Consumer Finance: Organisation, Portfolio Statistics and Modelling

Executive Summary

- The past decade saw the boom and bust of the specialty consumer finance company, in line with the credit bubble and credit crunch
- In the coming decade consumer finance operations will require more equity, retain interests even in securitisations, sustainable business and underwriting policies, transparency in reporting and good working relationships with regulators
- In developed markets consumers are expected to continue to deleverage
- In emerging markets robust economic growth and rising salaried classes are expected to drive strong growth in consumer finance
- The centre of the consumer finance operation is the client, who borrows to purchase a consumer asset
- A consumer finance business is a mass servicing operation
- The consumer finance operation requires many functions that need to work together towards a common strategy and set of goals
- The capturing of data on a portfolio's composition and historical performance is a key task that requires discipline and vision to ensure quality and consistency
- Vintage based statistics are the best way to capture information about default, recovery, arrears and prepayment performance
- Portfolio modelling is centred on estimating cash flows from the assets and allocating the cash flows through a waterfall to a liability structure
- Portfolio modelling is useful to funding through liability structure sizing, to valuation through the determination of cash flows allocated to equity, to pricing decisions assessing their impact on profitability and to risk management allowing more sophisticated and risk-nuanced targets to be set

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1. Introduction

Scope of report is non-deposit consumer finance operations

This report concerns non-deposit taking dedicated consumer finance operations. It is of interest to specialty consumer finance companies or divisions, consumer finance divisions of large retailers or manufacturers and dedicated consumer departments of deposit taking financial institutions. Deposit taking financial institutions such as banks that offer consumer finance amongst other products are outside the scope of this report; however the practitioners in consumer finance in these institutions will find this report of interest.

Three aspects of consumer finance:

Organisation
Portfolio Statistics
Portfolio Modelling

The report studies three aspects of consumer finance operations:

1. Organisation
    a. Different internal parties within the organisation, their roles and coordination, and interfaces with the external world
    b. Different corporate structures that can be adopted by consumer finance companies
2. Portfolio Statistics
    a. Portfolio composition data at a given moment in time (static)
    b. Vintage based historical performance statistics
        i. Origination volumes
        ii. Default and recovery performance
        iii. Arrears performance
        iv. Prepayment performance
3. Portfolio Modelling
    a. For funding purposes
    b. For valuation
    c. To aid in product pricing
    d. For risk management

The scope of this report is more suitable for non-revolving diversified consumer assets such as unsecured loans (personal loans) and secured asset finance (auto loans, mortgages) rather that revolving products such as credit cards which have their own nuances, however many aspects of the report are also applicable to these revolving products.

This past decade was the boom and bust of the specialty finance company

The credit bubble and new technology fostered originate and distribute models

Traditional consumer finance model was overturned

The decade of 2000-2009 saw the spectacular rise and fall of the specialty consumer finance company. The availability of plentiful and cheap wholeloan financing and in particular the insatiable appetite of the securitisation market for consumer assets encouraged the set-up of consumer finance companies or divisions with the business plan of originating consumer assets and distributing those assets to the securitisation markets. Many of these consumer players were pure marketing organisations focused on origination and quick exit from the assets, making a profit margin from the difference between sale price and net origination variable costs and fixed overheads. The spread of web-enabled technologies made “origination at a distance” feasible and lowered the costs of origination. This new model turned upside down the old consumer finance model of the steadfast and conservative lender that originated and retained assets on its books, serviced the loans, and made

a modest profit from the spread between financing income and costs.

Competition for origination led to deteriorating standards

The surge in consumer finance lending was epitomized by sub-prime mortgages in the United States. The rush of new entrants in quest of market share together with the moral hazard factor resulting from originators quickly exiting the assets (it becomes the purchaser's "problem") led to continuously eroding underwriting standards. As expanding credit fed increasing asset prices which helped mask poor borrower quality, it seemed to many observers that the circle had been finally squared. The stage had been set for an unprecedented deterioration in the performance of consumer assets, even beyond some of the worst stresses modelled by the rating agencies.

Systemic risks propagated troubles throughout the world's credit markets

The brewing systemic risks finally tipped in 2007, with thinly capitalised American sub-prime mortgage originators the first ones to start folding in increasing numbers. But the systemic risks resulting from global credit expansion were not constrained just to the sub-prime mortgage asset class in the United States (or only to consumer finance), and the wave of credit aversion spread to Europe and caused the early surprising demise of a deposit-taking mortgage specialist bank, Northern Rock, in the UK in September 2007. Mounting credit losses eroded the capital bases of commercial and investment banks worldwide, dried up available credit, damaged the liquidity particularly of financial assets and eventually led to the demise of Bear Stearns, Lehman, AIG etc and goaded massive global central bank interventions in 2008 and early 2009.

Capital markets remain adverse to consumer finance

In developed countries consumer deleveraging is expected

In emerging markets consumer finance will grow substantially in the next decade

In late 2009 the securitisation market for consumer finance assets remains closed and institutional investors scalded by the events of the last two years continue to be adverse to providing credit or investments to the consumer finance asset class. In developed countries it is often argued that we have entered a period of consumer retrenchment and deleveraging. However, in emerging markets, due to rising populations, expanding GDP's per capita, the emergence of salaried middle classes and increased demand for housing and consumer goods it is foreseeable that there will be expanding demand for consumer finance. And if we take into account that the finance sectors of many of these countries lack depth and the banking sectors are inefficient, this creates attractive opportunities for specialty consumer finance players in emerging markets.

New consumer finance company model:

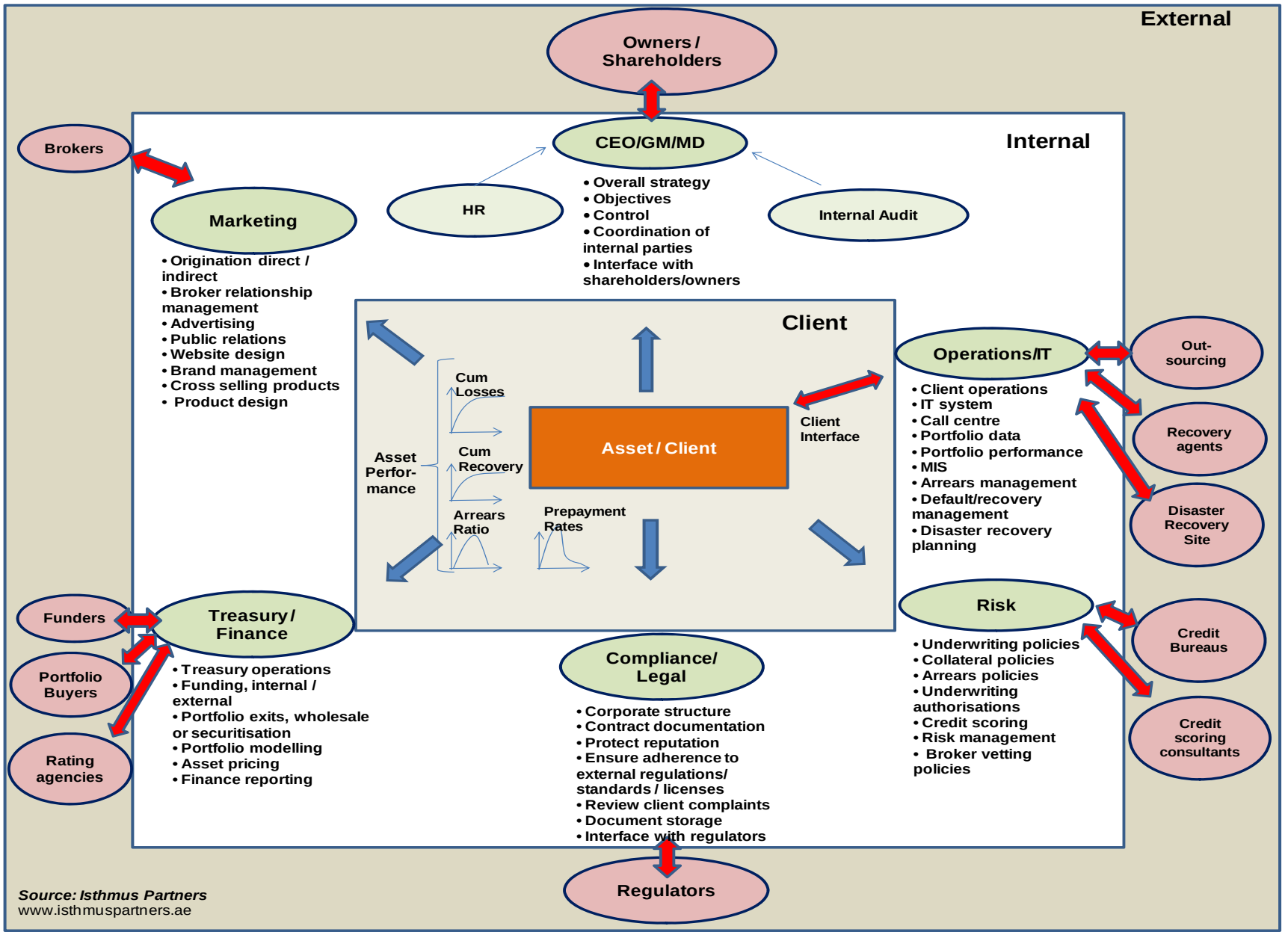
- More equity
- Reduced moral hazard
- Sustainability
- Quality of servicing
- Transparent portfolio reporting
- Good working relationship with regulators

It can be expected that lessons of the credit bubble and credit crunch will be heeded by players in the consumer finance arena, in particular by funders and securitisation investors. Instead of thinly capitalised and marketing-oriented origination and distribution platforms, the consumer finance business model will be based on:

- Sufficient equity to sustain the business and in particular to absorb risks during troughs in the lending cycle
- Originator retains "skin in the game" in the portfolio, even in securitised portfolios, to ensure the alignment of the originator with long-term holders of the assets
- Sustainable business policies that give the borrower a "fair deal" and will not attract negative media or regulatory scrutiny that would embarrass owners or funders; leading companies will

encourage and adhere to industry standards
- Servicing remains in-house and is of a high standard
- Good quality of portfolio statistics, transparent and meaningful reporting
- Good working relationship with regulatory authorities that scrutinise lending policies and arrears management practices

This report sets out Isthmus Partners' thoughts about the organisation of a consumer finance operation, the importance of disciplined and high quality portfolio data and performance capture, and how modelling can be used to aid the strategic and tactical decisions of the operation.


External
Owners / Shareholders
Internal
Brokers
CEO/GM/MD
• Overall strategy
• Objectives
• Control
• Coordination of internal parties
• Interface with shareholders/owners
Marketing
HR
Internal Audit
• Origination direct / indirect
• Broker relationship management
• Advertising
• Public relations
• Website design
• Brand management
• Cross selling products
• Product design
Client
Cum Losses
Asset Perfor-mance
Cum Recovery
Arrears Ratio
Prepayment Rates
Asset / Client
Client Interface
Operations/IT
• Client operations
• IT system
• Call centre
• Portfolio data
• Portfolio performance
• MIS
• Arrears management
• Default/recovery management
• Disaster recovery planning
Out-sourcing
Recovery agents
Disaster Recovery Site
Funders
Portfolio Buyers
Rating agencies
Treasury / Finance
• Treasury operations
• Funding, internal / external
• Portfolio exits, wholesale or securitisation
• Portfolio modelling
• Asset pricing
• Finance reporting
Compliance/ Legal
• Corporate structure
• Contract documentation
• Protect reputation
• Ensure adherence to external regulations/ standards / licenses
• Review client complaints
• Document storage
• Interface with regulators
Risk
• Underwriting policies
• Collateral policies
• Arrears policies
• Underwriting authorisations
• Credit scoring
• Risk management
• Broker vetting policies
Credit Bureaus
Credit scoring consultants
Regulators
Source: Isthmus Partners
www.isthmuspartners.ae

2. Organisation

The client, the borrower of the asset, is the centre of the consumer finance operation

The organisation diagram in the previous page depicts a consumer finance operation centred on the client and the assets. The assets are the consumer finance products which are bilateral agreements between the clients or borrowers and the consumer financier or lender. The lender provides cash or finances the acquisition of goods or services by the borrower. In return the borrower commits to return the principal and interest (or profit rate in Islamic finance) in a predetermined timeframe via regular instalments.

Six main functions of a consumer finance operation and the roles of each

The internal business departments carry out the necessary functions of the consumer finance operation. These internal parties are:

1. The CEO/General Manager/Managing Director
2. Operations/Information Technology
3. Risk
4. Compliance / Legal
5. Treasury / Finance
6. Marketing

To put it in simple terms, the CEO/GM/MD sets the strategy and objectives and coordinates the other parties to ensure they do not work in silos. It controls the organisation through an internal audit team and works closely with HR to ensure the right selection and retention of human capital. The function of marketing is to get sufficient volume of the right type of borrower applications into the organisation. Risk sets out policies to ensure that only applications within the desired risk parameters are completed. Operations/IT handles applications from entry to completion, interfaces with clients during the origination and life of the asset and gathers the data required for management information systems. Compliance/legal ensures adherence to external and internal standards for documentation and procedures. Treasury/finance's role is to obtain the necessary funds to be able to finance the consumer assets.

The Asset / Client

Consumer operations revolve around an intangible asset

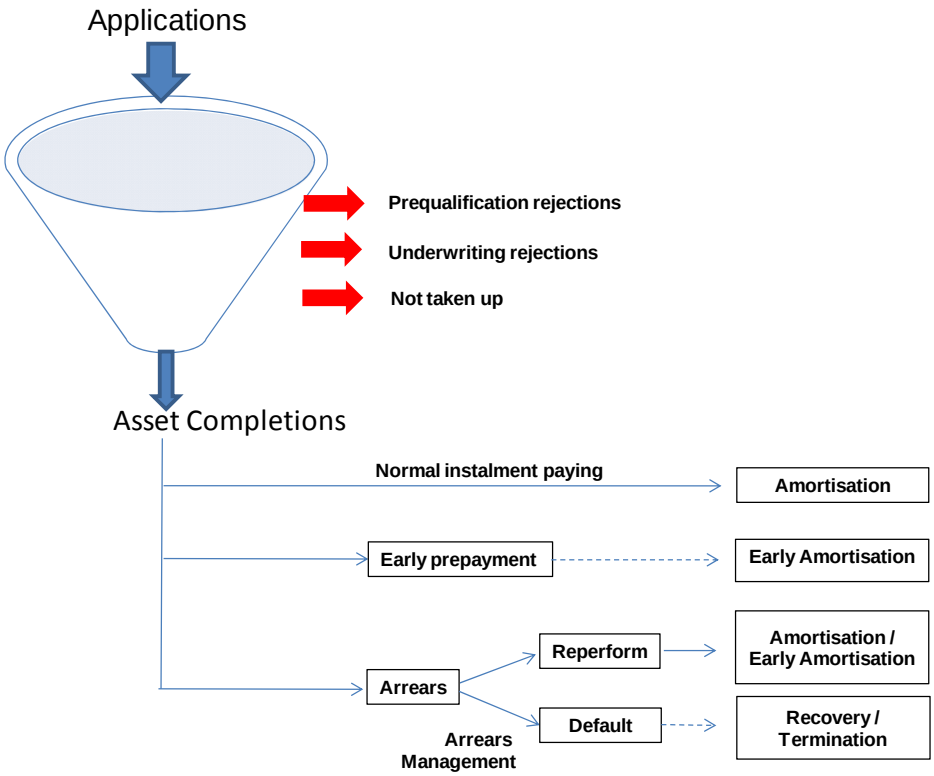
A consumer finance operation is a servicing operation

Clients are borrowers, they have an obligation to the lender

The asset and the client, the borrower/s behind the asset, are the core focus of a consumer finance operation. The asset is an intangible asset, the borrower's promise to pay, even though it may be collateralised by tangible assets such as a mortgage. The consumer finance operation is essentially a high volume service operation oriented to a client. The relationship with the client has a dual nature. The organisation wants the client's custom and to serve the client efficiently, but at the same time the client acquires an obligation to the lender and in the event of non-performance the relationship changes to one where the lender obliges the client to perform or takes action against the borrower.

The illustration below depicts the life cycle of a consumer finance asset as it flows through the organisation.

Life Cycle of a Consumer Asset



Source: Isthmus Partners

The life cycle of a consumer finance assets has two main stages, the application stage up to completion and the post-completion stage.

First stage is application Applications are rejected, desist or completed

In the application stage the client applies for credit either directly to the consumer finance organisation or through brokers/agents. The application will transit through a series of vetting procedures such as prequalification and underwriting. Many of the applications get rejected during the vetting procedures. Also many applicants who are approved or not rejected desist either because they go with another lender or change their mind about the underlying purchase or financing.

Second stage is post-completion, and the asset starts paying instalments

Paths that a consumer asset may take are varied

Once the consumer asset is completed and funds drawn, the asset is in the post-completion stage. The paths that the asset may take are varied. The asset can pay its instalments regularly until being fully amortised. Many times the borrower decides to prepay ahead of the agreed termination date. Very few residential mortgages live out their full agreed term. Some of the borrowers will go into arrears, from which some will recover promptly or later, and in some cases the assets go into default and the lender has to initiate recovery procedures.

Two key contact points between client and operation, at application

There are two key points where there is plenty of contact between the client and the consumer finance operation. The first is during the of

and at arrears

application phase up to completion, the second is in case of arrears, in particular if the arrears case ends up in default.

Operations/Information Technology

Operations is the interface with the client Staff are essential to the operation

The Operations department is the interface between the client and the organisation and needs to run smoothly a high volume service operation. To be able to undertake its functions Operations requires a good IT system and even more importantly a skilled, trained and motivated staff.

IT system: flexibility is key

Retain software development skills in-house

There are many off-the-shelf IT platforms suitable to consumer finance operations. It is important that the chosen IT system is flexible and can be adapted to the peculiarities of the lender's products and procedures and the jurisdiction where the lender operates. We recommend that the lender retains a good in-house IT development team for bespoke changes to the IT system. Outsourcing development can be a more inexpensive solution in the short term but in the long term limits operational flexibility and voids the benefits of in-house learning and control. Sometimes different systems can be used for core asset processing, call centre management, default and recovery management and for reporting packages. If different systems are used the IT team needs to ensure the seamless and coherent integration of the different software packages.

The Operations Manual and Underwriting Manual are important documents

A key responsibility of the Head of Operations is to prepare and ensure adherence to the Operations Manual. Working together with the Head of Risk, another function is to assist in the preparation and ensure adherence to the Underwriting Manual. The Operations Manual and Underwriting Manual are living documents that should be exhaustive in detail, easy to use and continuously improved and adapted to reflect the changing environment and practices.

Operations will process new applications, capture the relevant data on each application, and guide the application and the applicant through the internal procedures. Successful applications will be completed when the bilateral documentation is executed and in force and the funds are drawn and transferred to the correct recipient as per the underlying documentation. Security interests that need to be publicly registered will be perfected at the time of closing.

A client's perception of the organisation will be through interaction with the call centre

The call centre is another important responsibility of Operations. A client's perception of the lender will in great part depend on the client's interaction with the call centre personnel. It will influence the likelihood that the client repeats business in the future, that the client recommends the lender to others and even affects the client's propensity to fall into arrears. A fast IT system with easy access to all the relevant data used by well trained and motivated staff is the key to a successful call centre operation. Today's technology allows the efficient recording of calls and linking the stored conversations to the loan file, and this feature should be used as it allows to check past calls for the purposes of auditing, client complaint, disputes and even for use in courts or arbitrage.

In arrears management an experienced and motivated staff is paramount

Arrears management and recovery actions in the event of default are vital for a consumer finance lender. Clear, detailed and fair procedures carried out by experienced and motivated staff are required for good arrears management, to minimise the number of defaults and to maximize

recoveries in case of default. The Operations Manual will include the arrears and recovery procedures to which the Risk department will also contribute.

Data capture and maintenance are essential for a mass servicing operation

From the application stage accurate data capture of all relevant applicant and loan parameters is paramount. Once an asset is completed, it is essential to keep up-to-date and complete information of each individual asset and of the aggregate asset portfolios so that decision makers and information users may know at any given moment in time the detailed composition of the lender's book. This is the static information about the lender's portfolio. It is also important to retain data on applications that did not complete, as this is relevant to decision makers (why did these applications not complete, what can we do differently?) and to Risk for the purposes of developing credit scores and/or automated underwriting decision tools.aaa

Historical portfolio performance requires discipline for consistent and correct recording

Dynamic information about the historical performance of the portfolio is as important as static information. This includes information on origination volumes, rates of default, recovery levels, arrears behaviour and prepayment rates. This information is useful not only for performance measurement but also validates the assumptions used in portfolio modelling. It takes determined discipline and deep understanding of the use of portfolio historical statistics to ensure they are recorded consistently and correctly. Frequently when the right systems are not set up historical information is "lost" and the organisation cannot benefit from storing past information.

Back-up servicing may be required by funders

If required by funders, Operations will liaise with back-up servicers that will step in and take over the servicing functions in the event that the consumer finance operation cannot continue to service the loans.

Disaster recovery plans should be tested

Finally, Operations needs to ascertain that disaster recovery plans that keep safe the IT system and its records and ensure the revival of critical operations at a safe site are implemented, kept up to date and tested regularly. The worse situation that can happen to a consumer finance portfolio is ceasing the servicing of the portfolio.

Risk

Risk controls the underwriting quality of the portfolio

Risk is responsible for the portfolio's risk being of the quality targeted by the organisation. The Risk function is a balancing act between loose underwriting policies that are good for origination volumes but bad for future performance and overly stringent policies that reduce origination volumes to a trickle.

The Head of Risk will be responsible for the Underwriting Manual, and will work closely with the Head of Operations who needs to implement it.

Underwriting Manual sets out the underwriting standards

The Underwriting Manual will set the criteria and procedures for applicant identification, ascertain proof of income, check applicant credit and/or bank histories, methodology to calculate required debt service coverage (regular disposable income to total debt service) including how to check and treat other debts and commitments of the applicant, etc. In the case of secured asset finance the Underwriting Manual will set out the policies for acceptable collateral and its valuation (such as acceptable valuers), as

well as the LTV parameters.

The underwriting team will usually have a dual reporting line to the Head of Operations and the Head of Risk. The Head of Risk should set the underwriting authorisations and is the ultimate arbiter on underwriting decisions.

Underwriting based on human judgment using policies or automation using rules depends on the availability and quality of quantitative credit data

Risk needs to work out how much of the underwriting decision is automated and how much depends on human judgement. During the credit bubble automated decision systems were all the rage in the developed world. Automation was aided by IT networks that allowed the capture and processing of applicant identification information and credit history. The problem with automation is that it does not use human common sense that can be valuable to judge grey areas. In emerging markets where client identification is an issue and systemized credit histories are not available human underwriters are the only option, and viable due to their lower costs. As a consumer finance lender gathers experience and statistics in a market it can then implement decision systems that rank applicants according to risk and aid the underwriter (highlighting items in the application, risk factors, etc), but with the ultimate decision lying with the underwriter. In a later stage credit scorecards can be implemented and how much of the underwriting decision is left to systems will be a decision of the organisation.

Brokers should also be underwritten

Another important function of Risk in consumer finance organisations that use brokers to bring applicants is the vetting policies of brokers, as brokers themselves are a source of risk. Paradoxically, web-enabled technologies during the credit bubble in the developed world produced the "age of the broker" in the developed world (instead of the B2C model that some pundits predicted) and some brokers were skilled in gaming the sourcing systems, playing lender against lender and earning high commissions. When brokers make a commission from loan completions, their incentive is to close loans and "hide" damaging information about the applicant, even guiding the applicant on "how to beat the system". The consumer finance organisation needs to incentivise long term honest relationships with brokers and blacklist reckless or dishonest brokers.

Compliance/Legal

In many consumer finance organisations there will be a separate Head of Legal and Head of Compliance.

Compliance/legal protects the reputation of the organisation and ensures adherence to standards

Consumer finance is a politically sensitive area, with concerns about lenders taking advantage of vulnerable borrowers ("predatory lending"), excessive cost of finance, or the heavy handed tactics of recovery procedures in the event of default. The key role of Compliance/Legal is to protect the reputation of the organisation and ensure the adherence to fair standards and practices, both external and internal guidelines. To fulfil its role the Compliance/Legal function will review the Operations and Underwriting Manuals and approve them. The department will interface with the regulatory authorities and procure a fluid communication with the regulators' personnel.

The standard documentation should be bankable

The Compliance/Legal department will draft the loan and security documents and will work with the Finance function to ensure that the

agreements are bankable or securitisable while fulfilling legal and regulatory requirements. If the products need to abide by the requirements of Islamic finance, the Compliance/Legal department will interface with a Sharia board to check that the documentation and procedures comply with the tenets of Islamic finance.

Client complaints need to be managed

Compliance/Legal will deal with client complaints and report to the CEO about the causes and fair grievances of clients so that remedial action can be taken.

Working with Operations, the Compliance/Legal function will ensure that loan and security documentation are stored safely and retrieved when needed.

In concurrence with the Finance function and the CEO, the Head of Compliance/Legal will set up and maintain the corporate structure that is consistent with the organisation's business and funding strategies.

Treasury/Finance

Finance is responsible for funding the portfolio
Day-to-day cash management needs to be skilfully administered

On a day-to-day basis the Finance function is responsible for treasury operations, ensuring the seamless funding of loan closings and the cash management of collections. In the longer term the Head of Finance is responsible for funding arrangements, either from the parent company or from external funders. The mix and term of funding arrangements are important variables to consider. One of the pitfalls many consumer finance organisations fell into during the credit bubble was the use of short term financings (example 364 day revolving credit lines, which due to favourable capital treatment were cheaper) to fund longer term assets. When the credit markets dried and the financings were up for renewal, these companies found themselves in a tight spot and many went bankrupt.

The Head of Finance needs to coordinate with the Head of Compliance/Legal to ensure the standard loan and security documentation and the organisation's corporate structure are funding-friendly and/or agreeable to a securitisation solution.

Finance typically deals with portfolio modelling

Generally the Finance function will have staff with the requisite skills for portfolio modelling, as modelling is intrinsically linked to financing, securitisation and portfolio sales. The modelling function need to work closely with Operations, which provides the portfolio data and portfolio historical performance which are fed into the models, and with Risk, which provides guidance on risk parameters, expected portfolio loss, arrears and prepayment behaviour, confidence intervals and stressed scenarios.

The modelling function provides the CEO with the quantitative underpinning for pricing decisions on products offered by the originator. Pricing must be risk-adjusted, in other words the higher the risk of the asset the higher the interest or profit rate.

Marketing

Marketing needs to get applicants through the door

Marketing's function is to get applications from the target population into the organisation. The credit bubble was the heyday of consumer finance marketing, with sophisticated web-enabled technology reaching out to

consumers and brokers, very wide product ranges that offered clients deceptively broad choices and relatively large advertising and public relation budgets. Relationships with brokers were of primary importance. In the future Marketing's function will be more subdued but still fundamental, as without applications through the door the consumer finance organisation cannot grow.

Is origination direct or indirect through brokers The broker model can vary

Marketing's role will depend on whether the company's origination model is direct to consumer, through brokers, or through both channels. In a broker channel, brokers can have a role in preparing the application ("packaging") and even sometimes a lender may "white label" itself behind a large broker's brand ("correspondent lending"). When competition for origination was fierce and the brokers had strong bargaining positions these kinds of origination decisions could make sense for an organisation, but for the foreseeable future they are less likely.

The Head of Marketing is responsible for the brand of the consumer finance lender which is critical to attract applications and for public scrutiny of the lender.

Product design requires the coordination of all the functional areas

Marketing typically has the role of coordinating product design, but in this case working closely with a multilateral team as it would require the input of Finance to ensure financing for the product, of Compliance/Legal to ensure adherence to standards and preparation of adequate documentation, of Risk to decide the underwriting guidelines of the product, and of Operations to implement the product.

CEO/GM/MD

CEO sets the strategy and objectives, and ensures the internal parties do not work in silos

Last but not least the CEO has to set the overall strategy and objectives of the consumer finance organisation. One of the CEO's key functions is to ensure that the other departments work closely together for the benefit of the overall organisation and not in silos.

Control of the organisation plays an important role

The CEO needs to control the organisation, and for this there should be an internal auditor or auditing team reporting directly to the CEO. We believe that in spite of having an internal auditor it is a good practice for the CEO to personally review loan files, applications and listen to call recordings. Reporting is fine but nothing provides a better picture of the pulse of the organisation than putting the ear to the ground, and an experienced CEO will be able to ask more pointed questions and get more respect from the rest of team if the CEO does this.

The CEO's role includes selection and retention of right staff

Also of prime importance is the selection and retention of the right staff, and for this the CEO needs to work closely with the HR Director.

The CEO also has the key role of interfacing with the shareholders/owners and of representing the company or organisation publicly.

Corporate Structure

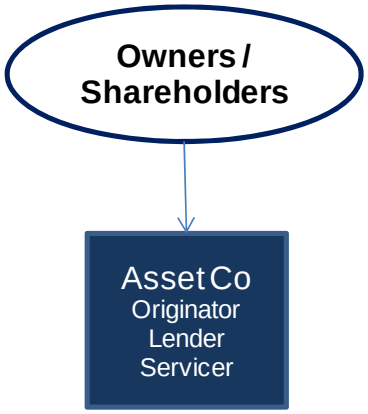
A flexible corporate structure provides options on funding and strategies

In an industry as dependent on funding (internal or external) as the consumer finance industry, the corporate structure is very relevant. A flexible corporate structure also allows greater strategic and operational options that can avoid many headaches down the road when an

organisation grows in complexity.

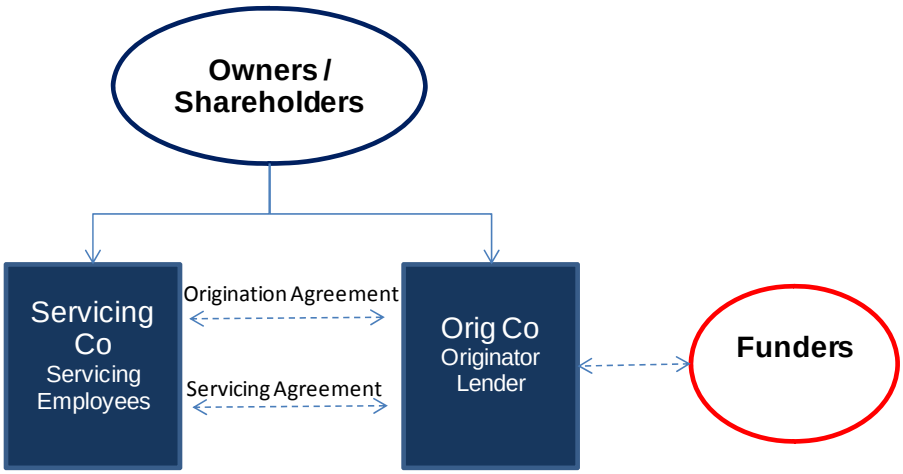
The Head of Legal, reporting to the CEO and working together with external counsel, tax experts and funding advisers, will be responsible for setting up and maintaining the corporate structure.

The simplest corporate structure (see illustration below) is the single limited company in which origination, servicing and lending functions are carried out under the same roof. While this structure is very easy to understand, it presents challenges to organisations seeking non-recourse financing such as securitisation.



Corporate separation of servicing and operational platform from origination and lending

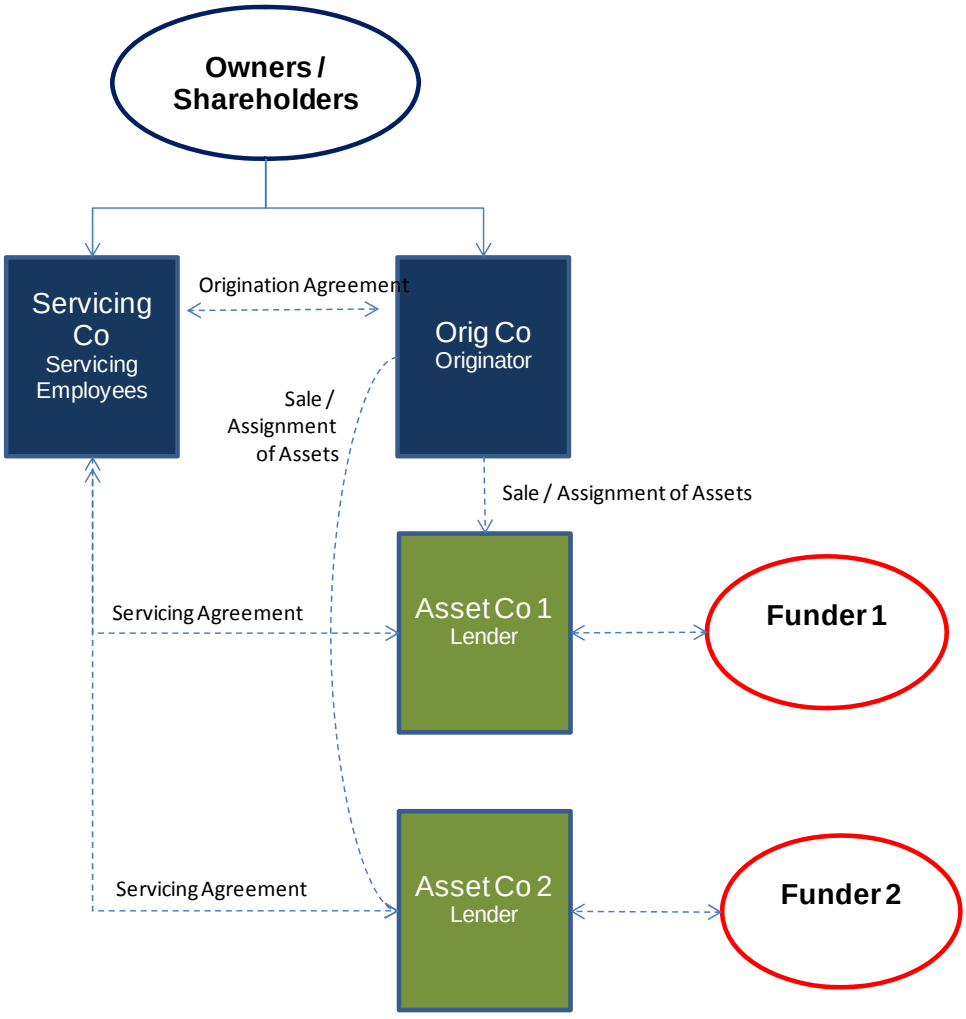
A more complex structure (depicted below) is one where the servicing side of the business is separated from the originating entity which is also the lender. All the employees, premises, leases, IT system, contracts and operational liabilities are held in the Servicing Co, which has an arms-length origination agreement (provides the infrastructure to service loans for the Origination Co) and servicing agreement (provides portfolio servicing to the lender). This structure facilitates a single funder (either stand alone or in a syndicated facility) financing the Origination Co. It is also easier for the Origination Co to sell assets to securitisation special purpose vehicles.



Separating origination from lending provides further funding flexibility

An even more complex corporate structure is one in which the Origination Co is separate from the Asset Cos. The rationale for this is that the act of origination creates potential liabilities in cases where the asset is originated defectively (borrower outside lending criteria, security documents improperly executed mean no collateral, outright fraud by broker, etc). The Origination Co retains exposure to these contingent liabilities, while the Asset Companies have a clean slate. The Lending Cos acquire or are assigned the assets from the Origination Co once they are originated. Each Asset Co can be a funding vehicle for a separate funder or securitisation. In some jurisdictions the Asset Cos are separately owned from the Servicing Co and Origination Co, they can even be an "orphan" (owned by a charitable trust). For the purposes of ensuring that each Asset Co is bankruptcy remote from all other entities, sometimes the Asset Cos' corporate and treasury functions are managed distinctively and separately by a trustee. A simplification of this type of structure is depicted below.

Lending Cos can even be orphan companies



3. Portfolio Statistics

An analyst studying a consumer finance portfolio will be interested in the following:

- What is the current composition of the portfolio?
- How does the current composition compare to past compositions?
- What has changed?
- Why are the changes happening?
- What has the historical performance of the originator's portfolios been?
- What are the trends in historical performance and what factors are they being driven by?
- Is there any recent deterioration in performance?
- Any adverse circumstances that the company could be trying to hide and that can be inferred from data?

To be able to answer the questions above, information on the current composition of the portfolio and historical information would be requested and studied.

Portfolio Composition

Portfolio composition includes summary descriptive statistics and the detailed loan-by-loan data tape

Portfolio composition can be divided into two different sets of data:

1. Summary descriptive statistics of the portfolio that provide information on the averages, range and distribution of key portfolio parameters. It is interesting to compare statistics with past statistics to observe the evolution of the portfolio.
2. An asset by asset individual detail with all the relevant fields for the asset, such as the following:
    i. Product type
    ii. Original principal
    iii. Outstanding principal
    iv. Interest rate / profit rate
    v. Original term
    vi. Remaining term
    vii. Instalment amount
    viii. Amount of current arrears
    ix. Collateral type
    x. Value of collateral

    The number of fields will depend on the nature and complexity of the product, but should include all those fields necessary for very detailed cash modelling of the asset and for qualitative assessment of the quality of the asset.

Keep private information about borrowers apart from analytics

It is a good practice for an organisation to keep personal information about a borrower (name, address, telephone number, bank account information, etc) separate from portfolio data that is used by internal and external analysts. A borrower id number is enough for the purposes of portfolio analysis (as long as it allows an analyst to know if different assets belong to the same borrower). This will help avoid embarrassing

episodes such as when a consumer organisation misplaces sensitive customer information, which attracts negative media and regulatory scrutiny. However, the filtered portfolio data is still very sensitive confidential information and should be treated with the utmost care.

Historical Performance: Origination Volumes

Vintage based analysis in the most useful way of approaching a consumer finance portfolio

The most meaningful way of breaking down historical performance is to use the concept of "vintage". A vintage in a consumer finance operation will consist of all similar products originated in a given time period. For example, for a consumer finance operator active both in mortgages and auto loans, one vintage will include all residential mortgages originated in January, another vintage will include the same product originated in February and so on. Another vintage will be all auto loans originated in January, yet another for auto loans from February, and so on. If within the mortgage origination there is a distinction between prime (good quality clients) and subprime (lesser quality clients) then it makes sense to differentiate between the two for the purposes of vintage analysis. Vintage breakdown makes sense as long as each vintage is populated with products and borrowers of similar characteristics.

Origination volume analysis allows studying origination success and mix of origination

Vintage origination volumes will be provided on a monthly or quarterly basis. This allows studying how the organisation is doing in terms of origination and also what is the composition of new originations, which will eventually come to represent the composition of the overall portfolio. Why is the organisation shifting its emphasis in origination? Is it because of strategy or because of external factors? Is the organisation shifting towards products that it has less experience with? Why and what are the potential consequences?

Historical Performance: Gross Loss by Origination Vintage

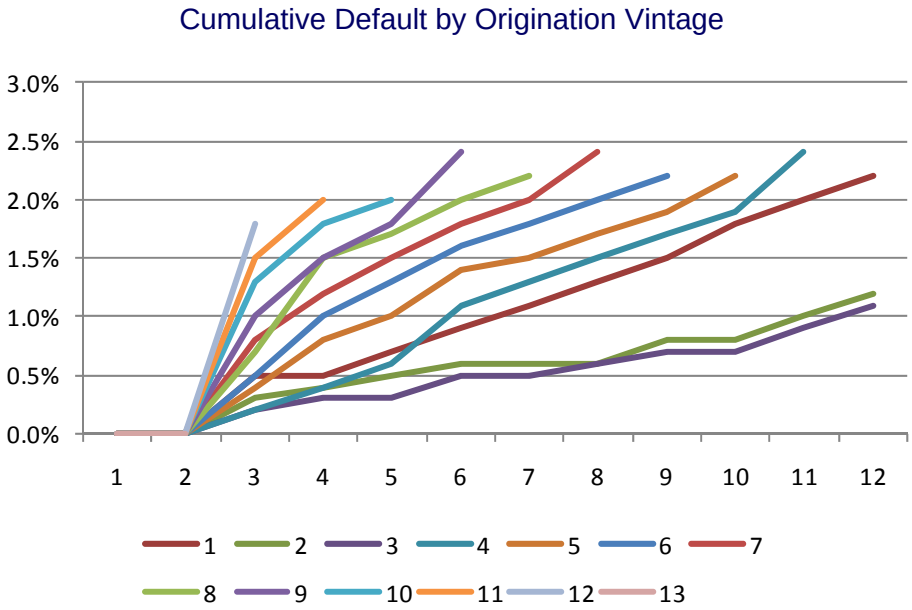
Losses should be shown by origination vintage

This statistics will show the cumulative gross losses by vintages. The table below is illustrative of how this information is presented.

Default Vintage

		Month after Origination											
Month	Originations	1	2	3	4	5	6	7	8	9	10	11	12
1	*XX*	0.0%	0.0%	0.5%	0.5%	0.7%	0.9%	1.1%	1.3%	1.5%	1.8%	2.0%	2.2%
2	*XX*	0.0%	0.0%	0.3%	0.4%	0.5%	0.6%	0.6%	0.6%	0.8%	0.8%	1.0%	1.2%
3	*XX*	0.0%	0.0%	0.2%	0.3%	0.3%	0.5%	0.5%	0.6%	0.7%	0.7%	0.9%	1.1%
4	*XX*	0.0%	0.0%	0.2%	0.4%	0.6%	1.1%	1.3%	1.5%	1.7%	1.9%	2.4%	
5	*XX*	0.0%	0.0%	0.4%	0.8%	1.0%	1.4%	1.5%	1.7%	1.9%	2.2%		
6	*XX*	0.0%	0.0%	0.5%	1.0%	1.3%	1.6%	1.8%	2.0%	2.2%			
7	*XX*	0.0%	0.0%	0.8%	1.2%	1.5%	1.8%	2.0%	2.4%				
8	*XX*	0.0%	0.0%	0.7%	1.5%	1.7%	2.0%	2.2%					
9	*XX*	0.0%	0.0%	1.0%	1.5%	1.8%	2.4%						
10	*XX*	0.0%	0.0%	1.3%	1.8%	2.0%							
11	*XX*	0.0%	0.0%	1.5%	2.0%								
12	*XX*	0.0%	0.0%	1.8%									
13	*XX*	0.0%	0.0%										

The chart below graphs the data above.



In this example it is obvious that the most recent vintages are performing progressively worse. Why is this happening? Has management taken notice? What corrective actions have been taken?

To make the information even more relevant, two types of cumulative default should be calculated and shown separately, firstly gross defaults and second net defaults. Net defaults include the amount of recovery on a defaulted asset which reduces the gross loss.

What is the gross loss amount? It is the principal balance of the asset when it is accounted for as defaulted. Some organisations will include in this balance accrued and unpaid interest. What is important is that information is captured transparently and in a consistent manner.

A certain limit by which an arrears case should be deemed defaulted must be set

When is an asset in arrears considered defaulted? This will depend on what is causing the arrears and the willingness/ability of the borrower to amend the arrears. However it is important that a certain limit in terms of number of instalments overdue is selected and any performance beyond that limit will lead to the asset being considered a default. This is for consistency and also to avoid the temptation to reduce reported defaults by not recognising them. This is the concept of “deemed defaulted” in rating agency jargon.

<u>Historical Performance: Recovery by Default Vintage</u>

Recoveries should be shown by default vintage

This statistics will show the cumulative recoveries, but not by origination vintage, but rather by default vintage. This provides statistics on what are the recovery levels and what is the timeline to recovery. It also allows studying the effectiveness of the recovery procedures within the organisation. Are recoveries improving or deteriorating? Why? Was there a change in recovery policies or change of recovery agents?

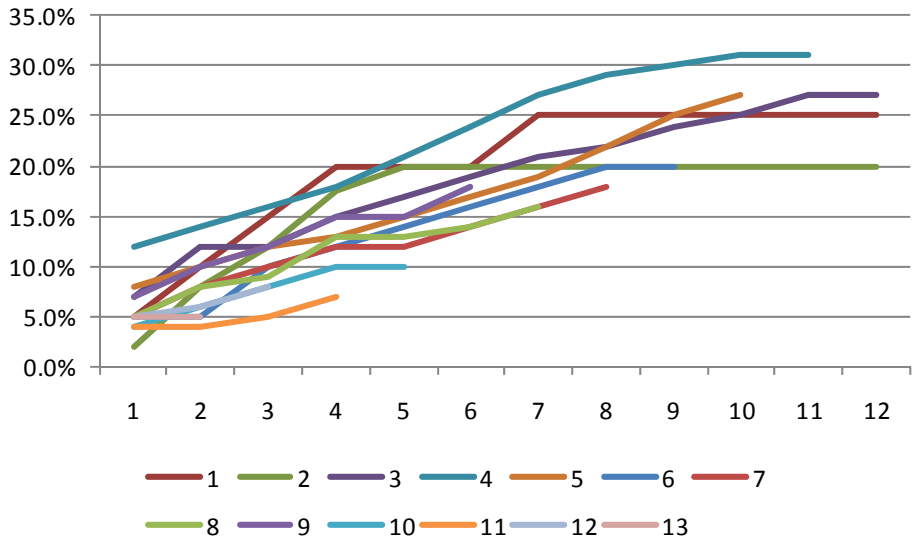
The table below shows how recovery information can be presented.

Recovery Vintage

		Month after Default											
Month	Gross Defaults	1	2	3	4	5	6	7	8	9	10	11	12
1	*XX*	5.0%	10.0%	15.0%	20.0%	20.0%	20.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%
2	*XX*	2.0%	8.0%	12.0%	17.5%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%
3	*XX*	7.0%	12.0%	12.0%	15.0%	17.0%	19.0%	21.0%	22.0%	24.0%	25.0%	27.0%	27.0%
4	*XX*	12.0%	14.0%	16.0%	18.0%	21.0%	24.0%	27.0%	29.0%	30.0%	31.0%	31.0%	
5	*XX*	8.0%	10.0%	12.0%	13.0%	15.0%	17.0%	19.0%	22.0%	25.0%	27.0%		
6	*XX*	5.0%	5.0%	10.0%	12.0%	14.0%	16.0%	18.0%	20.0%	20.0%			
7	*XX*	5.0%	8.0%	10.0%	12.0%	12.0%	14.0%	16.0%	18.0%				
8	*XX*	5.0%	8.0%	9.0%	13.0%	13.0%	14.0%	16.0%					
9	*XX*	7.0%	10.0%	12.0%	15.0%	15.0%	18.0%						
10	*XX*	4.0%	6.0%	8.0%	10.0%	10.0%							
11	*XX*	4.0%	4.0%	5.0%	7.0%								
12	*XX*	5.0%	6.0%	8.0%									
13	*XX*	5.0%	5.0%										

The chart below depicts the same data.

Cumulative Recovery by Default Vintage



The example data and graph show that recoveries on the assets tend towards 20% - 30% of the defaulted amount, and level off at about month 9 or 10.

Historical Performance: Arrears

Arrears are an early warning sign of portfolio deterioration

Arrears are an important portfolio indicator. Arrears reveal the borrower's unwillingness or inability to pay and anticipate future recognised defaults. Arrears are the early warning sign of deterioration and need to be monitored closely. Even if an asset recovers, arrears still represent a temporary non-payment of cash flow that can affect an organisation's treasury and its ability to service financing.

Arrears multiple expresses arrears as a ration of instalments

A useful concept for arrears statistics is the arrears multiple, which is the number resulting from dividing the total amount of instalments due on the asset divided by the periodic instalment. For example if a residential mortgage has a monthly instalment of $600 and the total amount overdue on the loan is $1,800, that loan will have an arrears multiple of 3.

There are three ways in which arrears can be presented, each one reveals different kinds of information.

Arrears by origination vintage can detect deterioration in origination quality in recent vintages

The first is arrears by origination vintage, very similarly to defaults by origination vintage. For example, the table will show the percentages of loans with arrears multiple >= 1 and arrears multiple >=3 with each row being an origination vintage. These are very useful statistics to detect deterioration in origination quality and promote early remedial action without having to wait for a surge in defaults.

Total portfolio arrears over time provides information on total arrears and seasonality

The second is total portfolio arrears over time. For example, the table will show in a given month what percentages of the aggregate portfolio have an arrears multiple >=1 and arrears multiple >=3. This gives an idea of the total volume of arrears that the organisation deals with, whether the size of the arrears management operation can cope, is there any seasonality in arrears, etc.

Arrears by month

Month	Performing < 1 AM	AM >= 1	AM >= 3
January	95.5%	4.5%	2.0%
February	95.7%	4.3%	1.8%
March	96.0%	4.0%	1.5%
April	95.5%	4.5%	1.6%
May	95.0%	5.0%	2.2%
June	94.5%	5.5%	2.5%
July	94.0%	6.0%	3.0%

The example in the table above shows a case where portfolio wide arrears data has suddenly deteriorated. What is the cause? Is it seasonal (check other years)? What remedies are being taken?

Arrears transition matrices provide information about arrears evolution and when an arrears case will most likely default

The third way to present arrears is through arrears transition matrices. These matrices represent the evolution of arrears from one bucket to another bucket over the course of several months. The best way to explain arrears transition matrices is through an example represented in the following tables:

Arrears Transition Matrixes

MAY/JUNE	Performing < 1 Arrears	=>1 < 2	=>2 < 3	=>3 < 4	=>4
Performing < 1	98.5%	1.5%	0.0%	0.0%	0.0%
1 <= AM < 2	25.0%	50.0%	25.0%	0.0%	0.0%
2 <= AM < 3	15.0%	10.0%	25.0%	50.0%	0.0%
3 <= AM < 4	10.0%	5.0%	10.0%	25.0%	50.0%
4 <= AM	5.0%	5.0%	5.0%	10.0%	75.0%

JUNE/JULY	Performing < 1 Arrears	=>1 < 2	=>2 < 3	=>3 < 4	=>4
Performing < 1	98.0%	2.0%	0.0%	0.0%	0.0%
1 <= AM < 2	20.0%	55.0%	25.0%	0.0%	0.0%
2 <= AM < 3	10.0%	10.0%	15.0%	65.0%	0.0%
3 <= AM < 4	5.0%	5.0%	5.0%	25.0%	60.0%
4 <= AM	5.0%	5.0%	5.0%	5.0%	80.0%

The table above shows that of the assets that were performing in May, 98.5% were performing in June with 1.5% of the assets having slipped into arrears. Of the assets performing in June, 2.0% of the assets had slipped into arrears in July. Of the assets with an arrears multiple between 2 and 3 (2<= AM <3) in June 65% had deteriorated further in July.

The arrears transition matrices are useful in checking the performance of the arrears management team and also in understanding from which arrears stage a loan tends to irreversibly head towards default, which can be used to set the deemed default limit.

Historical Performance: Prepayment Rates

Prepayments have a large cash flow impact on the portfolio

In a consumer finance portfolio the unscheduled prepayment of principal has a very significant impact on portfolio size and cash flow. In mortgage portfolios with loans with 20 or 30 year terms very seldom would a loan remain until full term. During the credit bubble when borrowers were constantly churning their mortgages, portfolio average lives of 3 or 4 years were usual.

Prepayments over the portfolio overall and on a vintage basis

It is useful to present prepayment rates in two ways. Firstly on the portfolio overall with the evolution over time, so that the path of prepayments in the portfolio can be studied. Is the portfolio prepaying faster or slower? Why? Secondly by vintage of origination, very similarly to how defaults by vintage are presented. In this manner we can study whether recent vintage prepayment rates are slower or faster. Is it because of changes in the borrower population that is being originated? Does this mean that in the future the portfolio will have a longer life and overall higher balance, with implications for funding?

4. Portfolio Modelling

Portfolio modelling should not only be the domain of the techies, all management needs to be involved
Portfolio modelling is a continuously improving process

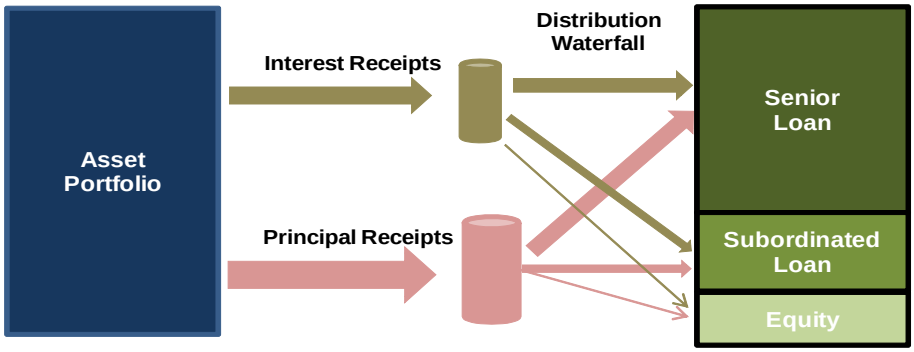
With the inputs of good portfolio composition and portfolio history an analyst can confidently model the portfolio. It is important that portfolio modelling not be an activity only understood by the techie analyst, it should be understood by all the management team and the CEO, and they should be able to challenge the assumptions and outcomes of portfolio modelling. Portfolio modelling should constantly be improving and adapting to the realities of the consumer finance operation and it should be a skill set that is fostered in-house as it is critical for funding, risk management, pricing and strategy.

Cash flow is the core of portfolio modelling

In modelling every asset cash flow is tied to a liability cash flow allocation

At the heart of a consumer finance portfolio model is the modelling of the cash flow generated by the portfolio and the distribution or allocation of the cash flow. From an accounting point of view, the asset must have been funded originally either with debt or equity, and the repayment of the asset will permit the repayment of the debt and the compensation of the equity. The schematic below is a simplification of how modelling works and its dual nature: cash is generated, cash is allocated.

Consumer Finance Modelling



Source: Isthmus Partners

Interest receipts and principal receipts are allocated with waterfall rules

Cash generated from the portfolio is identified as either interest receipts (interest/profit revenue, prepayment fees, arrears fee) or principal receipts, and each will follow its own set of rules of distribution ("waterfall"). In the simple liability structure above, the senior loan will receive the receipts in priority, the subordinated loan second and the equity last. Missing from the schematic above are the payments to the servicer for loan servicing and any interest hedges that are linked to the portfolio.

Each loan can be modelled individually and all the loans aggregated

Today's technology allows each individual portfolio asset to be modelled separately and then all the assets aggregated to obtain the overall portfolio modelling. Each asset comes to the model with its "baggage" of loan parameters (balance, term, interest/profit rate, etc) and the analyst needs to include in the baggage assumptions how the asset will behave with respect to the factors we detailed previously: default rate and

recovery, arrears rate and prepayment rate. Riskier loans will assume a higher probability of default, safer loans will assume a lower probability of default.

Portfolio Modelling: Financing

Liability modelling is a good practice irrespective of how funding is obtained

Some consumer finance operations may say that they do not need modelling for financing purposes since all funding is provided internally at a fixed cost. However this is an erroneous practice and funding costs should be risk adjusted, i.e. reflecting the risk of the activity that the funding is facilitating. Even if the parent company provides funds at a fixed rate, we still advise the CEO to maintain the discipline of "what-if" funding had to be obtained on a competitive basis, and to be ready for the day when the parent company may not be so generous.

Portfolio modelling can be used to estimate the tranchings or sizes of the liability classes

The core of portfolio modelling for financing purposes is to estimate the "tranching" which is securitisation jargon for the sizing of each liability class. In our simple schematic the liability classes are the senior loan, the subordinated loan and the equity. How is tranching estimated? The cash generation of the asset portfolio is put through a series of stress scenarios which reduce the projected available cash from the portfolio. The harshness of the stresses depends on the desired rating for the liability class, so that "AA" stresses are harsher than "A" stresses, etc. The senior loan is set at a size such that the senior loan tranche "survives" the senior loan stresses. By "survival", we mean timely payment of interest on the senior loan and eventual complete repayment of principal of the senior loan (technically, what we are describing is closer to the S&P and Fitch approaches rather than the Moodys approach which is based on expected loss).

Tranchings reflect the results of stresses

The rating agencies provide on their websites criteria and methodologies for tranching estimation. The rating agencies can also provide "shadow ratings" or private ratings to a consumer finance lender and its funder for the purposes of setting up a facility arrangement. What kinds of stresses are applied? The table below sets out some very rough rules of thumb.

Rules of thumb about stresses

Equivalent Rating	Default	Recoveries	Prepayment	Other
AAA	5.0 – 6.0 x expected defaults	None	Fast and slow scenarios	AAA Interest rate stresses Servicer default Severe systemic stress
AA	4.0 x expected defaults	None	Fast and slow scenarios	AA Interest rate stresses Servicer default
A	3.0 x expected defaults	10/20% of expected	Fast and slow scenarios	A Interest rate stresses Servicer default
BBB	2.0 x expected defaults	30/40% of expected	Fast and slow scenarios	BBB Interest rate stresses
BB	1.5 x expected defaults	50% of expected	Fast and slow scenarios	BB Interest rate stresses

AAA ratings in consumer finance are unlikely or very hard to get after the credit crunch

For the purposes of obtaining a shadow rating, a “AA” or “A” rating are advisable for the senior loan. We believe that after the credit crunch rating agencies will be very reticent to provide “AAA” ratings to consumer finance risk, and obtaining a “AAA” will be very punitive, resulting in a very small AAA tranche.

Going back to our simple example, once the senior loan tranche is estimated, the subordinated loan can be sized with milder stress scenarios than the senior loan. And the amount of the liability structure not covered by the senior or subordinated loan will be the equity.

The modelling provides the consumer finance originator and the funder (who may provide both the “senior” and the “subordinated” tranche in a single loan with blended pricing) a methodology to agree on the size of the funding.

Portfolio Modelling: Valuation

With a liability structure sized and priced, valuation is an exercise of determining how valuable the equity is

Once a portfolio’s liability structure and pricing for the liability classes have been determined, valuation is only a step away. Residual cash flows (after meeting financing obligations) from the asset portfolio will flow to the equity. Hopefully the cash flow performance of the asset portfolio will be much better than in the stressed levels and equity will receive a stream of cash flows. If the performance of a portfolio is very good, the equity tranche will receive a substantial amount of cash and can be a very valuable asset.

So how is pricing determined? Once the asset portfolios’ expected cash flows are estimated and the required rate of return for the equity set, then the size of the equity can be calculated. The sum of the senior loan, subordinated loan and equity tranche will be the “value” of the portfolio. Another way to look at valuation is that the liability structure determines the value. This is why when markets are stressed and the tranches are not attractive to investors or funders the value or asset side of the equation suffers. Of course, the liability structure was designed based on expected cash flows from the asset, so the asset/liability duality is a feedback loop.

Valuations exercises are a good discipline

It is a good practice for consumer finance organisations to value their portfolios, even if there is no intention to sale or securitise their book.

Portfolio Modelling: Pricing

Portfolio modelling supports pricing decisions and allows organisation to estimate the impact of pricing decisions on return on equity

The modelling framework for financing and valuation can also be used for the quantitative estimation of product pricing. All else equal, if a consumer finance originator reduces the pricing on its products, the return on the equity tranche and valuation of the portfolios will be reduced. Evidently if pricing is too high then there will be few originations, so the trade-off dilemmas that every business has with respect to pricing policy also apply to consumer financing.

Pricing of marginal products should be based on portfolios only made of the product or on target portfolio

An interesting question is posed by the pricing of new products. For example, assume a prime mortgage portfolio with thousands of loans to which a single subprime mortgage is added. The portfolio as a whole hardly shows the impact of that single loan, so should the pricing be the

weights which include the correlation benefit

same as prime mortgages? That is clearly the wrong answer. There two approaches with respect to pricing on separate products. One is to price each product by assuming the liability structure and valuation of a portfolio composed only of those products. Another is to model a single portfolio with the given target weights of each product and that assumes certain correlation benefits from the different products (i.e. when one product performs badly this does not translate into other products performing in a similar fashion). The correlation benefits help with the funding structure and therefore with pricing. However one of the big lessons of the credit crunch is the nasty habit that assets have to behave similarly in times of stress (when the correlation benefit is most needed), so this approach needs to be handled with caution.

Portfolio Modelling: Risk Management

Portfolio modelling facilitates risk management and setting more sophisticated portfolio objectives than return on equity

The portfolio modelling framework can be used by Risk for risk management purposes. Risk should not only provide expected losses for a product class, but also confidence intervals which reflect the degree of certainty about the expected losses. Using Monte Carlo simulation, which is repeated modelling of different stochastic (probability driven) scenarios, a more varied view of the potential performance of the portfolio can be obtained. Risk is mainly concerned with extreme or tail event behaviours of the portfolio, not just the expected performance.

For example in a sophisticated risk environment the CEO may mandate that the expected return on equity be 15.0%, but also that there is less than a 1.0% probability that the portfolio suffers more than a 5.0% loss. This will help the consumer finance organisation avoid excessive risks in the good times of the business cycle and help the organisation be sustainable in the long term.

About Isthmus Partners

Isthmus Partners FZC is a UAE based consultancy providing advisory services to real estate developers, SMEs and consumer finance operators. Please visit www.isthmuspartners.ae to learn more about our services and the partners.

In the consumer finance arena the Isthmus Partners team has worked for several years in London investment banking structuring consumer finance securitised facilities, wholeloan purchase programmes, M&A transactions of consumer finance companies, carrying out due diligence on consumer finance operations, modelling and valuing consumer finance portfolios and companies, amongst other services.

We can assist consumer finance operations with the following:

- Facilitate a securitisation
- Understand what is necessary to be ready for a future securitisation programme
- Prepare a portfolio for a wholeloan sale
- Obtain external financing secured by the portfolio
- Value the portfolio for internal or external purposes
- Address risk management issues

Please contact us to discuss how we can help you. Our contact details are on the first page of this report.

Appendix A. Case study: Paragon Group, UK

The Paragon Group of Companies PLC ("Paragon") is one of the UK's largest specialist lenders offering buy-to-let mortgages, personal finance, vehicle finance and specialist loan servicing for third parties.

Paragon is a FTSE 250 listed company with 600 staff, 150,000 customers and approximately GBP 9.5 billion loan assets under management. Paragon is also known for having one of the most transparent and user-friendly securitisation reporting packages available on its website.

Specialist lenders do not take deposits and depend on the wholesale market to fund their portfolios. In the last two years, most of Paragon's peers have gone bankrupt as the wholesale market has been shut for an extended period of time. In late 2007, investors were betting on the demise of Paragon. But, after a rough ride due to the credit crunch, Paragon managed not only to survive but to report a profit and hike its dividend in 2009 as well as to strategically position itself for future growth.

We review the case of Paragon as an example of how a specialised lender can proactively manage its capital structure and strategy in downturns to position itself for recovery and growth.

We identify three main reasons that distinguished Paragon from its peers. Paragon moved relatively quickly in changing its capital structure and converting the recourse debt to equity. The group had allowed for a larger cash cushion and when the crisis started, it actively protected its cash by minimising origination. Most importantly, the management team had the valuable experience of the early '90s recession in the UK.

Evolution of Paragon before the 2007 crisis:

The group launched as a mortgage lender in 1985 under the name National Home Loans Holdings PLC ("NHLC") with a GBP 100 million offering. The group focused on mainstream mortgage lending through tied assurance agents.

In 1988, the National Mortgage Bank ("NMB") was established and the group raised an additional GBP 100 million through a preference share issue. Over the next 12 months a restructuring created the NHL group, with NHLC concentrating on mortgages and NMB concentrating on consumer and business finance.

Two years later, in 1991, the UK was hit by recession. The group, which originated aggressively in the '80s bull market and had a mortgage portfolio worth GBP 3.2 billion, nearly went bakrupt. High interest rates and rising unemployment caused default levels to rise and with falling house prices there was little security to compensate.

The group's financiers, mainly banks and local authorities, cancelled their funding arrangements. The Bank of England eventually organised emergency funding for the group's banking operations by ordering a bail out by a syndicate of banks.

In 1992 the management team was replaced and the new team remains intact today. A restructuring followed. NMB was separated and sold and the group concentrated on servicing its existing mortgage portfolio. In March 1995, the group launched a GBP 50 million rights issue, restructured its capital base and refinanced its banking facilities. By 1995, the group recommenced its lending, specialising in the niche market of buy-to-let ("BTL") mortgages for professional landlords that look to expand their portfolios. The management believed, and still does, that this BTL segment has long term growth potential in the UK.

By 1996 the group had achieved a successful turnaround. Mortgage assets exceeded GBP 1.8 billion. In 1997 the NHL group fully rebranded into Paragon.

In the next decade Paragon grew organically and extended its activities by a series of acquisitions. Assets under management grew to GBP 5 bllion at the end of 2003, GBP 6 billion in 2004, GBP 6.5 billion in 2005, GBP 8.4 billion in 2006 and GBP 11 billion in 2007.

Paragon does not obtain any of its funding from deposits and mainly raises capital through public issues. In 1999, the group had already completed its 32nd public issue. The company benefited tremendously from the increasing popularity of securitisation issues in the early 2000s which provided cheap, matched and capital efficient non-recourse funding for its loan assets.

Through a series of issues by Paragon Mortgages PLC, Paragon Auto and Secured Finance PLC, Paragon Personal and Auto Finance PLC, the group frequently tapped the securitisation market placing bonds with international investors in different currencies.

In the first nine months of 2007, the group successfully completed four issues. Paragon Mortgages (No. 15) PLC, a GBP 1 billion transaction backed by BTL loans, was completed in July 2007 just ahead of the current period of turmoil in the banking and capital markets which has affected the normal operations of the securitisation market.

Riding the storm:

In September 2007, when the credit crunch became apparent, Paragon had a loan portfolio of GBP 11 billion. About 90% of its business was financed through long-term mortgage-backed bonds but the remaining 10%, from which the company wrote new business, was funded through short-term borrowings such as warehouse and working capital facilities. The company also had a GBP 120 million corporate facility.

Following the emergency funding of Northern Rock by the Bank of

England in late September 2007, it was apparent that the wholesale capital markets would remain disrupted. Paragon had to refinance short term borrowings of GBP 280 million - that had recourse to the business - by February 2008.

Paragon's shares, priced at GBP 3.5 in early September 2009 (and GBP 6.8 at the beginning of 2007), fell 25% on the day of the Northern Rock emergency funding announcement. With capital markets being shut and banks unwilling to renew the short-term borrowings, Paragon was in a critical position. The share price slided to GBP 1.2 by November 2007 and predictions that the company would go under increased.

In November 2007, Paragon announced that it may have to launch a GBP 287 million rights issue. The group had to offer new shares at a deep discount to entice existing shareholders to commit new capital given the deteriorating market conditions. Analysts at the time presented the rights issue as the worst option. The other alternatives to debt financing were asset sales, winding down the business and running down the portfolios through normal servicing or finding a buyer.

Paragon's management would have preferred to secure debt financing as it would be cheaper capital but, having lived through the 1991 crisis, they proactively moved to obtain a standby underwriting deal by UBS for the rights issue in November 2007 while continuing their efforts to renew the short term credit facilities.

On 11th January 2008, Paragon announced that it would proceed with the rights issue. The issue was pitched 90% below the 10th January 2008 market price of GBP 1.02. At terms of 25 for 1, if the existing shareholders did not exercise their rights they would have a 96% dilution. The issue was fully subscribed.

Paragon raised GBP 287 million of equity. It repaid the maturing facilities and has no corporate debt due until 2017.

Having removed recourse obligations from its balance sheet and having stopped originations, Paragon concentrated on actively servicing its existing loan portfolio to maximise the monthly net interest income and minimise write-offs. Paragon loans' reported arrears and defaults performance is better than the sector's average and has improved in recent months. At the same time, Paragon drastically reduced operating costs by closing down offices and laying off 30% of its personnel.

Shortly after the rights offer closed, Paragon received buyout approaches from private-equity firms, including one concrete offer for GBP 1.25 per share, as buyout houses looked to grab up distressed companies at bargain prices. At the time Paragon's share price was only GBP 0.70 but the management turned down the bid.

The housing market deteriorated in 2008 and Paragon's price plunged to GBP 0.39 in December 2008. But Paragon's proactive measures eventually paid off and the market seems to agree. The stock price has

quadrupled and is now at GBP 1.35, putting its market capitalization at GBP 394 million, up from a low of GBP 93 million

According to the interim financial statements of 31st March 2009, Paragon had cash of GBP 589 million, of which approximately GBP 64 million is free cash and GBP 525 million is securitisation cash. Securitisation cash is trapped in securitisation cash reserve accounts.

The group has initiated a bond repurchase programme to profit from the market situation and is also preparing to resume lending as confidence in the U.K. housing and funding markets is slowly restored. Paragon looks to access the funding market at the earliest opportunity.

Competition in Paragon's niche market has almost disappeared while the factors underpinning the private rented sector in the UK remain strong. Paragon is well positioned to exploit the new opportunities that the current environment is presenting and is considering loan portfolio acquisitions.

Having successfully and proactively ridden the difficult part of the crisis, the management team has streamlined the group for recovery when the business cycle turns. Specialty finance lenders are highly dependent on business cycles but Paragon's case proves that a strong and experienced management team is the most valuable asset of a company and by proactively managing the business and most importantly the cash position and capital structure, it can effectively ride storms.

Note: there is no business relationship between Paragon and Isthmus Partners

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