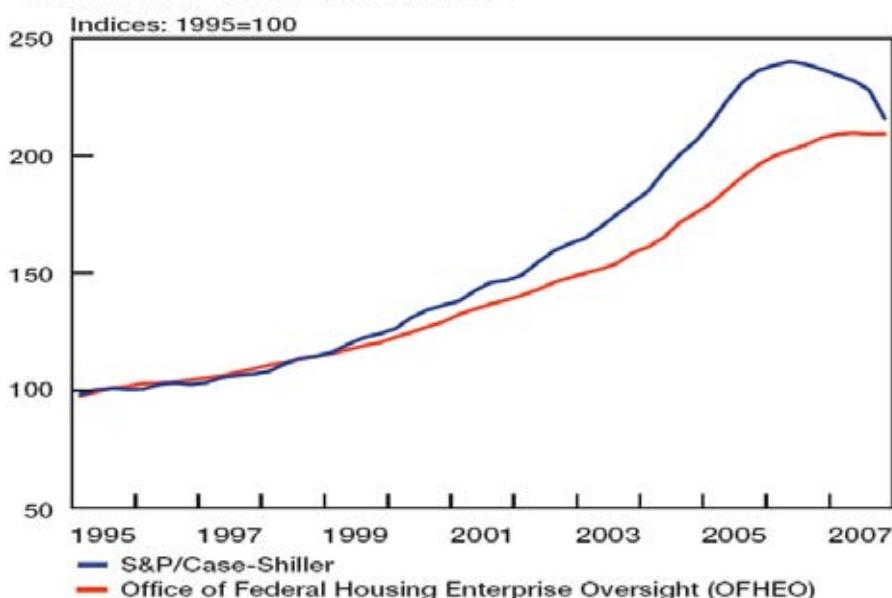
Partly in order to stem the negative impact of the share price decline on economic activity, monetary policy became accommodative in the US. This attempt at moderating the slowdown in economic activity seemed to be successful. At the same time, the low interest rates and rising levels of income bolstered the real-estate market, with house prices in the United States going from strength to strength.

### Federal funds rate



A long period of rising prices creates an expectation that the trend will persist. Economic agents – and not only unsophisticated ones – may be drawn into this belief, and may adjust their behaviour accordingly. By doing so, they may well reinforce and extend the duration of the trend. Translated to the US housing market, there was a fairly widespread belief that acquiring fixed property was a sure way to make a profit, because rising house prices would cover any cost of borrowing or the opportunity cost of owners' equity, and still leave a handsome return. This drew numerous borrowers into that market, and caused lenders to happily extend mortgage loans to such borrowers. Many of these borrowers were borrowers in good standing, and their business continues to be good to this day as they continue to repay their mortgage instalments and as the market values of their fixed property continue to exceed their mortgage debt.

### United States house price indices



But there were also home loans extended to very risky borrowers, with little or no income and few, if any, assets. A significant number of these were extended to so-called subprime borrowers – meaning the borrowers were of below-prime quality. (It does not mean that they got an interest rate below the prime rate! Given their riskiness they were usually charged

higher-than-average interest rates.) The “security” in this instance was primarily a belief in the continuation of the uptrend in property prices and the ability of homeowners to rent out these dwellings. One of the catchwords of the time says it all: NINJA loans, or loans to borrowers with “No Income, No Job or Assets”. According to the Chairman of the Board of Governors of the US Federal Reserve – the US central bank – advances in technology, the development of credit scoring techniques and the emergence of a large secondary market significantly increased the access to mortgage finance in the US (Bernanke, 2008:1). Consequently, from 1994 to 2006, subprime lending increased from an estimated US\$35 billion or 4,5 per cent of originations to US\$600 billion or 20 per cent of originations. Although responsible subprime lending was helpful in fostering sustainable homeownership, far too much of the lending was based on abusive, unfair or deceptive lending practices.

As mortgage loans were extended, the lender initially extending the loans in many instances securitised the loan. For example, a group or pool of, say, five thousand mortgage advances with an average value of US\$100 000 each would be created and sold to a cash-flush investor such as a pension fund for US\$500 million. This is nothing new – mortgage advances have been securitised on a substantial scale for many decades. Incidentally, the borrower would usually not even know that his or her mortgage loan had been securitised – the borrowers continue to send their instalments to the institution or “mortgage originator” which initially extended the loan. But the mortgage originator now simply passes on the instalments received to a company created to handle the pool of securitised mortgages, a “special purpose vehicle”, from where it is redistributed to the ultimate owner of the securitised mortgages – the pension fund in this example.

Numerous “structured financial products” were developed around the securitised mortgages. For instance, a batch of risky or sub-prime mortgage advances could be lumped together and sold off as a separate “tranche” which would pay a higher rate of interest than a batch of standard mortgages. Furthermore, some institutions provided guarantees or partial guarantees to enhance the risk-return characteristics of some of these products. And all remained well as long as the property boom continued. Loans could be extended quickly and repackaged and securitised speedily. The US housing market eventually ran out of steam around 2006 as supply started to outstrip demand, reinforced by tighter interest rates. This set in motion a chain of events in which subprime borrowers increasingly fell behind on their commitments and certain types of securitised assets and structured products started to show their true colour. As these assets stopped performing (or, at best, paid significantly less than previously projected) investor appetite for structured products and securitised assets diminished rapidly. This interrupted the process in which original lenders (mortgage originators) could so comfortably extend a loan and sell it off to somebody else to carry the credit risk. Liquidity in that market evaporated rather quickly, its previously smooth-running machinery grinding to a halt.

More fundamentally, investors and borrowers as well as all those institutions in between discovered that the risk premia which they had priced into a range of financial assets were grossly inadequate. This inadequacy extended beyond sub-prime mortgages, and beyond the USA only: numerous types of securities and derivatives were involved. During the credit boom, investors had struggled to understand complex new securities, so they relied on the credit-rating agencies. The credit-rating agencies labelled the new securities with the same ratings already applied to corporate bonds and this gave investors a handy frame of reference. The ratings methodology for corporate credit risk is, however, fundamentally different from that used for structured credit and yet the ratings that resulted were placed on the same scale, implying similar potential losses. Ratings agencies in their methodologies also assumed adequate liquidity in the trading of structured credit securities – an assumption that did not hold when this market unravelled.

Unfortunately, investors placed excessive trust in rating agencies' approach to structured credit as the new securities had little in common with corporate bonds. When the agencies pointed out that they relied on facts presented by issuers, and that due diligence was not

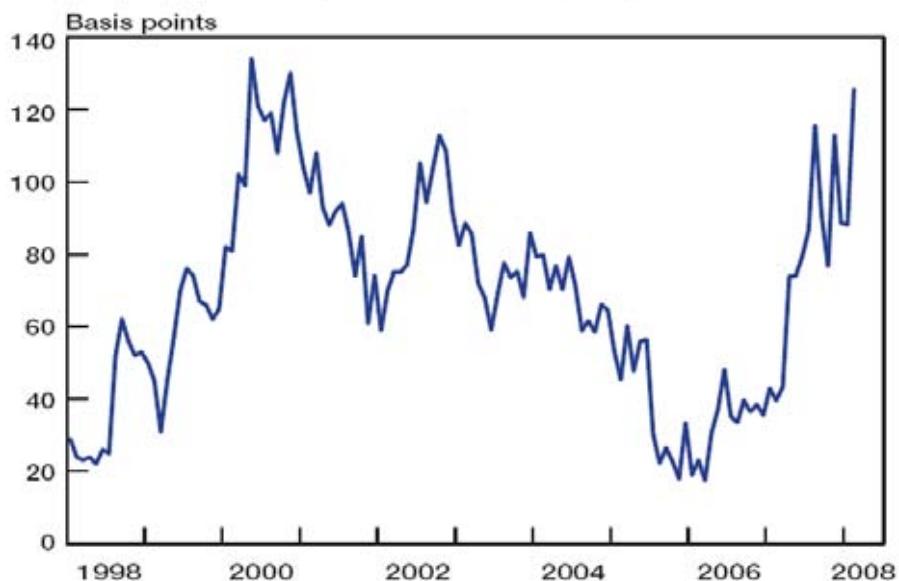
conducted on any of the individual mortgages within a pool, investors' perceptions of ratings on most innovative financial instruments changed. Accordingly, prices of such assets fell considerably as investors became less willing to assume risk. Furthermore, because financial assets are traded in global financial markets, the repricing of assets and drying up of liquidity in trading such assets spread across borders. Consequently, the financial market strains that originated in the U.S. subprime sector began intensifying in the second half of 2007 and led to a sell-off in global equity markets.

In a recent speech, the Governor of the Bank of Canada emphasised three underlying causes of the ongoing dislocations in financial markets (Carney, 2008:2). Firstly, overconfidence among market participants that ample liquidity would continue to prevail, providing an outlet for new products and facilitating the rapid growth of the "originate-to-distribute" credit model – loans are extended but then repackaged, tiered, securitised and distributed to end investors. Secondly, a lack of transparency and inadequate disclosure in respect of many highly structured financial products, complicating their valuation and reducing secondary market liquidity under conditions of stress. Thirdly, a series of misaligned incentives, which led to the watering down of credit quality standards and encouraged excessive risk-taking.

Following the sharp increase in delinquencies, the subprime-related securities were downgraded by rating agencies, causing this market to be impaired significantly. Funding pressures subsequently forced mortgage lenders to scale back or close down, and banks became reluctant to provide liquidity to each other. Uncertainty about who owed how much to whom resulted in overnight interbank lending rates increasing significantly and central banks had to provide additional liquidity to facilitate the orderly functioning of financial markets. Current estimates regarding the scale of losses suffered by mortgage owners in the US range between US\$400 billion and US\$500 billion, although in a recent article Krugman (2008) states that "I think there'll be \$1 trillion of losses on mortgage-backed securities..."

The turbulence came to the fore in many ways. Probably the most pervasive immediate consequence was the repricing of risk. Global markets generally experienced considerable volatility and illiquidity and borrowers were confronting tighter terms and conditions, spawning fears of a "credit crunch" which could harm economic growth. Credit spreads which had declined to extraordinarily low levels picked up considerably, as illustrated in the accompanying graph.

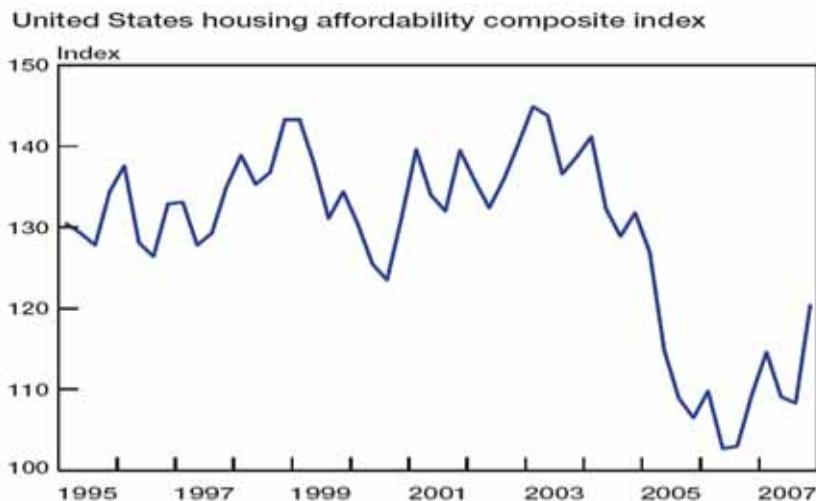
**United States risk spread:**  
US government and corporate AAA rated 9-year yields



### Policy reactions to the turbulence

One should point out immediately that some part of the turmoil – an upward adjustment to the risk premia imbedded in the prices of a range of financial assets – should be welcomed as a normalisation of affairs, such premia previously having been unsustainably low. However, authorities had to be mindful of the need to prevent total overshooting behaviour, and had to ensure the continued smooth functioning of the financial system as a whole. At the same time the hard-won gains in the fight against inflation had to be consolidated and protected, keeping inflation low and stable. Fortunately, the deterioration in the global inflation environment due to the rising prices of energy and food was partly offset by the continued impact of globalisation, the pursuit of sound macroeconomic policies and the effect of a long period of low inflation on inflation expectations.

When the turmoil struck the financial markets in the United States quite visibly in August 2007, the Federal Reserve responded decisively by loosening monetary policy and adding some liquidity to the money market. This provided some relief to cash-strapped borrowers. Over the subsequent six months the authorities in the US loosened monetary policy further, with the objective among other things to restore the affordability of housing and halt the rising delinquency rate. The Fed also became engaged in match-making and rescuing troubled institutions.



A number of prominent financial institutions had to write off huge amounts on account of bad loans, dragging down their share prices and raising concerns regarding their status as creditworthy counterparties. In the past few weeks the Federal Reserve put its balance sheet in harm's way to give assurance to the creditors of Bear Stearns (a mid-size investment bank) and extended that protection to the other primary dealers. In the UK in the meantime, an institution named Northern Rock, which to a significant extent relied on the loan origination-securitisation model, became the first UK banking institution in a long time to experience a bank run as its depositors queued to withdraw their deposits. As the authorities increasingly became mindful of the risks of a widespread crisis developing, Northern Rock was granted emergency liquidity assistance by the Bank of England and eventually nationalised by the British government.

Internationally, regulators were given much food for thought by the turbulence in the financial markets. The ability of a problem in one area of the financial system to spread and contaminate other areas was again illustrated rather vividly. The problems attached to innovative financial products were again underlined, including the need for adequate transparency and disclosure of the exact nature of and risks attached to each type of asset. Although regulators certainly had a role to play, the need for investors to ultimately be wary, do their own homework and not assume that others – regulators, credit ratings agencies, sellers of financial products – have already done it for them, was emphasised. To avoid future confusion regarding the risk attached to particular securities, ratings for the different types of obligation should be clearly distinguished and investors should never rely purely on ratings to determine investment policy. Credit-rating agencies will also have to work harder to ensure that users understand the nature of their ratings.

### Implications for the CMA

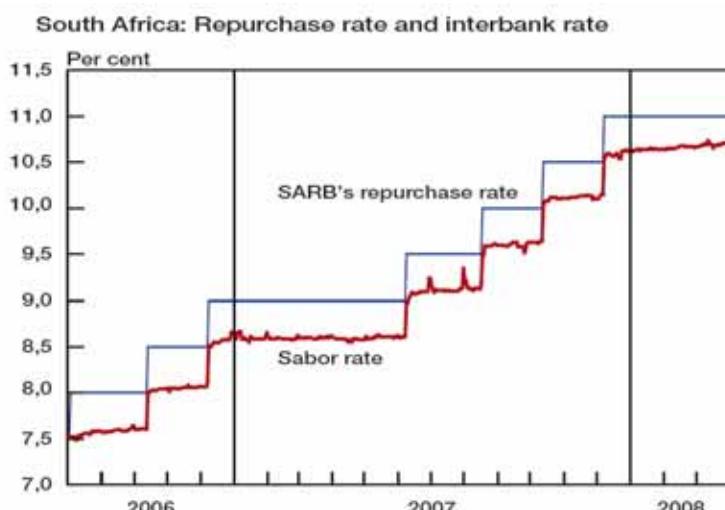
It is only fair to point out that the countries of the CMA are “in this together”, in dealing with the impact of these disturbances. South Africa and Lesotho, Namibia and Swaziland, through our currency union, have a shared financial market and similar if not identical interest rate policies. In many instances the same banks and financial institutions are active throughout the CMA.

The direct CMA exposure to the sub-prime market and to structured products seems to be quite limited. One or two institutions with a strong international presence may have, through companies in their groups, some exposure to the now discredited instruments. However, relative to their overall business and to their capital base, such exposure seems to be small. Fortunately, institutions in the CMA seem to have preferred to focus on more straightforward business and refrained from building up large positions in structured products. Not that banks

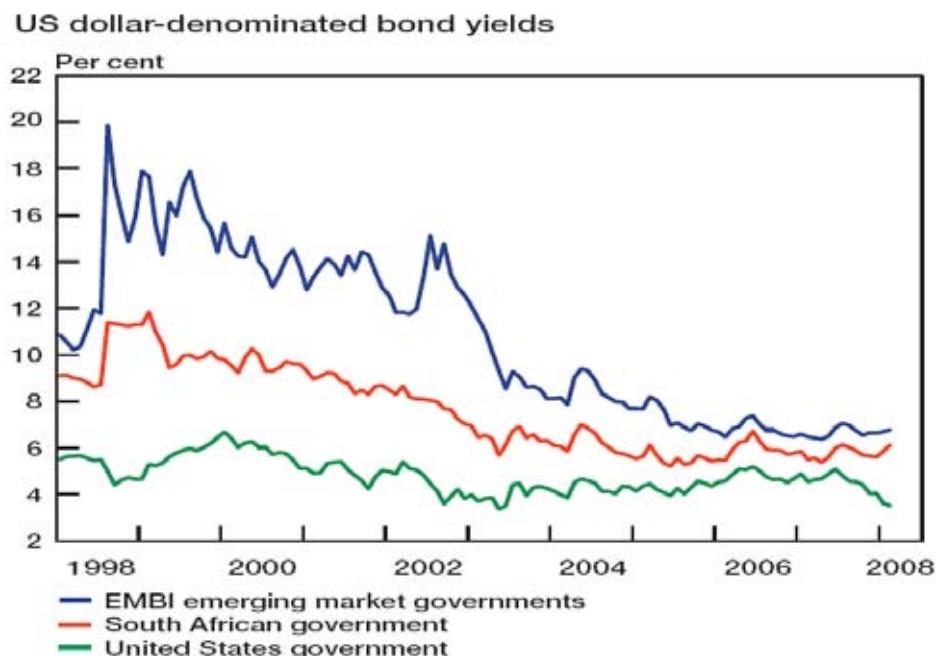
and other financial institutions in the CMA are not familiar with securitisation; many mortgage and instalment sale contracts have already been securitised, but these have tended to be very straightforward “plain vanilla” securitisations.

The international financial market turbulence has resulted in slower global economic growth, and is projected to continue doing so. Recent forecasts suggest a significant slowdown in growth in the US, which is bound to spill over to the rest of the world. Talk of decoupling from the United States is dodgy, at best. Accordingly, CMA exports – and especially those exports destined for the countries most affected by the financial turmoil – are likely to be held back to some extent.

As far as the money market in the CMA is concerned, liquidity has remained adequate throughout this episode of international financial market turmoil. The lack of enthusiasm to do business with other private-sector participants in the money market has not emerged in the CMA. Interbank lending, for instance, has continued without any disruption, and the interest rates at which interbank funds are placed have not risen significantly (as would have happened if perceptions of risk had deteriorated). For instance, the margin between the South African Reserve Bank’s repurchase rate and the Sabor, or South African benchmark overnight rate, has not changed much over time.



The turbulence prompted investors to demand higher risk premia on a wide variety of securities. Securities issued by emerging-market countries were affected, and the CMA was no exception. Accordingly, the spread of debt instruments issued by CMA governments over “risk-free” US Treasuries have widened. However, as can be seen in the graph, this widening was mostly attributable to declining US Treasury yields, which attracted investors owing to their safe-haven status.



While it seems fairly safe to say that the pricing of financial instruments has been influenced by this turmoil, it is more difficult to establish what the impact has been on non-resident capital movements – in other words, the magnitude of capital flows rather than the price thereof. South Africa currently runs a sizable deficit on the current account of the balance of payments, and has since the emergence of the deficit been able throughout to finance the shortfall through capital inflows. Since late 2007 the composition of the flows has changed: portfolio inflows have faltered but at the same time inflows of foreign direct investment and other investment funds have picked up considerably.

The turmoil has so far been accompanied by high and often rising international commodity prices. Greater uncertainty for instance tends to be good for the prices of precious metals. Southern Africa has generally benefited from the ongoing boom in commodity prices. However, these gains also imply a number of challenges: These include dealing with the windfall responsibly by not allowing the bulk of it to be translated into consumption; transforming the economy in such a way that the quantities of commodities produced and exported increase in response to favourable prices; and promoting beneficiation.

Levels of bad debt in the financial system of the CMA have remained fairly moderate. As indicated previously, there is not much direct exposure to structured financial products among financial institutions in the CMA. The increase in overdue loans which is currently observed is from extremely low initial levels, and is not unexpected, given the increases in interest rates since mid-2006.

Bank supervisors and financial supervisors, more generally, in the CMA have again been alerted by the recent events to the forces of globalisation, the significant cross-border activities undertaken by financial institutions in the region, and the accompanying risks. This has underlined the need for continued and effective cooperation and dialogue between supervisory authorities, which are essential for effective cross-border supervision.

This legitimate need should, however, not be confused with a need for more comprehensive and intensive financial regulation. The dislocation in certain financial markets has certainly been painful and some of the consequences far-reaching. While a worthy debate can also be entertained regarding possible regulatory changes in the light of the experience gained from the sub-prime fallout, an overambitious extension of regulation could easily be the wrong option. Such extensions often have noble intentions but unintended consequences. A modest and nuanced regulatory response is more likely to succeed than an overambitious

attempt to eliminate risk-taking (thereby possibly destroying much of the dynamism and most of the positive gains which have arisen from financial innovation).

## Conclusion

Against a background of volatility in the global financial markets, the CMA seems in some respects to enjoy safe haven status. Very little exposure to the structured asset markets has contributed to maintaining a fairly good level of credit quality and adequate levels of liquidity in the integrated CMA financial system. Our financial institutions are now, it would seem, being rewarded for not being too adventurous and aggressive in conducting their business. But to ascribe the relatively healthy state of affairs in the CMA only to lack of exposure to the structured asset markets would be unfair; the crucial role of CMA financial institutions' sound internal risk management processes, robust levels of capital and solid supervision should be acknowledged.

A general lesson from the recent events is that it is better to assume that trends rarely continue forever. This rings true, whether it involves the prices of houses, shares, gold, platinum or any other asset. Within reason, institutions, regulatory authorities and policymakers should develop feasible contingency plans and take active steps to make systems more robust in the event of significant reversals.

In an article presented on behalf of Edward Gramlich at the Federal Reserve Bank of Kansas City's Economic Symposium, legislators were urged to better protect consumers against predatory lenders and to improve regulation of mortgage lenders and banks (Gramlich,2007).

Sound institutions, first-class disclosure, sustainable policies, the building up of adequate reserves – being robust in the face of a storm requires that the relevant authorities focus on basics such as these. Prudential oversight and surveillance by regulators and risk assessment by market participants can also be enhanced by filling the gaps in information on global financial flows. International financial institutions such as the International Monetary Fund (IMF) have taken initiatives in this area. Some authorities have already put in place mechanisms to collect information to monitor capital flows by source countries and types of investors. However, the IMF has suggested that, given the severity of the current credit crisis in the US and notwithstanding the comprehensive monetary and fiscal policy steps already announced by their authorities, additional public funds might be needed to rescue the U.S. financial system in this instance.

Despite the severe U.S. credit crisis and its palpable spill-over effects on international financial markets, the CMA region's economies have thus far remained buoyant given the greater resilience and flexibility that have resulted from sound macroeconomic policies and structural reforms adopted over the past few years. While one should not underestimate the difficulty in the detail of doing so, the financial system in the CMA has weathered many storms successfully and there is no reason to doubt that it will continue to do so. Central bankers will also have to continue to be vigilant as the United States credit turmoil unfolds, and if confronted by deterioration in local financial-market conditions, stand ready to do what is required to facilitate the continuation of orderly trade. However, inflationary pressures currently pose a greater challenge to the CMA region's economies than the international financial turmoil and equally important therefore, is the assurance that we will continue to protect the purchasing power of the money in your pocket through appropriate monetary policies i.e. the pursuit of price stability.

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