

Cyprus Banking INSIGHT

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ASSOCIATION OF
CYPRUS BANKS

During the last year a multitude of developments occurred in relation to the implementation of the Cypriot economy macroeconomic adjustment Programme agreed with the International Monetary Fund (IMF), the European Commission and the European Central Bank (ECB). Most of these developments also affected the banking sector, since they involved the introduction of new legislation and adjustments on issues directly related to Financial Institutions (e.g. the lifting of restrictions on banking transactions, the adoption of legislation on foreclosures and the insolvency framework).



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In the current issue of the "Insight", we have attempted to cover the most important changes that took place and are relevant not only to our members, but also to the economy in general. In particular, this publication includes interesting articles on Non-Performing Loans, the new Insolvency Framework, the Capital Markets Union, the Guidelines on the Security of Internet Payments and the positive effects of flexible work arrangements and longer customer service hours.

We also present the views of guest contributors on other current topics such as: The shift towards alignment of banks' risk and finance function; Operational Risk; Cyprus: The banking and real estate sectors are interconnected.

We believe that we present a very interesting publication, which contains topical issues analyzed by experts, aiming at providing comprehensive information to "Insight's" readers.

We do hope that you find our new publication interesting and we welcome any suggestions and comments you may have.

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Reform of the insolvency regime in Cyprus

The insolvency framework in Cyprus, which was in place until April 2015, was deemed inadequate to tackle effectively the serious problem of non-performing loans faced by banks and cooperatives. Moreover the insolvency framework was based on an outdated legal framework of 1931 (with some modifications) in relation to bankruptcy of natural persons, and of 1951 in relation to insolvent legal persons (liquidation process), and therefore did not contain the required elements of a modern insolvency framework. It was deemed that it could not contribute to the creation of the appropriate conditions that would favor the rescue and reinstatement of the debtors, did not provide appropriate incentives to banks and debtors to agree on a mutually acceptable program for the repayment of debts, while the law regarding bankruptcy of natural persons followed a rather punitive approach to natural persons being declared bankrupted. At the same time, the bankruptcy and liquidation procedures took many years to be completed.

The new Insolvency Framework was voted by the Cypriot Parliament in April 2015 via five separate laws of around 300 pages relating to the restructuring of loans of natural and legal persons and bankruptcy and liquidation. The most important changes are summarized below:

- The profession of the Insolvency Practitioner (IP) is established, which will be subject to mandatory professional registration and regulation. In order to be approved, an IP needs to have relevant work experience and pass exams. Accountants and Lawyers wishing to act as IPs will be required to obtain the relevant certification provided they comply with the required criteria and shall be regulated by their existing Regulatory Bodies (i.e. the Institute of Certified Public Accountants of Cyprus and the Bar Association). A code of conduct is also expected to be put in place soon.
- A new Insolvency Service is established, which will be responsible for the certification of the IPs and will undertake bankruptcy and liquidation procedures.
- In relation to natural persons the new framework aims at restructuring the indebtedness for such borrowers. An IP is involved in the process who would develop a restructuring plan, following an application by the debtor. A moratorium is imposed (stay on enforcement

proceedings by creditors) of 95 days during which the IP must come up with a restructuring plan.

- The write off of small amounts of debt (25K EURO irrespective of the amount of their total debt) of debtors with no assets and no income (Debt Relief Order -DRO) is established. This concept did not exist before. The DRO process enables eligible insolvent debtors to write off their debts where they can prove they are not in a position to repay them. The process will go through the IS and the final DRO will be issued by court.
- In relation to Companies, the new framework amends the Company law and introduces the Examinership scheme based on the Irish model. Any creditor, or the management of the company, can file to the Court to ask for the appointment of an examiner. The court evaluates the prospects of viability of the company and if it decides that there are prospects, the court appoints an examiner. The company is placed under the protection of the court for a period of 6 months. During the protection period the Examiner must conduct an examination of the affairs of the company, and report to the Court a proposal which has been previously agreed by the majority of creditors in number and value. If approved by the Court, the scheme becomes legally binding on all parties. The Court may approve the scheme even if the majority of creditors did not vote for its implementation on the ground that the proposal is fair and just.
- The bankruptcy and liquidation procedures are modernized and become more simple and shorter.
- Mortgaged property is added in the property that can be sold by the receiver, while until now this property was not included in the bankruptcy and liquidation procedures.
- The amended bankruptcy law allows for the fresh start of reinstated natural persons. Bankrupt persons will be allowed to be automatically reinstated after three years, while all of their remaining debts not satisfied by their property will be written off.

The challenges faced by those who are called to implement the new framework (i.e. the Insolvency service, IPs, banks and courts) are huge, while the new laws do not provide for a transitional period. In the next weeks the newly



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established Insolvency Service shall need to be organized, set up its websites, draft and issue its application forms, produces and protocols, set up communication channels with banks and IPs, issue the code of conduct of the IPs, arrange the exams of the first IPs to be certified and arrange for the training of its own staff, the IPs and other affected parties and start accepting and reviewing applications of debtors. Banks also need to set up new insolvency units or re-organize their existing recoveries and arrears management units, adopt new procedures and train their staff. These need to proceed as soon as possible if the new framework is to succeed.



¹ As of 30th April, 2014, NPLs in Cypriot banks (including cooperative banks (provisional), and excluding overseas operations (branches and subsidiaries situated abroad)) were as follows:

	Total Credit facilities	Total non-performing credit facilities	Percentage of non-performing credit facilities to total credit facilities
Credit facilities to legal entities	32.701.772	15.445.653	47,23%
Credit facilities to private individuals	24.385.036	11.743.561	48,16%

² Bankruptcy Law (Cap 5)

³ Company Law (Cap 113)

Cypriot Banks biggest challenge: NPLs

Following the events of 2013, the Cypriot banking sector has made substantial progress in overcoming the crisis and adjusting to the new economic and regulatory environment. Local Banks, primarily systemically important Banks, have successfully managed to strengthen their capital position through equity raising and to a lesser extent through retained earnings. Looking forward, the biggest challenge is the management of non-performing loans (NPLs) which have risen considerably and as a result have subdued lending to both households and corporates.

In the immediate crisis aftermath, Banks encountered a sharp increase in the level of NPLs in the banking system. This was primarily the result of a deterioration of economic conditions and a sudden amendment of the definition of NPLs and restructured (forborne) loans (July 2013) by the Central Bank of Cyprus (CBC).



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High levels of NPLs have implications to both the Banks and the economy. Persistently high levels of NPLs aggravate capital needs, strain liquidity, deplete earnings, increase funding costs and affect profitability. Therefore, Banks need to carry-out an internal consolidation in order to improve asset quality. Managing NPLs becomes a costly process that consumes resources and substantial management time. Furthermore, reduced lending has negative implications on economic activity, leads to lower productivity, deteriorates competitiveness and induces a misallocation of resources as credit is tied-up in ailing, unprofitable corporate and over-indebted households. All the above implications unavoidably render difficult any attempt to expand lending to profitable businesses and credit worthy households, thus impeding efforts to return the economy back to recovery, growth and job creation.

To deal with a systemic NPL problem requires decisive action by both the authorities and the Banks. Lenders compensate for higher risks relating to debt collection by requiring higher levels of collateral, guarantees, interest rates and fees. Therefore, authorities should address all legal impediments that delay loan resolution and make it difficult and costly for Banks to collect from defaulted borrowers. They need to reform the legal framework and set up a simple and effective foreclosure process by amending laws and regulations dealing with debt collection, seizure of assets from debtors, auctioning procedures and judicial processes. Nevertheless, addressing these issues is a major political challenge due to the socially disruptive effects. Additionally, authorities should proceed with regulatory and tax measures to incentivize loan restructuring, for example modernize framework for loan securitization, introduce temporary tax deductibility for provisions, and abolish fees/tax relating to immovable property.

Banks on the other hand, need to recognize the true size and cause of the NPL problem and adopt and implement a plan to tackle the issue. They need to employ professionals with loan collection and workout skills and they need to structure and implement work-out strategies in order to assist troubled borrowers by offering viable restructuring solutions. Lastly, they need to manage effectively their



balance sheet and if necessary raise additional capital, remove problem loans (bad bank/good bank structure), recognize losses, and raise cash by selling assets or non-core business.

Concluding, the return to economic recovery, growth and job creation depends on the successful tackling and settlement of the NPLs issue. Harsh and decisive policies and measures need to be implemented by the government, regulatory authorities and the Banks in order to restore confidence in the banking system and reinstate conditions for growth and prosperity.

CYPRUS: The Banking and Real Estate sectors are interconnected

The stability of the Cypriot banking system is highly correlated to the real estate sector as past and current lending practices that local financial institutions applied have amplified both the upturn and the downturn of the Cyprus real estate market. The large credit expansion of the years 2006-2008, especially in the real estate sector, was instrumental in fuelling the overheating of the property market during that period, but when demand from domestic and foreign investors collapsed post 2008 and prices took a significant hit, the banking sector faced an unprecedented situation due to the large increase in the non-performing loans (NPL) that were collateralised by real estate.

To date, loan origination remains at extremely low levels and consequently the ability of buyers to buy property is limited and property prices remain depressed. This is the "cyclical" effect of the lending criteria and policies employed by the Cypriot banks

during the boom.

Many times, particularly during the inexorable rise in property prices in the period 2004-2008, the banks in Cyprus "underestimated" the credit risks implicit in mortgage loans. This could be attributed to various reasons, such as the lack of sophisticated systems of risk assessment and the lack of reliable data and information, but the main reason is that the continuous increase in property prices created a false sense of security in Cypriot banks and led to further credit expansion. This is the classical myopic expectations view, which is one of the main reasons driving cyclical movements in real estate markets.

This behaviour was one of the main reasons that kept property prices ever increasing, and led to the subsequent deterioration of the loan portfolios of domestic



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banks. Currently, the sharp decline in property prices and the depreciation of mortgaged properties increases the credit risk and the bank capital requirements even further. The shortage in the supply of credit by the banks, reduces the demand for properties, commercial investments, etc, inevitably reinforcing the downward trend in property prices.

The Central Bank of Cyprus (CBC) and the local banks themselves have to consider the consequences of the property price decline and the restructuring of their portfolios and adapt their policies accordingly. In order to do this in the most effective way, collection of data for all mortgaged properties, as well as data analysis using statistical/ econometric models are needed. For example, using such tools, the geographical concentration and other characteristics of problematic properties/mortgages can be identified allowing the risk assessment to the sale/ divestment of specific properties in specific areas.

The demand for properties has become more vulnerable to the fluctuations of prices because of the banking system influence. Theoretically, the decision of granting a loan must be based on long- term projections regarding the future value of the financed property until the repayment of the loan. Also, the repayment ability of the borrower has to be assessed and seriously considered. The lack of adequate information for assessing and evaluating prevailing market trends and possible future prices, however, prevents a correct evaluation of requests for mortgage loans. The funding decisions as a result, are primarily based on the prices of similar properties during that period. The experience from international markets indicates that

property prices are subject to considerable fluctuations, which may or may not coincide with the “economic cycles”. Under certain circumstances, these fluctuations may be amplified and become much more intense due to the credit policy applied by credit institutions, when this policy is of cyclical nature. In any case, monitoring the evolvement of property prices should be of direct interest to the monetary and supervisory authorities. As the recent experience from the domestic financial crisis points out, the sharp decline of property prices has had a significant impact on the banking sector and thus on the real economy of the country.

It is not a big surprise that both the authorities and the banks are reviewing their credit rating systems and their methods of monitoring mortgages/ properties so as to better manage their portfolios.

PS (Real Estate Outlook): With the parliament voting sooner than later the foreclosures law, the Cyprus Real Estate Market should be entering the process of bottoming out in the next 24 months, at which point most of any negative effects of foreclosures will have been realised, and if there are any residual effects by then, they should be neutralised or minimised due to the return of above 1 % economic growth, as predicted by the European Commission. Therefore, with this outlook in mind we believe that the next 12-18 months represent a very good timing for sourcing and acquiring opportunities at near bottom pricing.

** This article was written before the voting of the Insolvency framework by the Cypriot Parliament in April 2015, which was a pre-requisite for the activation of the Foreclosures Law.*

Modelling Loss Given Default (Recovery Rate) of Non-Performing Loans

With the Cypriot banking sector showing record levels of non-performing loans, we face the challenge of urgently and radically changing the ways we deal with a problem that was almost non-existent in the local market a few years ago. Apart from revolutionising the way we collect and recover defaulted debt, it is now more important than ever before, to predict as accurately as possible the actual loss we will incur from a defaulted credit facility, that is predicting Loss Given Default (LGD).

Better prediction of LGD means better estimation of expected losses and, hence, better provisioning on behalf of financial institutions. In addition, LGD is an input variable in the calculation of capital requirements. An error in predicting LGD is as damaging as an equivalent error in predicting Probability of Default (PD). Therefore, the importance of LGD should not be underestimated. A better prediction of LGD is indispensable also during loan origination as it can yield improved pricing and credit risk management.

Synectics quickly realised the impending banking crisis that would follow and applied in 2012 for a grant under the Innovation Scheme competition organised by the Ministry of Energy, Commerce, Industry, and Tourism and co-funded with European research funds. We successfully completed the various evaluation stages and received funding for our proposal with two goals in mind, namely: (1) Develop a predictive model of Loss Given Default for Residential Mortgage loans. (2) Build a supporting software tool capable of data collection and transformations, management of multiple models, statistical calculations, visualisation, parameterisation, and reporting.

The project, named 'Filoktitis', began in November of 2013 and had a 14-month span, ending in December 2014. For the development of the predictive model Synectics partnered with a local research firm, Technovation Solutions. Through this project Synectics has amassed valuable experience and insight on how to set out to tackle such an initiative, and how to address and resolve common issues arising during such endeavours. Further below, we will briefly discuss some of our findings and describe solutions to some of the challenges we faced during the project.

As in most cases of statistical research, data quality is of paramount importance. No matter how sophisticated statistical techniques you utilise, suspect data will only lead to doubtful conclusions and results. Data needs to be at least complete, correct, current, and consistent. One area that almost always will not be current is valuation of collaterals, especially when we are dealing with mortgages where asset valuations will be outdated, in most cases, by more than a year. To overcome this, Synectics has developed a novel valuation algorithm, using various indices to update asset valuations to reflect prevailing conditions.

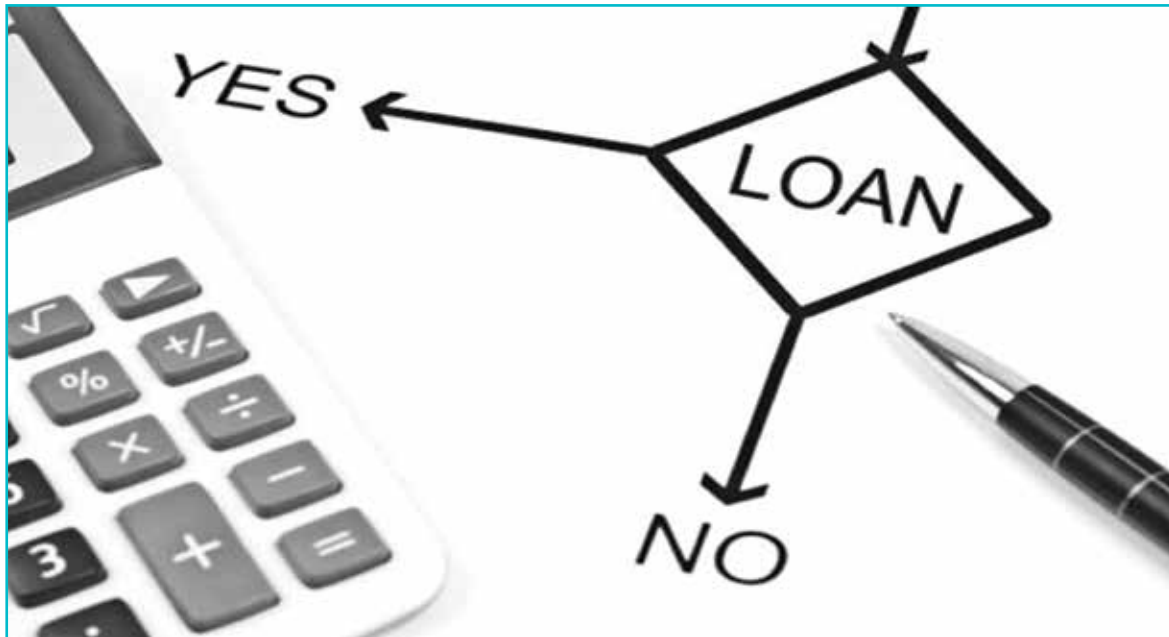


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It is imperative to have sufficient historical data in order to have a large enough, representative dataset on which to build the model. While current European regulations allow models on retail data to use as little as five years of historical data, this is not sufficient when dealing with residential mortgages in Cyprus. Due to the lengthy legal procedures and, hence, extended foreclosure periods, historical data should cover much longer periods to be statistically representative.

In addition, there is a need for availability of correct loan-specific historical data such as the interest rate of the loan throughout its lifetime. It is crucial to keep snapshots of a wide array of data, say on monthly basis. A software tool can help in properly maintaining reliable records of changes in underlying critical data, as well as preserving calculations, and data consistency. In addition, this software will maintain other critical details, such as complete audit trail of parameters, assumptions, macroeconomic data, and bank-specific records of credit extension policies over the years.

Another important issue that must be tackled stems from the high degree of cross-collateralisation, which is a common local banking practice. LGD needs to be calculated on a facility level and, therefore, it is important to determine the amount of collateral for each facility. This is not straightforward due to the many-to-many relationships that exist between borrowers, facilities, collaterals, underlying assets, etc. To give a very simple example, in the case where a specific security covers a borrower as a whole, there is



a need to devise a mechanism to somehow apportion this collateral to the various credit facilities of the borrower in question. This can easily get a lot more complicated when we consider facilities with joint borrowers (co-owners), which have multiple collaterals that also cover other facilities or other borrowers who in turn have multiple facilities and so on. To overcome this, Synectics has developed an inventive algorithm, which apportions all these collaterals to each individual credit facility, in order to calculate current loan-to-value ratios and also at facility origination time.

The “Filoktitis” project developed a two-stage predictive statistical model for forecasting LGD using historical data of defaulted retail mortgage loans, belonging to a leading local bank. The model is based on the Internal Ratings-Based Approach (IRB) as prescribed by European supervising authorities.

The model is parametric and was developed by using some of the most widely used statistical methods, for each of its steps. The data used can be classified in five categories related to the (1) borrower and guarantors, (2) credit facility, (3) collaterals (mortgage, personal guarantees etc) and properties making up these collaterals, (4) credit institution, and (5) macroeconomic environment. The model is adaptive and can be customized to fit every financial institution’s needs given the formalized framework of data gathering and parameters estimation supported by accompanying algorithms such as the ones mentioned above. A purpose-built Software System provides a usability “envelope” for managing Models and corresponding Data Sets, that facilitates data collection and structured storage, calculations, visualization, models management, overview and reporting according to the end-user needs.



REPUBLIC OF CYPRUS



STRUCTURAL FUNDS
of the European Union in Cyprus
our ideas, actions for development



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**Ministry of Energy,
Commerce, Industry
and Tourism**

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(Αρ. Πρωτοκόλλου: 8.1.12.13.2.3.65)*

Capital Markets Union

The concept of Capital Markets Union (CMU) was first mentioned by Mr. Jean-Claude Juncker, the president of the European Commission, in his July 2014 speech to the European Parliament. In fact, Mr. Juncker has identified CMU as one of the key priorities of the new Commission. Towards this end, a new Directorate-General is being formed (DG for Financial Stability, Financial Services and Capital Markets Union).

What is CMU ?

The general idea behind CMU is the adoption of a series of measures to help businesses to tap into diverse sources of capital from anywhere in the EU and offer investors and savers additional opportunities to put their money to work.

It should be explained that CMU has not yet been defined and, according to the chairman of the European Securities and Markets Authority (ESMA), is "still a concept under construction". The Commission has issued a Green Paper consultation in February 2015 in order to get feedback on which to base a concrete Action Plan for CMU implementation, over the next five years. The program for the CMU should be in place by 2019.



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The main objectives are:

- To cut the cost of raising capital, notably for SMEs and help reduce the EU's very high dependence on bank funding
- To maximize the benefits of capital markets and non-bank financial institutions for the real economy
- To create a single market for capital for all 28 Member States by removing barriers to cross-border investment within the EU
- To improve the financing of the European economy
- To increase the competitiveness and attractiveness of Europe as a place to invest
- To facilitate the implementation of the ECB's monetary policy.

Why did the idea for CMU come up ?

The idea for CMU was driven by two things: 1) to understand and reverse the withdrawal of liquidity into national markets which occurred during the financial crisis; and 2) to provide alternative means of financing a sustainable return to growth and job creation.

The free flow of capital was one of the fundamental principles on which the EU was built. However, the market for capital remains underdeveloped and fragmented along national lines. This fragmentation became more prominent as the financial crisis evolved and there was capital flight back into the domestic markets. The first step towards addressing financial fragmentation was taken with the implementation of the Banking Union reform, which was aimed at addressing the fragmentation of Europe's banking supervisory and regulatory framework. The CMU therefore comes as a logical next step towards a unified European financial space, by aiming to identify and eliminate other barriers to the free flow of capital. However, unlike the Banking Union, the intention is for the CMU to cover all 28 member states of the EU and not solely the eurozone.

A further impetus for CMU comes from the realization of EU policy makers and regulators that greater diversity in financing is needed to stimulate investments and growth. At present, the real economy in the EU remains reliant on bank intermediation. This is seen to be problematic, especially now that banks in the EU are still undergoing structural changes and deleveraging, and

this is impacting their capacity for lending. CMU is aimed at having a more diversified system with enhanced capital markets which would create more financing opportunities for SMEs and infrastructure projects and also spread risk more effectively. As such, capital markets and non-bank financial intermediation are seen to cover a long list of market segments such as venture capital, private equity, corporate bond issuance, securitization, crowdfunding and credit intermediation by specialized non-bank financial firms.

Possible items that could be included in the CMU agenda: The CMU is expected to consist of a set of initiatives rather than a couple of high-profile actions.

There are a number of initiatives where preliminary work has already started, or that have been identified as priorities in Juncker's €315bn "Investment Plan for Europe" to kick-start Europe's economy. Based on these, some short-term initiatives that the CMU is expected to encompass are:

- Reviving the securitization market through proposals to encourage high quality securitization and through

a revision of the banks' capital requirements for securitizations.

- Revising the current prudential capital framework for institutional investors (ie pension funds and insurers) which at present is discouraging some types of long-term investments in Europe's capital markets.
- Reviewing the Prospectus Directive to make it easier for smaller firms to access markets and reach investors cross border.
- Facilitating central access to credit information about SMEs to help bring loans to smaller firms.

CMU could also include some targets to be pursued over the medium to long term such as:

- Redesign of corporate income taxation across the EU to reduce the leverage distortion and promote an equal fiscal treatment of SME equity and debt. This would be aimed at reducing incentives for higher leverage.
- Harmonization of insolvency and debt restructuring frameworks within the EU to facilitate cross-border market integration.

What do European banks think of CMU ?

The European Banking Federation (EBF) has publicly welcomed the CMU in the recognition that banks and capital markets are not competing sources of financing,



but are complementary and need to work together towards boosting growth and employment in Europe. It is acknowledged that the expansion of underdeveloped equity and credit market segments in the EU will provide more options to European companies looking for investment and that more developed capital markets are consistent with a prominent and well-functioning banking sector.

The Commission services have already approached the EBF for suggestions on the broader concept of CMU as well as for future input from a technical perspective. European banks are ready to engage in the development of the CMU and aim to forge a strong partnership with the EU institutions towards delivering concrete suggestions.

EBA Guidelines on the Security of Internet Payments

The European Banking Authority (EBA) is an independent EU Authority which works to ensure effective and consistent prudential regulation and supervision across the European banking sector. Its vision is to maintain financial stability in the EU and to safeguard the integrity, efficiency and orderly functioning of the banking sector.

The EBA also plays an important role in promoting convergence of supervisory practices and is mandated to assess the risks and the vulnerabilities in the EU banking sector.

Concerned about the increase in frauds related to internet payments, the EBA decided that the implementation of a more secure framework for internet payments across the EU was needed. Hence, in December 2014, the EBA published

the final version of: "Guidelines on the Security of Internet Payments" (the "Guidelines").



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The Guidelines set the minimum security requirements that are expected to be implemented by EU Banks, and are based on the technical work carried out by the European Forum on the Security of Retail Payments (SecuRe Pay). They were initially based on a "Recommendations Paper" prepared by the European Central Bank, and reached their final form after a consultation process conducted by SecuRe Pay amongst member states. The Guidelines provide the legal basis for achieving a level playing field for all Banks across the EU.

Through this piece of work, the EBA looks into supporting the development of e-commerce across the EU, while ensuring proper protection of consumers.



The EBA decided to expedite the process of issuing the Guidelines, because of the rising levels of fraud observed in internet payments. Pan-EU figures showed that fraud on card internet payments alone caused €794 million of losses in 2012 (up by 21.2% from the previous year).

Bearing in mind the importance and urgency of the matter, the EBA decided that it would be better not to delay the implementation of the Guidelines until the transposition of the 2nd Payments Services Directive (PSD). Although the latter aims at creating more secure, competitive and consumer-friendly rules for payments in the EU, it is not expected to be transposed by member states before 2018. It was hence considered that a more timely and efficient approach is necessary while waiting for PSD2.

All competent authorities (i.e. the Central Banks) across the EU are expected to comply with these Guidelines by incorporating them into their supervisory practices and amending their legal framework or their supervisory processes, accordingly. The implementation date of the Guidelines is the 1st of August 2015.

The Guidelines are based on following five guiding principles:

1. Banks should perform specific assessments of the risks associated with providing internet payments which should be regularly updated in line with the evolution of internet security threats and fraud mechanisms.
2. The initiation of internet payments as well as the access to sensitive payments data, should be protected by strong customer authentication in order to verify customer's

identity, before proceeding with an on-line payment.

3. Banks should implement effective processes for authorizing transactions and systems in order to identify abnormal customer payment patterns and prevent fraud.
4. Banks should engage in customer awareness and education programmes on security issues related to the use of internet payments, with a view to enabling customers to use such services safely and efficiently and to ensure that they understand the risks and best practices in internet payments.
5. Regarding consumer data protection, the Guidelines foresee that Banks offering card payment services to e-merchants, should encourage them not to store any sensitive payment data, and require that they should take all necessary measures in order to protect these data. Banks should also carry out regular checks and if they become aware that an e-merchant handling sensitive payment data does not have the required security measures in place, they should take steps to enforce this as a contractual obligation, or even terminate the contract.

Although the Guidelines are not an official form or regulation, it is expected that all competent authorities and financial institutions to whom the Guidelines are addressed, will eventually comply, even with a small delay.

In Cyprus, the competent authority responsible for implementing and fully endorsing the Guidelines, is the Central Bank of Cyprus. Banks in Cyprus are currently working towards implementing the Guidelines, ideally within the defined deadline.

The positive effects of flexible work arrangements and longer customer service hours

Flexible work arrangements are a common characteristic of the modern workplace in Europe. It results from the needs of employees who need to cope with the realities of their daily lives (i.e. take care of their children or elders), the needs of societies who expect from retail establishments to work longer hours in order to accommodate their needs and of employers who always seek to satisfy customer demands.

An independent and objective third-party looking into this matter will easily reach the conclusion that social partners need to sit down and find common solutions to satisfy customer needs. Not employees' needs, not employers' needs but customers' needs and wants. And it seems that in several European countries this was the case.

A 2014 Eurofound study titled "Impact of the crisis on industrial relations and working conditions in Europe", noted a growth in part-time employment during the crisis. The study further suggests that "changes to traditional working hours and the working week (for example, short-time working schemes or working time accounts) allow employers to organise work more flexibly and to quickly adapt their labour force to changes in demand". OECD (2011) suggests that these kinds of flexible arrangements can help stabilise the economic recovery of countries.

Looking objectively on this trend one cannot avoid noting the benefits for all stakeholders involved. Employees weekly work hours remain the same but they do have the opportunity to work within the boundaries of a more flexible work schedule to accommodate their needs and achieve a better work-life balance. Employers are able to keep their businesses open for more hours and thus offer better customer service and citizens have the opportunity to receive the service they want, when it is more convenient for them. Moreover, extended customer service hours "compel" organizations to utilize employees otherwise

they might not need anymore or even create additional jobs, through flexible arrangements such as part-time employment so that they will be in a position to offer such extended hours. The latter obviously helps the society the most as it reduces unemployment and lifts the burden on the state to pay unemployment and other benefits. According to statements made at the House of Representatives, by the Minister of Labour, Welfare and Social Insurance,

Mrs. Emilianidou, extended customer service hours in retail stores, created employment opportunities for those unemployed, hence contributed to the fight against unemployment.

Inevitably the banking sector in Europe is no exception to the above. Flexible working arrangements and longer service hours for customers exist in a number of European countries. Moreover, in a number of European countries bank branches also offer service on Saturdays as well. In general, extended customer service hours seem to be the trend in the majority of European countries.



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Does the above mean that employees will work more hours? The answer is a definite NO. It goes without saying that employees' weekly work hours remain the same and their rights arising from either sector or company-level collective agreements are recognized, and fully adhered to. The change affects the hours that bank branches remain open, thus extending customer service hours. Obviously, flexible working arrangements become more important in cases where customer service hours exceed employees' weekly work hours. In such cases, part-time or other forms of flexible work arrangements (e.g. shifts) could be introduced to extend hours of service to customers.

Having in mind all of the aforementioned positive results of extended customer service hours and flexible work arrangements, a question comes in mind. Why is the banking sector of Cyprus still so different than its European counterparts?

References

1. Eurofound (2014), *Impact of the crisis on industrial relations and working conditions in Europe*, Dublin.
2. OECD (2011), *The role of short time work schemes during 2008 -2009 recession*, OECD Social Employment and Migration Working Papers, No 115, OECD Publishing.

Payment accounts package: Transparency and better protection for European consumers

On 23 July 2014, the Directive 2014/92/EU on comparability of payment account fees, payment account switching and access to payment accounts was passed and published in the Official Journal of the EU. Based on EU statistical data, around 58 million consumers over the age of 15 in the European Union do not have a payment account and about 25 million citizens without a payment account wished they could have at least one bank account. Economic status, ethnicity and the complexity of the banking system are some of the reasons that restrict consumers from having access to payment accounts.

According to another European study, consumers find it difficult to compare financial offers and payment account fees from different providers, while the process of transferring an existing payment account in another bank is too complex and unreliable. The abovementioned Directive aims at establishing a uniform set of rules to tackle the issue of low customer mobility at improving comparison of payment account services and fees and at incentivizing bank account switching. The Directive focuses on the following three areas:

(1) Comparability of fees connected with payment accounts

As already mentioned above one of the objectives of the Directive is to establish a practice for the easier comparison of bank charges across the EU. The legislation requires that a "Fee Information Document" is provided to consumers in all Member States. This fee information document should include at least 10 and no more than 20 of the most representative services linked to a payment account and their corresponding fees. The document should be provided to consumers prior to the commitment of the contract and should be short and accurate. The fee document should be accompanied by a glossary document (a set of definitions and standardised terminology for the services which are common to the majority of the Member States). The fee document should also be accessible free of charge at any time and upon request in bank premises and at bank websites. In this way, consumers will be able to easily identify the services that interest them most and evaluate which banking institution offers the service with the lowest fee.

Furthermore, the Directive lays down provisions so that banking institutions provide their customers with a yearly bank

statement which shall include all charges, fees and interest rates imposed on their accounts over the last 12 months. This statement should also be provided to consumers free of charge.

At the same time the Directive provides for the creation of one independent national website in each Member State for the purposes of comparability of charges. National websites should be operationally independent of any payment service provider and the information should be clear, up-to date and accurate.

(2) Switching service

The self regulation rules which were adopted in 2008 by many financial institutions in Europe are not being followed consistently in all EU countries and existing measures at national level are extremely diverse. Consumers often face problems and time delays in trying to transfer their account to another bank while there is no adequate level of consumer protection in all Member States. Policy makers therefore decided to introduce legally binding rules and procedures for the transfer of a bank account from one bank to another both nationally and cross-border. The aim was to create a clear, quick and simple procedure for bank accounts switching. It was considered that a harmonized process for the switching of payment accounts across the Union would improve the functioning of the internal market for the benefit of both consumers and payment service providers.

The Directive ensures that the receiving payment institution is the one which manages the process on behalf of the consumer. The basic steps of the transfer process are the following:

The consumer contacts the bank that he wishes to transfer his account and gives a written consent. This authorization is the only action required from the part of the consumer. The authorization allows the consumer to identify credit transfers, standing orders and direct debit mandates that are to be switched. Next the receiving payment service provider performs the following steps:

- Contacts the transferring bank and requests (a) the transfer of the customer's account data to the receiving bank, (b) the closing of the payment account and (c) the cancellation of all



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standing orders, direct debits and incoming credit transfers.

- Sets up a new payment account as well as new standing orders, credit transfers and direct debits.
- Transfers any remaining positive balance to the payment account opened with the receiving bank.

Member banks of the Association voluntarily adopted in 2009 a Code of Conduct for the transferring of banks accounts from one member bank to another. The Code has been drafted according to the Common Principles of the European Banking Industry Committee (EBIC) and lays down the procedure for bank account transfers. With the transposition of the European Directive into national legislation by 18 September 2016, the local Code of Conduct will be revised so as to comply with the provisions of the European law.

(3) Access to payment accounts

Statistical data show that consumers in most cases do not have access to payment accounts due to their financial situation, nationality or place of residence. Therefore another objective of the Directive is to allow all EU consumers, regardless of their country of residence or economic situation, to open a bank account with any payment service provider in the EU so as to perform basic banking transactions (i.e. salary or pension payments, transfer of money to other accounts, handling of direct debits, cash withdrawals or use of debit cards, etc). Holding a payment account with basic features shall be in no way discriminatory. An account with basic features includes

the opening, operating and closing of the account, fund transfers, cash withdrawals, direct debits, online payments, and credit transfers as well as overdraft facilities in relation to the payment account.

Although on 18 July 2011 the European Commission issued a Recommendation setting out the general principles for the provision of basic payment accounts within the Union, very few Member States have adopted it. As a result, the Commission considered it necessary to adopt legislative measures in order to ensure access to at least one payment account.

The Directive provides that financial institutions will have the right to deny access to a basic payment account, only if the bank customer does not comply with the rules on money laundering and terrorist financing regulations.

Although in Cyprus there is not a national legislation which ensures access to payment accounts, there is no real obstacle in opening a bank account for residents and non-residents. However, financial Institutions strictly adhere to the regulations for money laundering prevention and always apply the principle of "know your customer" in order to protect the banking system against fraud and other illegal activities. Without any doubt, local banks will change all existing policies and IT procedures in light of the transposition of the EU Directive into national legislation by 2016.

The shift towards alignment of banks' risk and finance functions

The issue

Financial institutions and banks in particular are under pressure from business-unit leaders, investors, boards of directors and their regulators to deliver improved and more transparent performance management data.

Many of these pressures are driven by regulatory changes that emerged after the most recent financial crisis. Banks in Cyprus, like elsewhere in the Eurozone, are now faced with an increased demand for information and reporting by the ECB's SSM – their new supervisor.

Historically, banks were accustomed to managing their businesses with summarised financial information, based largely upon generally accepted accounting principles and complemented by regulatory requirements – many of which driven by their local regulators.

Now, they are required to include a wider range of information at a more granular level, with both accounting and risk-based views. At the same time, banks – especially in Cyprus – also face pressure to reduce costs while making better strategic decisions by pricing for risk in an environment constrained by internal factors (such as liquidity and capital capacity) and external factors (such as regulatory activism). Meeting these demands requires close coordination between the risk and finance functions.

Unfortunately, most risk and finance functions have evolved separately – with distinct languages, operating models and technology. In some cases, however, the two functions perform duplicative or overlapping activities. In addition, data comes from multiple sources and often requires considerable manual efforts to produce actionable information. And, even then, the results are not always dependable.

For example, PwC's 'Unlocking Potential: Finance effectiveness benchmark study 2013' highlights that only 45% of finance professionals believe that their company's forecasts are reliable¹. At the end of the day, banks need quick access to accurate and actionable information to support both business decisions and reporting to regulators. These needs are amplified in the current environment of constraints on capital and liquidity.

It is our view that executives should undertake a formal assessment of how risk and finance in their organisations should operate in the future. There are several deliberate ways for the chief risk officer (CRO) and chief financial officer (CFO) to coordinate efforts in order to reduce or eliminate redundancy across their two functions while improving quality.

Our view

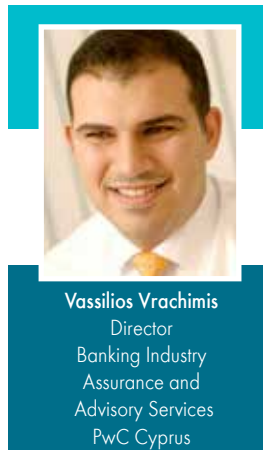
In this paper, we outline our observations of the industry and present our views on the five dimensions of risk and finance integration.

While many financial institutions have started along this journey, progress has generally been slow and results, mixed. It is our view that delivering on this effort will require new ways of thinking about risk and finance, the processes that are executed, the controls in place, as well as the systems that store data. It will also require resolving the differences between two functions that have fundamentally different cultures:

- Finance's mission is to find ways to improve business performance while conforming to largely predefined accounting and regulatory mandates.
- The risk function uses much of the same data as finance, but uses it differently. Specifically, risk inputs data into models to predict future outcomes based upon correlations, analytics and assumptions. With relatively few industry standards for risk management, each bank has tended to focus on different measures and methods. As a result of its mandate, risk has largely preferred to have imperfect information faster, whereas finance required additional quality and controls.

Banks face these issues as the regulatory environment continues to evolve, with many regulations having disparate impacts on each function. In addition, regulators expect sufficient separation between the business, risk and finance in order for them to challenge each other and retain independence. This expectation has arisen in part in response to the market failures of the past.

Therefore, risk and finance integration does not mean a single integrated function. Instead, we propose that banks





only combine those activities that make sense to combine, based on agreed-upon criteria.

At the same time, a wholesale redesign of the risk and finance operating model and architecture is not required. In reality, most organisations do not have this option, as unwinding existing risk and finance structures is both expensive and impractical.

Banks that solve the risk-finance alignment puzzle stand to reap numerous benefits. These include greater cost savings, improved controls, greater transparency, the ability to make better business decisions and improved compliance with regulatory mandates.

The five dimensions of risk and finance integration

Perhaps the most common reason why organisations have found it difficult to tackle this issue is what we refer to as 'fuzzy vision'. Put simply, this means that the exact meaning of risk and finance integration is not clear. Many CROs and CFOs don't know whether integration should apply to data alone or also to the systems that produce the data. They also don't know if the concept should be broadened to include integration of the finance and risk functions themselves.

In our view, the reason this issue is so complicated is that it is multidimensional, cutting across five dimensions, multiple functions (some expanding beyond risk and finance) and numerous activities. In order to clarify the issue and better frame the areas on which the CRO and CFO should focus their energy, we define the following five dimensions for risk and finance integration:

Data management

Comprises all the disciplines related to managing data as a

strategic asset. Defines and resolves the data sourcing and quality management to make the environment fit for use.

Organisation and governance

Defines roles and responsibilities within and across the risk and finance groups, and any associated committees and also provides the organisational structure that spans the two functions.

Process management

Agreement of business process flows between people, agreement on how people use systems, and agreement on how people do reporting and analysis. Process management should be defined for both expected processes and any processing exceptions.

Standards and definitions

Common, agreed-upon set of terminology and language for use when functions interact and communicate with each other.

Technology

Collection of computer hardware, software and other tools needed to run the business. It also includes technology and data architectures.

We recommend that the first two dimensions (data management, organisation and governance) be addressed centrally for all activities as they set the groundwork for how the functions will interact with each other. Banks should evaluate the next three dimensions (process management, standards and definitions, and technology) individually for each activity, and then explore opportunities to improve consistency across the board.

¹ PwC, 'Unlocking Potential: Finance effectiveness benchmark study 2013', October 2013. www.pwc.com. Accessed 19 November 2014.

Proposed Revisions to the Standardized Approach for credit risk

The Bank for International Settlements (“BIS”) has recently issued a consultation paper (“CP”) with recommendations on revisions to the Standardized Approach for credit risk. This is an important development with potentially a significant impact to the calculation of the minimum capital requirements (“MCR” or “Pillar 1”) to the financial services industry and especially to the banking sector. Its importance in Cyprus derives from two facts: (a) all the banks (and investment firms) in Cyprus follow the standardized approach for the calculation of their MCR for credit risk, and (b) the MCR for credit risk constitutes more than 90% of the total MCR for the banks.

These proposed changes can be considered as an “appetizer” to Basel 4 one year after the implementation of Basel 3¹.



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It is noted that the initial focus of Basel 3 was primarily on the numerator of the capital adequacy ratio – the quality (increasing emphasis on CET1 capital and harmonisation of deductions from capital) and quantity (multiple buffers) of a bank’s capital. Changes to the denominator were confined to specific areas such as the risk weights on securitisations and on counterparty credit risk in bilateral trades. The changes of Basel 3 in the denominator (Risk Weighted Assets –RWAs) was not so significant.

The main objectives of the proposed regime are to make the standardised approach to credit risk more risk sensitive, more closely aligned (in terms of definitions and scope) to the internal ratings-based approach, and less reliant on external credit ratings.

The main recommendations and changes of the CP which are expected to impact the Cyprus banks are the following:

a) Exposures to banks (and investment firms)

- Currently such exposures are treated as institutions, which includes both banks and investment firms. The Committee proposes a different definition for those institutions that are banks and different treatment.
- Investment firms that do not disclose the risk drivers described below will be treated as “Corporates”
- The RWAs for banks will depend on two drivers: (a) Core Tier 1 ratio, and (b) Net Non-Performing Assets Ratio
- Where no available information exists to compute the above ratios (i.e. pillar 3,etc), there will be a RW of 300%
- In relation to the treatment for short term claims, the proposal is for a preferential treatment which is however worse than the existing regime (i.e. RW of 20%). In addition, exposures that are expected to be rolled over should be excluded from this class.

Table: Proposed RWAs for banks

CET1 ratio:	Above 12%	9.5-12%	7-9.5%	5.5-7%	4.5-5.5%	Below 4.5%
Asset quality ratio						
Below 1%	30%	40%	60%	80%	100%	300%
1-3%	45%	60%	80%	100%	120%	300%
Above 3%	60%	80%	100%	120%	140%	300%

- In addition, the Committee is considering to incorporate country risk as an additional driver, and especially for exposures to banks that are not under B3 standards

b) Exposures to Corporates

- Corporates will be split into two categories: (a) Senior Corporate Exposures, and (c) Specialised Lending
- For Senior Corporate Exposures, the RW will depend on two risk drivers; (a) Revenue, and (b) Leverage (Total Assets to Total Equity)

¹ Basel 3 is implemented in Cyprus through two (2) EU regulatory documents, the Capital Requirements Regulation and the Capital Requirements Directive IV.

- Banks would apply a risk weight of 300% to exposures to a borrower that has not provided revenue and leverage data to the lending bank, although for a newly incorporated corporate that has not yet provided revenue and leverage data to the lending bank, the bank may apply a risk weight of 110% in the first year after the establishment of the corporate.
- For specialised lending, banks would apply the higher of (i) the risk weight applicable to the counterparty and (ii) 120% to exposures classified as project finance, object finance, commodities finance, and income-producing real estate exposures.
- Exposures classified as land acquisition, development and construction exposures would be risk-weighted at the higher of (i) the risk weight applicable to the counterparty and (ii) 150%.

	Revenue	Up to €5m	€5-€50m	€50m-€1b	Above €1b
Leverage	1-3 times	100%	90%	80%	60%
	3-5 times	110%	100%	90%	70%
	More than 5 times	130%	120%	110%	90%
	Negative equity (liabilities exceed assets)	300%	300%	300%	300%

c) Exposures to retail

- There is enforcement of a 0,2% numerical limit to each individual exposure to the overall retail portfolio in order to be eligible to be considered as retail, with national discretion to remove it where alternative methods are implemented.
- In addition, the Committee invites respondents to suggest risk drivers for the potential substitution of the current 75% RW

d) Exposures secured by residential real estate

- The proposal is to change the current 35% with a RW which is based on two drivers: (a) Loan to Value Ratio (LTV) which is the Loan balance to the value of the mortgaged property at the time of origination), and (b) the debt service coverage ratio (DSCR): Example of calculation of DSCR might be the monthly installments on all loans of the borrower to the monthly net income.
- In addition, the property must be fully completed/ finished.

e. Table: Proposed RWs for the RRE portfolio

LTV ratio		Up to 40%	40-60%	60-80%	80-90%	90-100%	Above 100%
DSR	Less than 35%	25%	30%	40%	50%	60%	80%
	Above 35%	30%	40%	50%	70%	80%	100%

Exposures secured by commercial real estate

- The proposal includes the implementation of one of the following two proposals:
 - Not to consider the property as a risk mitigant / collateral and RW the exposures as unsecured i.e. Retail or Corporate, or
 - Apply a RW depending on the LTV of the mortgaged property

Table: Proposed RWs for the CRE portfolio

LTV	Below 60%	60-75%	Above 75%
Risk weight	75%	100%	120%

- In addition, the property must be fully completed/ finished.

As it is evident from the above proposals, both the potential outcome on the proposals i.e. expected higher capital requirements but also the calculation itself as a process will continue to be a challenge for the banking sector.

As a result, banks should (a) start to find the relevant information within (or outside) their current infrastructure, (b) enhance their databases with the requirement information, (c) set new processes for the update of the information and (c) perform quantitative studies to calculate the potential impact to their capital adequacy ratio.

Industrial Relations and the Role of the Industrial Relations Officer

The industrial relations system in Cyprus is the cornerstone of the social and financial coherence of the country. It safeguards labor peace which, in turn, is the foundation of stability of the economic activity of the country.

The liberal and voluntary nature of the industrial relations system in Cyprus is based on four (4) basic pillars:

1. Social Dialogue
2. Collective Agreements
3. Industrial Relations Code
4. Labor Advisory Board

All four pillars work together and are interdependent. Over time, this interdependence resulted in the emergence of procedures and customs we apply today. However, the effectiveness of the above institutions and procedures relies on the availability of human resources with the necessary knowledge, skills and abilities.

This renders great significance to the role of the Industrial Relations Officer (IRO), particularly nowadays due to the challenges caused by the economic crisis and the need to maintain a healthy balance between the employers and the employees in the workplace. Their role is especially important to the economy since their aim is to promote labor peace and safeguard the country's industrial relations system.

The knowledge, the professionalism and the quality of the IRO influence positively not only their employers but the whole system in general. The IROs constitute a special and unique category of professionals with specific

attributes and skill-set that will contribute to their success. Industrial Relations skills are mostly based on a mixture of communication and interpersonal skills rather than academic credentials.

The industrial relations process is a constant pursuit of mutually agreed solutions arising through discussions, negotiations and compromises on various issues that occur at the workplace. Furthermore, the IRO is the link between the employers and the various governmental employment and labor services, as well as Unions.



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The characteristics needed for a successful IRO are patience, persistence, diligence and responsibility. At the same time a pleasant personality and friendliness are a must. These characteristics will enable the IRO to successfully promote and fulfill his demanding task.

The IRO must also be able to perform under pressure and resolve promptly, detecting effectively the core of each labor problem in order to solve it. Continuous education and awareness of any changes, withdrawals or introductions regarding relevant legislation and decisions of the Labor Court or the Supreme Court of the Country are very essential.

As a conclusion one could say that the role of the IRO is in a constant state of evolution due to the changing conditions and circumstances. Therefore, in order to be successful, the IRO should be dynamic and knowledgeable in order to best serve the employer, while at the same time safeguarding labor peace and a healthy industrial relations system.



Operational Risk - Alternative Standardized Approach

Awaiting the Basel IV regulations, Basel Committee announced a new Consultative Document with title: "Operational risk – Revisions to the simpler approaches." The review seeks to address the weaknesses identified in the existing approaches by (i) refining the operational risk proxy indicator by replacing GI with a superior indicator; and (ii) improving calibration of the regulatory coefficients based on the results of the quantitative analysis.

Introduction - Definition

Risk management concerns the investigation of four significant risks of a loss to a firm or portfolio: market risk, credit risk, liquidity risk, and operational risk¹.

According to the revised Basel Committee "operational risk is defined as the risk of loss resulting from the inadequate or failed internal processes, people and systems or from external events. This definition includes legal risk". Furthermore, "legal risk includes, but is not limited to, exposure to fines, penalties, or punitive damages resulting from supervisory actions, as well as private settlements²."

Operational risk is of two types, either: (i) the risk of a loss due to the firm's operating technology, or (ii) the risk of a loss due to agency costs. These two types of operational risks generate loss processes with different economic characteristics, both modeled as Cox counting processes³.

Different parameter values differentiate the operational risk processes. Although it is conceptually possible to estimate the operational risk processes' parameters using only market prices, the non-observability of the firm's value makes this an unlikely possibility, except in rare cases. According to Jarrow, the data internal to the firm, in conjunction with standard hazard rate estimation procedures, provides a more fruitful alternative. Jarrow show that the inclusion of operational risk into the computation of fair economic capital without the consideration of a firm's NPV, will provide biased (too large) capital requirements⁴.

Weakness recognition – Framework revised

In the wake of the financial crisis, the Basel Committee on Banking Supervision has been reviewing the adequacy of the capital framework. The aim is not only to address the weaknesses that were revealed during the crisis, but also to reflect the experience gained with implementation of the operational risk framework.

At that time, the Committee made clear that it intended to

revisit the framework when more data became available. Despite an increase in the number and severity of operational risk events during and after the financial crisis, capital requirements for operational risk have remained stable or even fallen for the standardized approaches. This indicates that the existing set of simple approaches for operational risk – the Basic Indicator Approach (BIA) and the Standardized Approach (TSA), including its variant the Alternative Standardized Approach (ASA) – do not correctly estimate the operational risk capital requirements of a wide spectrum of banks.

The weaknesses of these simpler approaches stem mainly from the use of Gross Income (GI) as a proxy indicator for operational risk exposure based on the assumption that a bank's operational risk exposure increases linearly in proportion to revenue. This assumption usually turns out to be invalid. In particular, where a bank experiences a decline in its GI due to systemic or bank-specific events including those involving operational risk losses, its operational risk capital falls when it should be increasing. Moreover, the existing approaches do not take into account the fact that the relationship between the size and the operational risk of a bank does not remain constant or that operational risk exposure increases with a bank's size in a non-linear fashion. In addition, the changing operational risk profiles of banks may render a calibration based on the past behavior of variables unfit for the future. Proxy-based indicators used in the operational risk approaches and the calibration of the associated parameters should therefore be periodically tested to ensure their continued validity. Such a review is all the more important given the lack of relevant operational risk data and experience in operational risk modelling when the original framework was designed in the early 2000s. Now there is a richer data set to support the quantitative analysis, and a decade of experience with implementation of the framework.

Current approaches for the measurement of operational risk

The Basel framework provides three approaches for the measurement of the capital charge for operational risk. The simplest is the Basic Indicator Approach (BIA), by which the capital charge is calculated as a percentage (alpha) of Gross Income (GI), a proxy for operational risk exposure. Being the most basic approach, its adoption does not require prior supervisory approval. The most advanced methodology is the advanced measurement



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approach (AMA), which allows banks to use internal models to calculate their capital requirements. Adoption of the AMA requires prior supervisory approval and involves implementation of a rigorous risk management framework. The third approach, the Standardized Approach (TSA), which is positioned as an intermediate approach between the BIA and the AMA, requires banks to divide their total GI into eight business lines and to calculate capital requirements as a sum of the products of the GI attributed to each business line and the specific regulatory coefficients (betas) assigned to each line. Since the adoption of the TSA requires compliance with a set of qualitative criteria relating to operational risk management systems, banks are required to obtain prior approval from their supervisory authorities before moving to this approach. A variant of the TSA, the Alternative Standardized Approach (ASA), allows banks with high interest margins to calculate their operational risk capital requirements by replacing the GI for two business lines – retail banking and commercial banking – with a fixed percentage of their loans and advances. Adoption of the ASA is allowed by the respective supervisory authorities at their national discretion.

Based on the qualitative and quantitative analysis, the Committee has identified the Business Indicator (BI) as the most suitable replacement for GI, as it addresses most of the latter’s weaknesses.

The BI comprises the three macro-components of a bank’s income statement: the “interest component”, the “services component”, and the “financial component”. The BI’s power, as compared with GI and other potential indicators, lies in its superior ability to capture a bank’s exposure to the operational risk inherent in a bank’s mix of business activities.

The BI includes items sensitive to operational risk that are omitted or netted from the GI definition. In addition, the BI uses the absolute values of its components, thereby avoiding counterintuitive results based on negative contributions of components to capital charges from net losses under the existing framework. Moreover, the BI reduces the relative weight or contribution of components of the financial statement that are associated with activities traditionally less exposed to operational risk, and increases that of the components associated with activities more closely associated with operational risk (e.g. gains and losses on traded and sold portfolios, commissions from services payments, fees received from securitization of loans and origination and negotiation of asset-backed securities, penalties from mis-selling and inadequate market practice). Many of these components proved to be at the core of the financial crisis⁵.

Calculation of minimum capital requirements

The revised SA is based on two inputs – (i) the BI, and (ii) the regulatory coefficients applied in a layered manner. Banks using the SA must hold capital for operational risk calculated according to the following formula⁶:

$KSA = [\sum_{years 1-3} \sum (BI_j \times a_j)] / 3$ where:

KSA = the capital charge under the revised SA

BI_j = annual value of the BI apportioned to bucket “j” (1...n) in a given year

a_j = coefficient for bucket “j”

Banks will not be required to calculate the coefficients and use them in the capital calculation process, which remains much simpler, as illustrated by the following numerical examples based on Table 1

The proposed coefficients per bucket under the SA Table 1	
BI (€ millions)	Coefficient
0–100	10%
>100–1,000	13%
>1,000–3,000	17%
>3,000–30,000	22%
>30,000	30%

Example

Bank	BI	Capital calculation
A.	80	80*10% = 8
B.	800	100*10% + 700*13% = 101
C.	2,000	100*10% + 900*13% + 1,000*17% = 297
D.	20,00 0	100*10% + 900*13% + 2,000*17% + 17,000*22% = 4,207
E.	40,00 0	100*10% + 900*13% + 2,000*17% + 27,000*22% + 10,000*30% = 9,407

Conclusion

The Basel framework recognizes that capital is not a substitute for effective controls and risk management processes. Rather, strong and effective risk management and internal control processes help reduce the capital that a bank needs to hold against its operational risks. An emphasis on sound management of operational risk to ensure financial soundness of banks is consistent with the uncertainties in the current capital measurement methodologies for operational risk, which are improved but still evolving toward maturity.

The Committee’s Principles set out its expectations for the management of operational risk. All internationally active banks should implement policies, procedures and practices to manage operational risk commensurate with their size, complexity, activities and risk exposure, and they should seek continuous improvement in these activities as industry practice evolves. Internationally active banks with significant operational risk exposures should be evolving

towards the qualitative risk management standards of banks using the AMA for capital estimation, even while they remain on the SA.

In the current operational risk regulatory framework, the TSA/ASA has explicit qualifying criteria for risk management. Because the revised SA approach will become the “entry level” capital methodology, its use will not require supervisory approval nor will it be accompanied by any explicit operational risk management standard. This does not mean, however, that the revised framework is rendered less rigorous than the existing one, as this would not be appropriate in the light of the substantial operational risk losses incurred by banks during and in the aftermath of the recent financial crisis.

References

1. Jarrow, R., Turnbull, S., 2000. “Derivative Securities, second ed.” South Western College Pub., Cincinnati, Ohio.
2. Basel Committee on Banking Supervision, November 2005. “International convergence of capital measurement and capital standards: A revised framework”. Bank for International Settlements, Press and Communications, Basel, Switzerland.
3. Chavez-Demoulin, V., Embrechts, Pl., Neslehova, J., 2006. “Quantitative models for operational risk: Extremes, dependence and aggregation.” Journal of Banking and Finance 30, 2635-2658.
4. Jarrow, R, 2007. “Operational Risk” Journal of Banking and Finance 32, 870-879.
5. Basel Committee on Banking Supervision, January 2015. “Operational risk – Revisions to the simpler approaches” Bank for International Settlements, Press and Communications, Basel, Switzerland.
6. See above 5.

Why, it is urgent to adopt the Foreclosures Law and updating of the bankruptcy legislation

CCCI has been following recent developments very closely. Whilst it feels that the government has been able to control fiscal situation and to be well placed to enter into the financial markets for future financing needs, the problems of the banking sector remain outstanding, threatening the final evaluation of the country by troika. It is very worrying that Parliament cannot yet find a solution regarding the required legislation on the disposal of property and updating of the bankruptcy legislation to normalize markets.

The problems of the Banks, like the lack of liquidity, non-performing loans and very high indebtedness of the private sector, hamper the attempts to reactivate the economy. Without their resolution any resumption of normal lending activity would continue to be difficult. The possibility that property is not indefinitely protected by the courts needs to change in order to provide incentives to borrowers to cooperate in finding beneficial solutions for all. This of course should be combined with the need to provide protection both for the deserving cases of home ownership as well as by modernizing the operation of the bankruptcy legislation. CCCI would like to plead once more about the urgent need for politicians to find a speedy resolution to these issues, because published data by the Central Bank reveals that the situation of banks is becoming more difficult to solve. This has been underlined by the CEOs of the three Cypriot

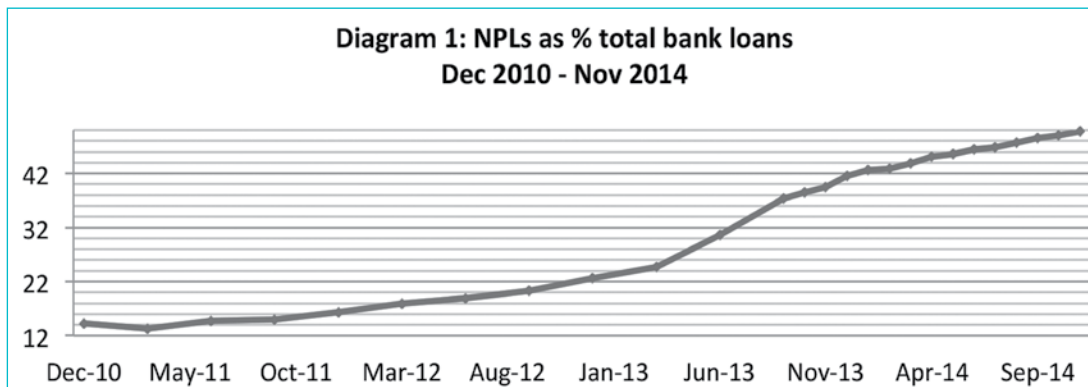
systemic banks, during their presentations at a seminar organized by NCCI Nicosia. They emphasized the fact that foreign investors who were invited to invest in Cyprus banks were assured that the required legislation would have been passed. But this has not taken place yet and is worrying investors. The fact that NPLs continue to rise so many months after the manifestation of the crisis (Diagram 1) is an indication that bank customers are not cooperating. The level of NPLs is not proportional to the real crisis in the economy.

It is also true that in many cases, banks themselves, have not handled the situation in the most appropriate way, whilst the extensive paperwork required to be filled by borrowers undertaking debt restructuring have made it more difficult for them to respond.

To illustrate the problems a look at some of the published data by the Central Bank, make for a very disappointing reading and require immediate action. We can start with the positive developments emanating from the depositors, who seem to have renewed their faith in the Cyprus banking system, as they have passed successfully the European wide stress tests and the systemic banks of Cyprus are now supervised by the European Central Bank. So deposits have been constant at €45 - 46 billion over the past 16 months. However there are many negative aspects such as:



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Cyprus Chamber of
Commerce & Industry



The banking sector appears to be stagnant 24 months after the haircut as total lending within Cyprus has remained over 350% of GDP. This has happened because whilst there has been some limited reduction in the level of borrowing this reduction has been proportional to the decline of GDP and hence as a proportion of GDP the level of borrowing remains prohibitively high.

In addition to the overall debt exposure in Cyprus, we witness a stagnation of the ratio of loans to deposits within the banking system as a whole. Again this has not changed over the last 18 months as it has oscillated around 130 Euros worth of loans for every 100 Euros of deposits. As loans exceed deposits by such high margin it reveals an extremely tight situation regarding bank liquidity restricting the ability of banks to extend further loans and finance potential recovery.

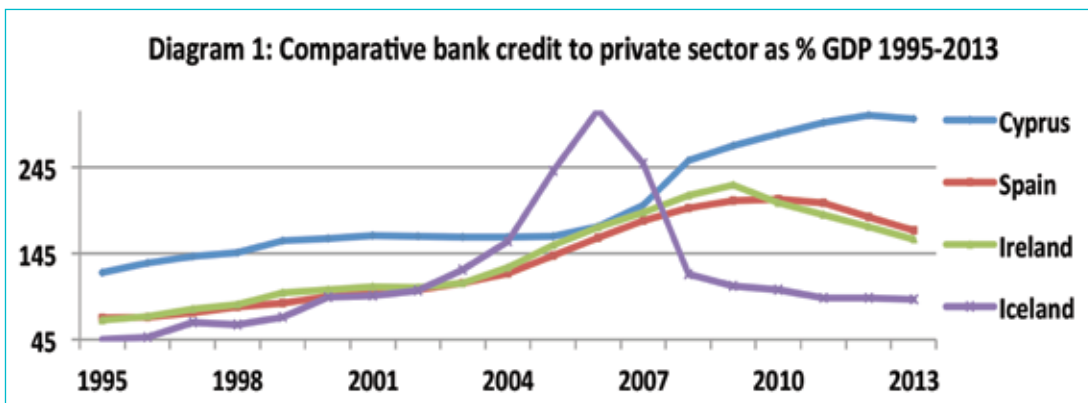
The persistence of the level of borrowing, as a proportion of GDP, shows Cyprus to be out of line with the experience of countries which have also undergone banking crises over the last 20 years. This experience is repeated whether we are talking about Sweden, Finland and Norway, which went through a banking crisis in the early 1990s, or in the eastern Asian countries case (Malaysia, Thailand, Indonesia and Hong Kong) which suffered a banking

crisis in the years 1997-1998. Similarly for the three other European countries, which went through a banking crisis after 2008 (Spain, Ireland and Iceland). The data published for the European countries by the World Bank, show bank lending falling sharply, as a percentage of GDP, after the manifestation of the crisis. In Cyprus despite the fact that the stagnation in economic activity has lasted since 2009, bank lending as percentage of GDP continues to rise rather than decline (Diagram 2), and is much higher as a share of GDP compared to the other European countries that have suffered recent banking crises.

The situation is even more disturbing since the data reveal that most of the small adjustment that has taken place in bank lending as a proportion to GDP, has not been by Cypriot households and enterprises, but by third country nationals and nationals of other EU member states. In their case the ratio of their borrowing to GDP has fallen by almost 20 percentage points (from 0.93% of GDP to 0.74%). For Cypriot residents instead of falling, this ratio continues to rise.

Hence, the urgent need to pass the required legislation.

* This article was written before the voting of the Insolvency framework by the Cypriot Parliament in April 2015



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