

The Financial Crisis and the Banking System in Cyprus†

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Abstract

This paper briefly reviews the causes and propagation mechanisms of the global financial crisis, and the types of policy responses that have been undertaken to date in order to mitigate its adverse effects. It subsequently examines the way that it has been transmitted to the Cypriot banking system, and looks at the impact of the crisis on Cypriot banks so far.

Keywords: financial crisis, credit expansion, Cyprus banking sector, offshore.

1. Introduction

The financial crisis is upon us and its duration is still unknown. We are already well past what may be considered as the first two stages of the crisis (the US subprime mortgage-cum-structured finance debacle, and the post-Lehman Brothers global financial markets turmoil), and have moved to the third and final stage (worldwide economic recession). In contrast to previous crises, this one is deeper and wider, reflecting the growth in financial penetration and globalization that has been taking place in recent decades.¹ Under such circumstances, it was inevitable that Cyprus and its banking system would also be affected.

The objective of this paper is to briefly describe the causes and evolution of the crisis and to assess its effects on the Cypriot banking system to date.

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¹ From a longer-term perspective, banking crises are quite common and tend to follow periods of high international capital mobility; see Reinhart and Rogoff (March 2008) for a historical overview.

Section 2 describes the build-up to the crisis, the propagation mechanisms that have spread it globally, as well as the policy measures that have been adopted in an attempt to contain it. Section 3 reviews the condition of the Cypriot banking system at the eve of the crisis and describes the ways that the crisis has affected it. The paper concludes with the main findings and some thoughts about the way forward.

2. The global financial crisis and policy responses

2.1 The build-up to the crisis²

A full assessment of the causes of the crisis remains tentative at this stage and will (continue to) be the subject of countless publications in the future. Although there are disagreements about the relative importance of different contributing factors, it is generally accepted that the crisis stemmed from a combination of unsustainable global macroeconomic imbalances and structural financial system weaknesses.

A long period of abundant liquidity and rising asset prices, particularly between 2003-2007, in the context of international financial integration and innovation, led to the build-up of global macroeconomic imbalances (growing U.S. current account deficit financed by capital inflows from Asian and oil-producing countries). The abundant liquidity and excessively low interest rates fed a global “search-for-yield” and general under-pricing of risk by investors, which induced in turn a rapid expansion of credit in many developed and emerging countries. Mortgage finance was one of the high growth areas, both in the US and elsewhere, and contributed to a bubble in global real estate prices.

Financial innovation increased systemic leverage and vulnerabilities in several ways. The growth of the mortgage market, especially in the U.S., was accelerated by the adoption of the “originate-to-distribute” model (i.e. loan origination by credit institutions for sale to capital markets) that was supported by financial innovation in structured finance and credit derivatives as well as by an active secondary market for mortgage-related securities. Moreover, both regulated and unregulated financial institutions became more ‘interconnected’ as a result of the explosive growth of over-the-counter derivatives, such as credit default swaps.

² See Acharya and Richardson (eds., 2009), Brunnermeier (Winter 2009), FSA (March 2009), and Hellwig (November 2008) for an analysis on the causes of the crisis.

At the same time, the favourable macroeconomic environment, increased competition, technological advances, and growing asset prices caused financial institutions to move down-market, to lower credit underwriting standards, to engage in riskier trading activities with maturity mismatches (funding of longer-term investments using short-term instruments), and to rely excessively on quantitative risk models. The same factors bred complacency among capital markets investors, leading them to reduce the monitoring of risks and to proper vetting of their investments.

In the case of the U.S., the crisis was shaped by particular characteristics of its financial system such as a complex mortgage financing value chain, a large 'shadow financial system' involving various poorly regulated intermediaries (Investment Banks, Hedge Funds, Structured Investment Vehicles etc.) and instruments (credit default swaps), the existence of different regulatory regimes for investment banks, commercial banks and government-sponsored housing finance enterprises (Fannie Mae and Freddie Mac), as well as a fragmented supervisory architecture comprising several federal and state agencies with competing and overlapping mandates.

The slowdown and subsequent decline in U.S. housing prices since 2006 was the trigger for the unravelling of the highly leveraged and unsound lending that had been building over time. These weaknesses first became apparent in the area of subprime mortgage lending that contained the most over-extended borrowers, although other market segments have subsequently been affected as well. It would therefore be wrong to characterize the crisis as stemming solely from the subprime market – that was merely the forerunner of more extensive problems that were revealed later on.

The following factors have been cited as contributing to the initial phases of the crisis:

- *Structural flaws in the mortgage financing chain* because of its compartmentalization and the lack of retained exposures by mortgage brokers and lenders, thereby reducing incentives for sound risk management and underwriting standards (moral hazard).
- *Market discipline proved weak*, due to inappropriate accounting rules, complex securitization structures, inadequate disclosure, lack of own due diligence and excessive reliance on credit rating agencies by investors, and poor bank governance and compensation arrangements that facilitated risk-taking.
- *Consumer protection was inadequate* as some lenders enticed consumers (mostly lower-income) to obtain mortgages with features (e.g. teaser

interest rates, high origination fees and prepayment penalties, negative amortization) that carried inappropriate and not-well-understood risks or which were abusive in nature.

- *Prudential oversight was lax*, allowing poor lending standards, the proliferation of non-transparent securitization structures, poor risk management throughout the securitization chain. Further it allowed the build-up of excessive leverage by financial institutions, especially via the creation of the opaque 'shadow financial system'.

The crisis has also brought to the fore the long-standing debate on the efficient markets hypothesis and on whether market prices are good indicators of economic value.³ The belief in the self-correcting properties of markets has been the predominant assumption behind financial markets regulation in recent years. The crisis is prompting a rethink of this assumption, and is likely to lead to less regulatory reliance on market discipline and greater emphasis on identifying and controlling the build-up of asset price bubbles and credit booms. In fact, the most important regulatory change that has emerged from the crisis to date is emphasis on a macro-prudential framework that focuses on factors affecting the stability of the entire financial system, as opposed to the traditional emphasis of micro-prudential regulation on individual financial institutions. Macro-prudential factors stem from the business cycle (time dimension) and from 'too big to fail' institutions and inter-linkages between different parts of the system (cross-sectional dimension).⁴

2.2 Propagation mechanisms⁵

The decline in U.S. housing prices prompted large losses on subprime mortgage assets by several banks in major financial centres, sparking a sell-off of assets to meet margin calls and restore capital ratios. In the aggregate, this behaviour further reduced asset values and prompted investors to reduce their risk appetite and to question the exposure of financial institutions to a broader range of structured securities.

³ The FSA (March 2009) states that "it is quite possible, for instance, that efficient and liquid markets provide useful and accurate price signals as to the relative attractiveness of different equities or credits even if the overall level of prices is subject to irrational overshoots".

⁴ See Stephanou (June 2009b) for a discussion.

⁵ See the latest editions of the Global Financial Stability Report (International Monetary Fund, October 2008 and April 2009) for more details.

It is important to distinguish between symptoms, causes, and propagation mechanisms when discussing the crisis. While the above factors are likely to have contributed to the crisis, other factors may have aggravated it and propagated its impact. One of them, at least according to segments of the financial industry, has been the use of fair value accounting rules that is alleged to have forced institutions to value their illiquid assets at artificially depressed prices and contributed to further price declines. Another likely factor is poor policy responses, including the initial pre-occupation with liquidity (rather than solvency) concerns, the adoption of *ad hoc* measures (as opposed to systemic solutions) in response to individual events, as well as the decision to allow investment bank Lehman Brothers to declare bankruptcy in September 2008, in order to allegedly re-establish market discipline in the expectation that the market was prepared for such an eventuality.

The collapse of Lehman, together with the subsequent bailout of insurance company AIG and the initial failure by Congress to pass legislation to support the banking system, proved to be a threshold event. It sparked a vicious circle of deleveraging and of flight-to-quality worldwide as market participants became uncertain about the true health of banks and the degree of government support. While bank lending did not decline markedly, credit provided by the 'shadow financial system' collapsed. It was only through the use of extensive policy measures (see below) that the authorities were able to contain the crisis.

While the crisis may have originated in developed countries and in the subprime-structured finance markets, it spread widely to emerging countries. The initial impact stemming from the direct exposure of financial institutions from those countries to subprime-related securities was relatively small, and many countries appeared to be insulated from the crisis. However, the second-round effects have been much more severe and have primarily stemmed from the deleveraging process and the reversal of capital flows. Such outflows led to significant – and sometimes indiscriminate – debt and equity market sell-offs, higher interest rates and spreads, and pressures on exchange rates. These created negative feedback loops and raised fears (that have not yet materialized) of 'sudden stops' – the abrupt reversals in the availability of foreign credit that have characterized recent financial crises in emerging countries.

The channels of contagion differ widely across countries. In particular, the deleveraging process has exposed pre-existing, home-grown problems in many emerging countries, which have served as triggers for adverse market reactions by investors. These problems include large current account deficits financed by private capital inflows; lax credit underwriting standards that were hidden by years of extraordinary

growth in asset prices and in consumer lending; maturity/currency mismatches on bank and corporate balance sheets; weak fiscal positions; overvalued currencies, partly driven by the boom in commodity prices; and political instability. It would therefore be inappropriate to attribute the crisis solely to the decline of U.S. housing prices or to adopt a 'one-size-fits-all' explanation on the propagators of the crisis in emerging countries.

What started as a purely financial sector problem has subsequently morphed into a full-blown global economic recession – the first such peacetime event since the Great Depression. This has affected many emerging countries via terms of trade and investment – rather than financial – linkages, including declines in commodity prices, remittances and foreign direct investment. The global nature of the recession will make it difficult for them to grow their way out through higher exports as in the past.

The pressures are particularly severe for those countries that have relied on capital inflows to expand economic activity and domestic financing, such as Central and Eastern Europe (CEE). The collapse in the demand for manufacturing exports and commodities, combined with the decline in financing from foreign-owned banks (that often dominated their banking system) and large corporate debt amounts falling due in 2009-10, is placing tremendous strains on these countries. Hungary, Ukraine and the Baltics (particularly Latvia) have been the most distressed countries thus far; Russia has also been substantially affected, although it is partly buffered by a large stock of foreign currency reserves. Some of these countries are caught in a bind since their exchange rate, which could act as a 'pressure valve' in crisis times, is either fixed and cannot adjust (e.g. currency boards in the Baltics) or its significant devaluation would imply big losses on foreign currency-denominated loans that domestic residents (both corporates and households) hold and could trigger a domino of bankruptcies. Significant financial support has already been provided by the international community (IMF, World Bank, European Union) to avert any collapse, and more is likely to be needed before the crisis is contained.

2.3 Policy responses

As with previous crises and in addition to fiscal and monetary expansion, the immediate financial sector policy responses have sought to stem panic among market participants and the wider public, and to restore financial

stability.⁶ In particular, five types of measures have been undertaken, often sequentially⁷:

- Provision of emergency liquidity support (not described below), typically through easing access to central bank lender of last resort facilities, establishing foreign exchange swap facilities, and lowering of reserve requirements.
- Expansion of financial safety nets, comprising government guarantees on various types of bank liabilities.
- Interventions and capital injections in financial institutions (FIs).
- FI restructuring and problem asset resolution.
- Measures to kick start lending.

Prompted by systemic stability and, in a few cases, competitive concerns, most high-income countries have provided extensive assurances to bank depositors and creditors – and, in a few cases, non-bank financial institutions. These arrangements include blanket guarantees on deposits and guarantees on (mostly new) bank debt issues in order to maintain funding, restore investor confidence, and buy time for other policy measures to take effect. The design and scope of such guarantees vary widely across countries, and some of the changes may become permanent.⁸ Although some countries initially announced that the guarantees would be extended for 18-36 months, these arrangements will likely be maintained until financial stability is consolidated and credit flows resume on a sustained basis, which may take longer. In addition, the crisis has shown the need for much greater international policy coordination in adopting and exiting such measures to avoid inefficient beggar-thy-neighbour outcomes. While the need for such coordination has not generally been a key feature of previous crises, the extent of global interconnectedness currently makes it imperative.

⁶ See IMF (March 2009) for a summary of crisis response measures in G-20 countries.

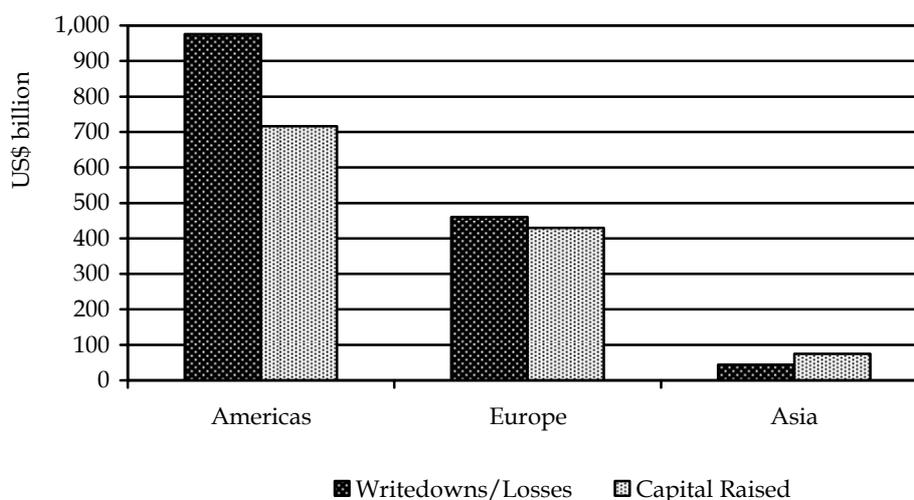
⁷ See Stephanou (June 2009a) for more details.

⁸ For example, the EU has introduced new rules expediting access to insured deposits and raising minimum deposit insurance ceilings from €20,000 to €100,000. The new rules also facilitate the elimination of co-insurance, driven by the perception that it has not enhanced the incentives for ex ante monitoring but has instead encouraged deposit runs on troubled banks, as illustrated by the case of Northern Rock in the UK.

Spurred by increases in write-downs and credit losses (Figure 1), the US and several European countries also engaged in a range of bank intervention strategies. These included arranged takeovers of weaker entities by stronger partners (e.g. Bear Stearns, HBOS, Wachovia, Merrill Lynch), conservatorship (Fannie Mae and Freddie Mac), closures (e.g. Lehman Brothers, Washington Mutual), and nationalizations (e.g. Northern Rock, Bradford and Bingley, Fortis). They have also provided significant capital injections to many other private FIs in order to prevent them from breaching minimum prudential requirements. Those injections were initially provided as individual *ad hoc* responses to rescue specific institutions that were perceived by market participants to be at imminent risk of failure, in the belief that the overall financial system remained fundamentally solvent. However, at a later stage and especially from late 2008 onwards, such interventions took the form of broader industry-wide support packages. In some cases, they have led to the government becoming the main shareholder of still-private private FIs (e.g. AIG, Citibank, RBS). Government exit plans are generally defined in only a handful of programs and will be conditional on the recovery process.

FIGURE 1

Reported losses and capital raised by global financial institutions (June 2009)



Note: Figures include reported losses and capital raised since the start of the crisis (2007).

Source: Institute of International Finance.

Several countries have announced programs to deal with exposures on bank balance sheets. Most of them target higher-quality assets and do not therefore specifically attempt to clean banks from their problem exposures.

These programs mainly include guarantees for certain types of loans while keeping them on bank balance sheets, and the purchase of a broad range of structured securities and loan portfolios. The modalities differ widely and result in different loss allocations on an *ex ante* basis between bank shareholders and taxpayers, although a full assessment of their effects can only be undertaken once the crisis is contained. Only a few countries have actually attempted to tackle problem assets head-on, which has not necessarily promoted efficient problem asset resolution. However, the current crisis is unique in that most distressed assets to-date are structured securities, as opposed to corporate debt, making them difficult to unbundle and restructure.

Evidence of a credit crunch remains mostly anecdotal to-date, although credit growth rates have plunged dramatically around the world. However, while research on past crises indicates that output tends to recover before credit⁹, a healthy financial system is certainly needed to promote a sustainable economic recovery. While capital injections may partly restore banks' financial health, the worsening outlook understandably makes them cautious to extend new lending – nobody wants to 'catch a falling knife'. At the same time, demand for bank financing has increased in some countries as a result of the implosion of the 'shadow financial system' and the drying up of liquidity and risk appetite in capital markets. These pressures are beginning to lead to the crowding out of smaller and riskier borrowers in those countries where governments and large corporates that were funded in capital markets revert to banks for their financing needs.

Central banks have stepped into the void by, for example, engaging in 'credit easing' policies or releasing foreign exchange reserves to kick start financing in various credit markets. The effects of their unconventional quasi-fiscal tactics, sometimes forced upon them as policy rates drop to zero and governments are constrained by political deadlock and fiscal inflexibility, will be closely scrutinized for their effectiveness and their impact on inflation objectives. In addition, the crisis has led several countries to adopt whatever policy levers they have at their disposal in order to mitigate the crunch. These have included additional lending by state-owned financial institutions, the provision of credit guarantees and lines of credit, and even direct government support for troubled borrowers.

⁹ See Calvo et al. (December 2006) for a description of the 'Phoenix Miracle' for emerging countries.

Several of the aforementioned crisis management measures have not yet been necessary for most emerging countries. Emergency liquidity support to the domestic banking system has been the preeminent form of policy response to-date, followed by the expansion of safety nets and measures to kick start lending. Those countries that were not as financially integrated (e.g. Sub-Saharan Africa) or had relatively stronger macroeconomic and financial system fundamentals (e.g. Latin America), have generally not been as affected thus far.

A few emerging countries – particularly in CEE and parts of the Middle East and East Asia – have attempted to match developed countries by raising deposit insurance coverage and introducing blanket guarantees in order to prevent capital outflows or destabilizing bank runs. However, the state guarantee is unlikely to be credible in countries with sizeable public sector debt, a large banking system, and an open capital account. While not yet broadly evident in this crisis, selective controls on capital outflows have also been introduced in a few countries and the pace may quicken as more of them try to prevent ‘leakages’ of domestic liquidity injections or find themselves unable to cover external financing needs.

Capital support in emerging countries has mostly taken the form of expanding the equity base of state-owned banks in order to increase lending (e.g. China and India), as a pre-emptive measure (e.g. Qatar, Saudi Arabia), or as a means to address troubled FIs (e.g. Russia, UAE). There have been relatively few instances to-date of banking system-wide problems due to a significant accumulation of non-performing loans. However, the continuing sharp declines in economic activity as well as the large refinancing needs of corporates (both financial and non-financial) in some emerging countries, will likely create bank funding and solvency problems and generate corporate restructuring needs that would ultimately require support by governments and the international community.

Finally, the deleveraging process and the slowdown in economic activity are leading to a reduction in new financing and the crowding out of riskier borrowers, particularly SMEs. Government support programs in developed countries that set domestic lending targets have also had the unintended consequence of reducing cross-border lending (e.g. trade finance) and accelerating the retrenchment of domestic banks from their foreign activities. Therefore, it is no surprise that emerging countries have also adopted a wide variety of measures to avoid a credit crunch.

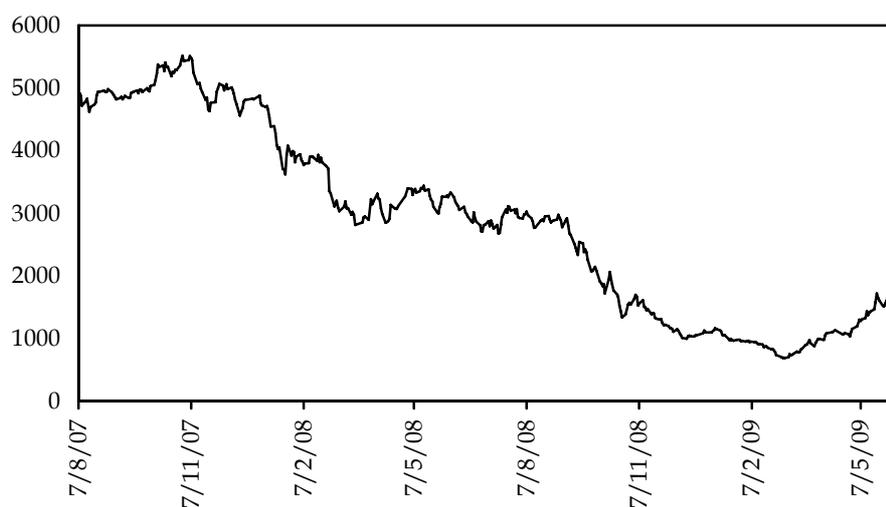
3. Effects on the Cypriot banking system

3.1 Conditions at the eve of the crisis

The financial crisis was first noticed in Cyprus, as an event that could potentially impact the domestic banks, in August 2007, with the marked increase in the difference between the main Euro-Market Interbank Rate (Euribor) and the European Central Bank (ECB) rate. This was followed soon thereafter, in mid-October 2007, by a precipitous drop of the Cyprus Stock Exchange (CSE) index – partly due to “fire sales” by institutional investors attempting to liquidate positions – and a bear market lasting almost 1½ years (Figure 2). The drop closely mirrored the Athens Stock Exchange (ASE) due to the increasing influence that the Greek market had on the CSE, as a result of their joint platform and the dual listing of major Cypriot company shares in the ASE.¹⁰

FIGURE 2

Evolution in the CSE index (August 2007-June 2009)



Source: Cyprus Stock Exchange.

¹⁰ The correlation between Athens Stock Exchange movements and those of the Cyprus Stock Market increased from a range of 0.1-0.3 in 2005 to almost 0.9 in 2008.

At the time, both the Central Bank and the local banking system were busy preparing the way for the introduction of the Euro, which was due on the 1st of January 2008. Earlier, on 22 June 2007, the Cyprus pound was irrevocably fixed against the euro, a few months before the euro changeover. The process of euro convergence had started soon after EU entry in May 2004. As part of this, the Central Bank of Cyprus (CBC), in September 2006, re-introduced an earlier directive requiring banks to equate their base lending rate to that of CBC repo rate.¹¹ The implication of this will be made clear later on.¹²

At the same time Cyprus was experiencing a credit boom with bank lending to local residents growing in the region of 20% per annum during 2007-2008. The CBC seemed unable (or hesitant) to contain it, in spite of a deterioration of the current account deficit from 5% of GDP in 2004 to 7% in 2007, possibly since it would have jeopardised interest rate convergence with the EU and, hence, eventually Euro adoption.¹³

The introduction of the Euro on 1st January 2008 led to an additional, large, liquidity injection in the system, as Euro deposits by non residents – which until then were considered to be foreign currency and hence subject to very high liquidity requirements by the CBC – were classified as local currency and, hence, subject to the much lower liquidity requirements of 25% that applied to local resident deposits.¹⁴ This further facilitated the rapid credit expansion, while the further lowering of the “Euro” liquidity ratio to 20% in July 2008 exacerbated the boom further.¹⁵

¹¹ This became, with the introduction of the Euro, the ECB main refinancing rate.

¹² One need only mention at this point that, under normal conditions, Euribor is for banks the main “cost of funds” indicator. Hence the increase of Euribor well above the ECB main refinancing rate (which would have become the base lending rate for Cypriot banks due to the decision of the Central Bank mentioned above) meant a potentially large squeeze in profitability.

¹³ One can argue that the deterioration of the current account is not a central bank issue but a fiscal issue. Central Banks are there to target inflation and inflation was low. This ignores the fact that, in a small open economy like Cyprus, inflationary pressures manifest themselves on the current account as excess demand leads to more imports.

¹⁴ Cyprus had a strategy since the 1980s to become an international (offshore) business centre, using as base for the strategy a low corporate tax rate for foreign owned companies and a web of double tax treaties. Because the CBC considered (and still does) deposits by non-resident entities as more unstable, it imposed very high liquidity ratios on such funds ranging from 100% in the mid nineties to the current rate of 70%.

¹⁵ This was done in order to “harmonise” the liquidity regime with that of Greece and ensure a more level playing field. Cypriot banks were facing aggressive competition from

Running parallel to (and at least partly because of) this, Cyprus was experiencing a property “bubble” fuelled by speculation that house prices were “low” compared to the EU, speculative buying by non-residents (mainly British) who transmitted the international housing bubble domestically, and a widely held belief that investment in land and property was safe as it “never depreciates in value”.¹⁶ This was a classic case of an “asset price” bubble supported by loose monetary policy and rapid credit expansion.

Four other factors were fundamental in shaping the banking system in the eve of the crisis. The first is that during 2006-2008, Cypriot banks were expanding overseas, particularly in Greece, the ex-Eastern block countries (Romania, Bulgaria, Serbia), as well as in Russia and Ukraine. Secondly, the arrival of two new Greek banks in Cyprus in 2008 – in addition to the three that already operated there – increased competitive pressures in the system. Thirdly, the end of 2007 saw the end of the transitional arrangement for the cooperative banks to harmonise their prudential practices with the European *acquis*.¹⁷ Fourthly, just prior to the global financial crisis, Cyprus adopted, along with the rest of Europe, the Capital Requirements Directive (CRD) most commonly known as Basel II, which relates the amount of capital banks hold to the risks that they are facing and forces them to introduce risk management policies and structures.

Greek banks in financing construction and real estate and, with newcomers in the market, in attracting deposits.

¹⁶ This type of “black swan” belief stemmed partly from the fact that property ownership was the only alternative to bank deposits for a long time because of the foreign exchange controls that Cyprus operated and because of a virtually non-existent domestic capital market. In fact, one can trace the beginning of the housing boom to the 1999-2001 stock exchange bubble, when substitution effects in asset allocation led first to a slowdown in housing/land demand (during the market upswing), then to an increase in such demand during the peak period (due to a wealth effect and asset relative price effect), and finally to an acceleration of related investments during the “crash” as investors sought a ‘safe haven’. Pashardes and Savva (2009) provide some evidence of this as they find a negative association between Cyprus house price increases and stock market returns, with a high growth in house prices after the stock market collapse in 2001.

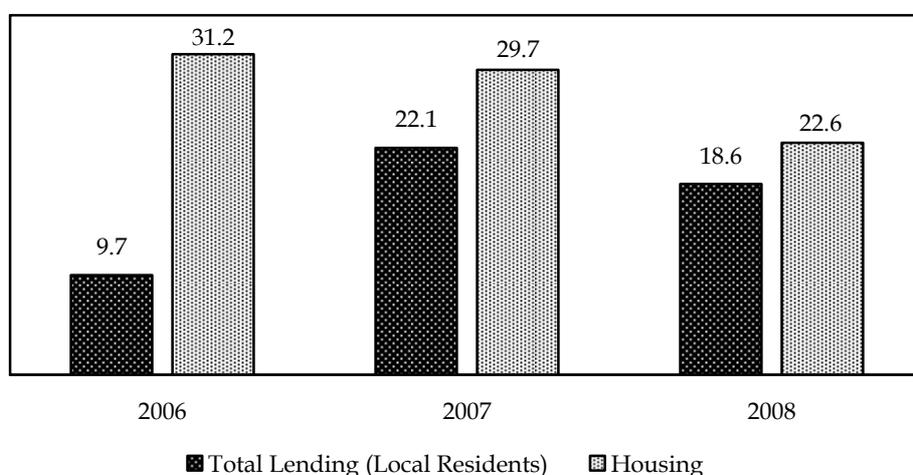
¹⁷ Up to the point of EU entry, Cyprus operated a “two tier” banking system – a “formal” banking system with banks being licensed and supervised (quite strictly) by the CBC and an “informal” system consisting of cooperative societies that operated with relatively little regulation and supervision.

3.2 Credit exposures

Cyprus experienced a credit boom during 2007-2008, with bank lending to local residents growing around 20% per annum. A big part of this lending was directed to the Construction and Real Estate sectors (Figure 3).¹⁸ A striking aspect of the fast expansion in bank housing loans was the marked increase of such lending to non-residents, whose share of bank housing loans increased from 3.2% of the total bank housing loans in January 2006 to 18.6% in March 2009 (Figure 4), clearly demonstrating the way the international property bubble spread to Cyprus.

FIGURE 3

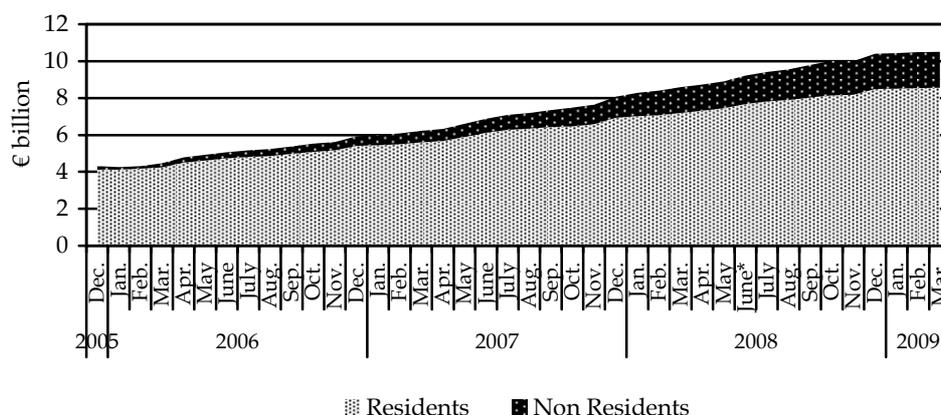
Lending growth (2006-2008)



Source: Central Bank of Cyprus.

¹⁸ According to the CBC, the share of the “Real Estate, renting and business activities” in total bank lending increased from 9.8% in December 2006 to 16.3% at the end of September 2008. Bank lending to the more narrow “Real Estate activities” sector increased its share in total bank lending from 5.4% to 8.0% in September 2008. In terms of annual growth rates, lending to this sector grew by a staggering 71% in 2007 and 79% in the 9 months to September 2008. At the same time, the share of “Construction” in total bank lending increased from 7.0% in December 2006 to 10.2% at the end of September 2008, which represents a growth of 56% in 2007 and 31% in the 9 months to September 2008. Similarly, the share of bank housing loans in the banks’ portfolio increased from 16.7% in 2005 to 21.6% at the end of 2008.

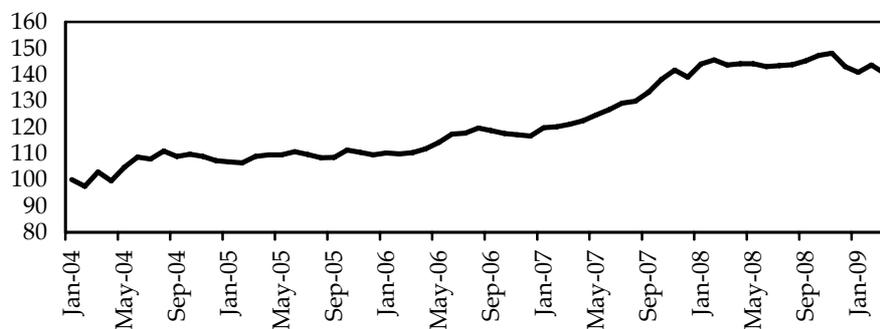
FIGURE 4

Composition of housing loans (2005-2009)

Source: Central Bank of Cyprus.

House prices increased by almost 50% from early 2004 to the end of 2008 (Figure 5); see also Pashardes and Savva (2009, in this issue). In July 2007, the CBC introduced tougher lending restrictions for housing loans, requiring banks to obey strict prudency rules in house lending, an action heavily criticised at the time but, with hindsight, a move that may have saved the system from its own excesses.¹⁹

FIGURE 5

Evolution of BuySell /MAP Platis property index (2004-2009)

Source: S. Platis Economic Research.

¹⁹ The CBC required banks not to provide more than 60% financing in the case of “second home/holiday home” purchases, thus building an appropriate collateral buffer for the banks.

As a result of the financial crisis, demand for housing fell sharply especially for “tourist” holiday homes mainly in Paphos and the Protaras/Ayia Napa area where speculative buying was higher. The impact of this drop is likely to be felt heavily by banks that lent aggressively to foreign “speculative” buyers, though, as was mentioned earlier, the stricter financing rules introduced by the CBC should have provided some protection.

A second risk that Cypriot banks are currently facing stems from their exposure to the tourist sector, which is widely expected to be affected by the crisis, as the economies of the “source” countries get hit by the deepening recession. This is especially so because of the country’s dependence on tourism from the UK, which is doubly affected – the UK recession and the adverse movement of the UK pound vis-a-vis the Euro. The exposure is more manageable than that in construction for four reasons. The first is the size of the exposure – according to the CBC, it represents only 6.5% in 2007 of banking credit, having dropped from 9.6% in December 2003 due to continuing problems of the sector. Secondly, the exposure has no “bubble” element in it – banks were not competing aggressively to lend to the sector as in the case of construction, and hence any excesses are not so pronounced. Thirdly, the sector is expected to fully recover after the end of the crisis with tourist flows returning to normal, compared to construction which is not likely to regain its bubble momentum. Fourthly, a lot of the exposure is old, which means that the ratio of loan value to collateral has declined as loans get repaid and property prices increased.

A third potential credit-related issue facing the Cypriot banks has to do with their liquidity-related placements with international banks. Cypriot banks place a large part (70%) of their foreign currency deposits with international banks.²⁰ This had the effect of creating a “systemic link” of the latter to Cyprus, as a potential collapse of one or more of these banks would have a serious adverse impact on the Cypriot banking system.

Finally as was mentioned earlier, Cypriot banks began venturing overseas during the 2006-2008 period, following (and mimicking) the earlier ventures of Greek banks in the Balkans - Romania, Bulgaria, Serbia - as well as Russia and Ukraine. According to the 2008 annual reports for the three large publicly-listed banks (Bank of Cyprus, Marfin Popular Bank, and Hellenic Bank), two had overseas exposures in these countries ranging

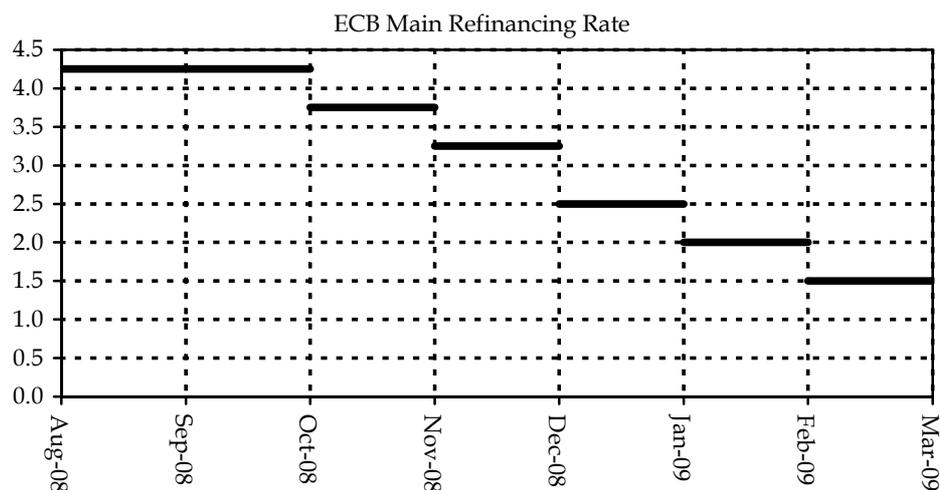
²⁰ According to the 2007 annual reports, approximately 18% of their total assets were held with other banks.

between 12%-14% of Total Assets. In addition, all three banks had exposures in Greece ranging from 22% to 50% of total loans, indicating a varying degree of immunity to Cypriot events but susceptibility to international crisis factors. The problems that these countries are facing as a result of it are described in section 2.

3.3 Interest rate effects

One of the striking characteristics of the current crisis is the sharp reduction by central banks worldwide of their main lending or refinancing rates. For example, the European Central Bank reduced its main repo rate from a high of 4.25% in September 2008 to the current 1.25% in April 2009, in six, almost successive, steps (Figure 6). At the same time, interest rates for household deposits remained on a continuously rising path²¹ while the rates for non-bank corporate depositors at best remained unchanged (Figure 7).

FIGURE 6
Evolution of Central Bank rates (2008-2009)



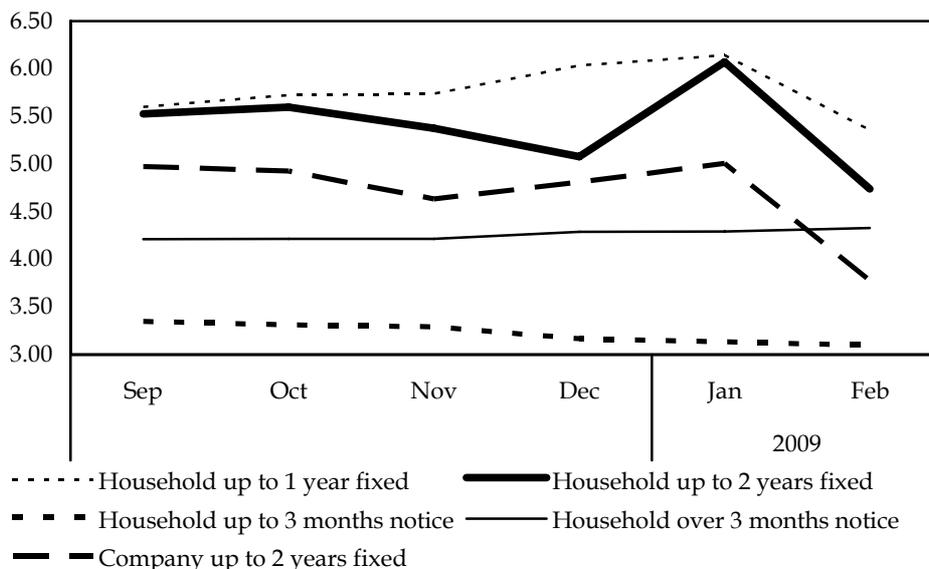
Source: European Central Bank.

²¹ The increase in deposit rates is likely to be the result of liquidity strains of Greek banks. This led banks in Greece to offer high deposit rates, which were, then, transmitted, through their Cypriot subsidiaries, to Cyprus. On a macro level problems in the Cyprus balance of payments with the slowdown of non-resident deposits, meant that the flow of foreign funds was not sufficient to maintain the fast credit expansion.

This could have had catastrophic consequences for the banking system in Cyprus, since, as previously mentioned, the CBC directly linked the banks' base rate to ECB refinancing rate as part of the process of the adoption of the Euro. What saved the day for the Cypriot banking system was, for commercial banks, clauses in their client contracts that enabled them to increase their credit spreads to compensate.

FIGURE 7

Evolution of Cyprus deposit rates (2008)

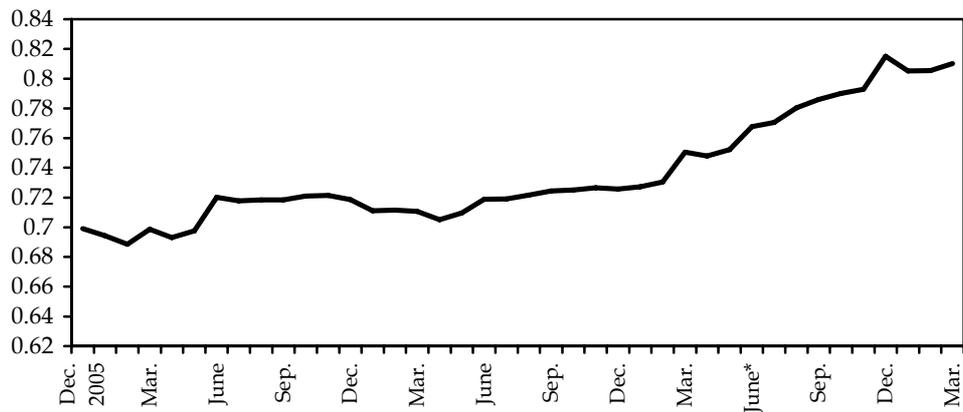


Source: Central Bank of Cyprus.

3.4 Liquidity

The liquidity position of Cypriot banks reflects the rapid extension of credit, with the loan-to-deposits ratio increasing sharply from around 75% in the middle of 2007 to over 95% at the end of 2008 (Figure 8). This was driven by the reduction of the liquidity ratio to 20% prior to Euro adoption and the release of Euro-denominated deposits from the high 75% liquidity requirement that applied for foreign currency deposits to the 20% requirement that applies to "local" currency.

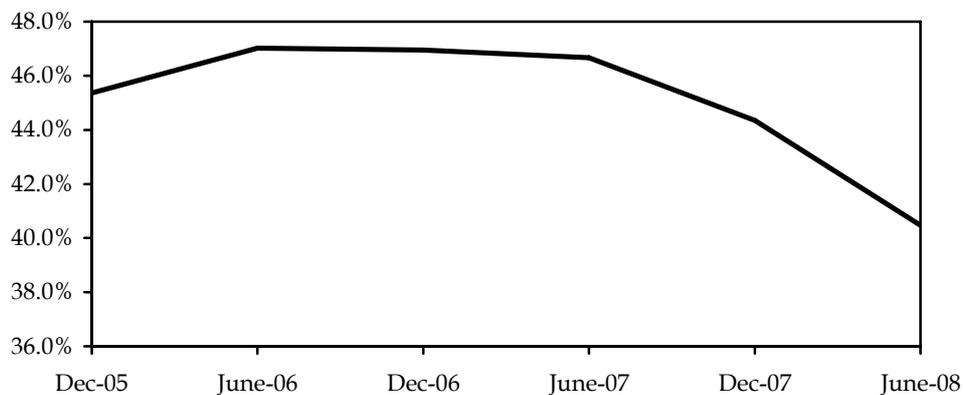
FIGURE 8

Evolution of loan-to-deposits ratio (2005-2009)

Source: Central Bank of Cyprus.

This is also seen by the percentage of bank assets classified as liquid, which declined from 47% to (a still high and comfortable) 40.5% (Figure 9). The high liquidity of Cypriot banks is the result of the high prudential requirements for “offshore” deposits, and is considered to be a major strength in the current crisis. It is also the reason for the high exposure of these banks to international banks that was previously discussed.

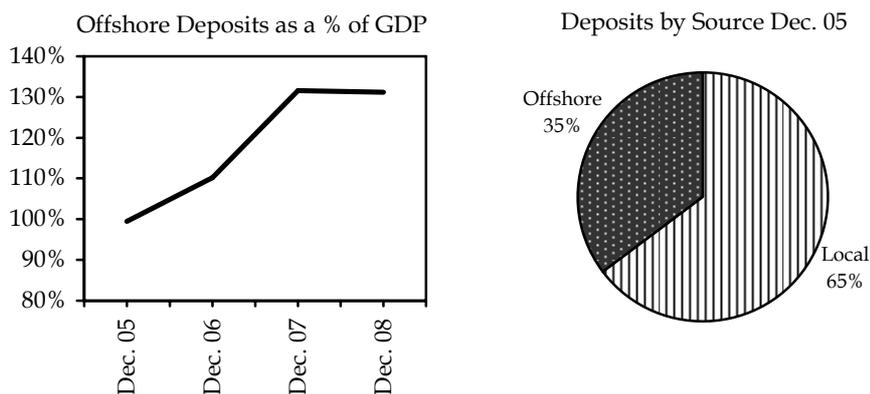
FIGURE 9

Evolution of liquid-to-total assets ratio (2005-2009)

Source: Central Bank of Cyprus.

Another aspect of the liquidity situation of Cypriot Banks has to do with the behaviour of the “offshore”, or non-resident, deposits. As a result of the Cyprus policy to develop as a financial centre using a network of double tax treaties, non-resident deposits have steadily increased in the last 15-20 years and have become an important source of funding for local banks (Figure 10). The CBC, recognizing the possibly unstable nature of these deposits (being tax-dependent), imposed more stringent requirements to banks, essentially allowing them to lend only a small fraction of those; this ratio stood at 25% prior to Euro adoption in January 2008. Euro adoption meant that a large part of these deposits were re-classified as “local currency” and, hence, attracted the lower liquidity ratio that applied to such deposits.²² In addition to exacerbating the credit boom, this was (with hindsight) badly timed since in October 2008, depositors worldwide “took fright” and began withdrawing bank deposits, a move that could have had serious repercussions on the system. On the other hand, however, the adoption of the Euro was a stabilizing factor since it laid to rest any questions regarding the adequacy of the country’s foreign currency reserves to pay these depositors.

FIGURE 10

Evolution and structure of deposits

Source: Central Bank of Cyprus.

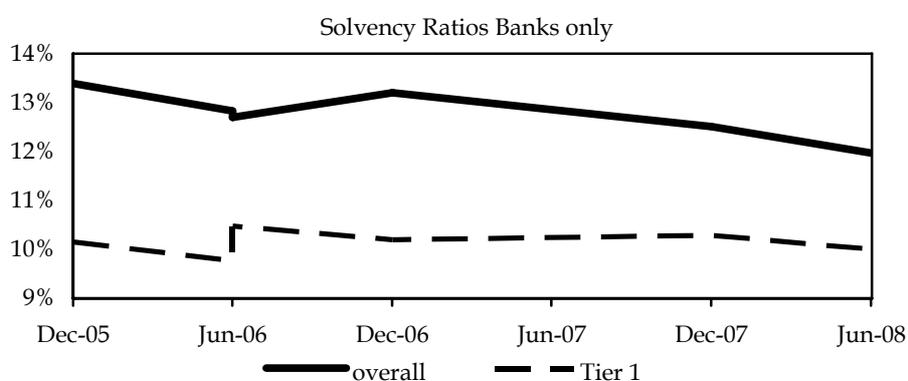
²² The local vs. foreign currency rules date from the early 1990s when the offshore sector’s expansion began. At the time, due to exchange controls, Cypriots held local currency and “non residents” held foreign currency. Banks, in turn, re-deposited their foreign currency with the CBC. The problem began to appear with the gradual abolition of exchange controls and EU entry when Cypriots were allowed to maintain foreign currency deposits and intensified with the adoption of the Euro that, by virtue of being an international currency, was held by offshore depositors.

3.5 Capital adequacy

A discussion of the financial health of the Cypriot banking system would not be complete without an analysis of the banks' capital adequacy ratios. The introduction of the new CRD framework did not have a direct impact on local banks' capital ratios²³ but encouraged the banks to formalise the risk management procedures and think in a more structured way about risks. The relevant ratios show a slight decline over the period (Figure 11) more as a result of the fast increase in lending²⁴ that was mentioned earlier and not because of any capital "hits" due to revaluation losses from investments in "exotic" or "toxic" products, as has been the case with several foreign banks.²⁵

FIGURE 11

Evolution of bank solvency (2005-2008)



Source: Central Bank of Cyprus.

²³ Banks in Cyprus were historically overcapitalized, partly due to a policy by the CBC to set minimum capital adequacy to a level higher than the minimum (prior to the adoption of the CRD, this rate was set at 10% compared to the required Basel minimum of 8%) and partly as a result of the practice of operating with a comfortable margin above the minimum.

²⁴ The published accounts of all three Cypriot banks show "revaluation" losses that affected their capital base but these are more likely to be the result of a reduction in the value of international bonds held. The reader is reminded that Cypriot banks invest a large part of their liquidity in Bank Bonds.

²⁵ Other ratios used to judge the financial health of banks as non performing loans to total loans or provisions to total non performing loans, show a marked improvement in the last years. This is, however, more likely to be the result of the rapid credit expansion of the recent years that increased total loans while "bad" loans did not have time to show up yet, rather than to a quality improvement of bank portfolios.

4. Conclusion

It is generally accepted that the financial crisis stemmed from a combination of global macroeconomic imbalances and structural financial system weaknesses. Unlike recent episodes, this crisis originated in developed countries and has spread to emerging ones via a variety of financial and real sector contagion channels. The immediate financial sector policy responses - including emergency liquidity support, expansion of financial safety nets, and interventions in financial institutions - have successfully stemmed widespread panic. With the exception of CEE, most of these responses have not yet been necessary for emerging countries, although policymakers around the world have undertaken various measures - including unconventional ones - to mitigate the perceived credit crunch and to kick start lending. The duration of this crisis will determine to a large extent whether financing measures, as opposed to actual adjustments in countries' economic structure, will be appropriate. CEE is the most vulnerable region and will remain at the epicentre of the crisis for the foreseeable future.

The history of how the Cypriot banking system has coped with the crisis thus far has several components: a combination of strict regulations (high liquidity ratios, higher-than-minimum solvency ratios), timely intervention to stop aggressive real estate lending, fortunate coincidences (EU entry and Euro adoption), unfortunate policy decisions (e.g. linking the banks' base rate to the ECB rate and allowing excessive credit growth to persist), and some completely unexpected results of otherwise prudent supervisory decisions (i.e. high mandatory liquidity ratios leading to high exposures to foreign banks). Compared to banks in other European jurisdictions, Cypriot banks have generally managed to weather the crisis fairly well to-date.

However, it is likely that the Cypriot banking system has not yet seen the worse of this crisis. The problems of the construction and real estate sector have not yet fully hit the banks, since a lot of this lending was granted with built-in grace periods. Tourism is showing a decline and the CEE countries are facing severe problems. These are the factors that will shape the future course of events and determine the severity of the impact.

A final note of caution concerns the policy lessons from Iceland, Switzerland and Ireland, whereby allowing domestic banks to grow disproportionately large relative to the economy's size and the ability to support them in times of trouble has come back to haunt the authorities. Cyprus is in a similar position in terms of the size of its banking sector compared to GDP, although it has not yet had to face this type of 'too-big-to-fail' bank event. An important policy implication may be to further

strengthen banking regulation by adopting a macro-prudential framework that focuses on the stability of the entire financial system and introduces additional 'firewalls' (to the extent possible) to protect domestic depositors and taxpayers from any banking problems, and to make supervision even more intensive and forward-looking. This may be the only way to sustain the international business centre strategy that has been a key driver of growth in recent years without compromising the economy's future well-being.

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