Credit Risk Programme

Module 11

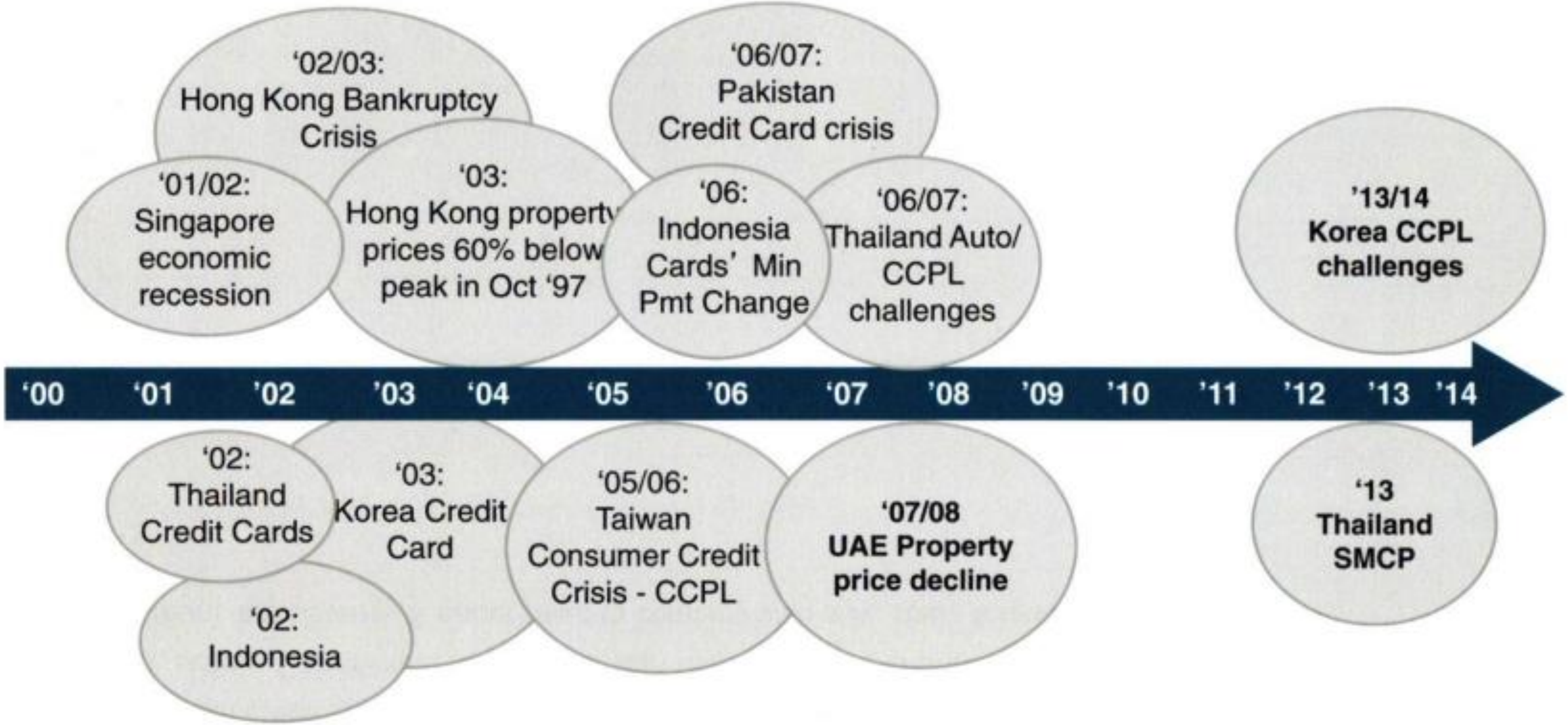
Crisis Management : Lessons Learned

Learning Objectives

At the end of this module, you will be able to understand and demonstrate:

- The typical causes and early warning signs of credit crisis.
- How to monitor and manage to prevent and/or mitigate crisis.

A History Littered With Crises!



- Participation in our markets exposes us to event risk
- Anticipating and effectively mitigating the impact of those 'events' must be a core competence if we are to outperform

Key Messages

- Unsecured lending is material, profitable & potentially volatile
- Industry level credit stress is a risk of participation
- The cost of credit challenges far exceeds credit losses
- Clear, simple & consistent lessons but with unique country characteristics
- Alignment, consistency & rigour need to combine with skill, scale & balance

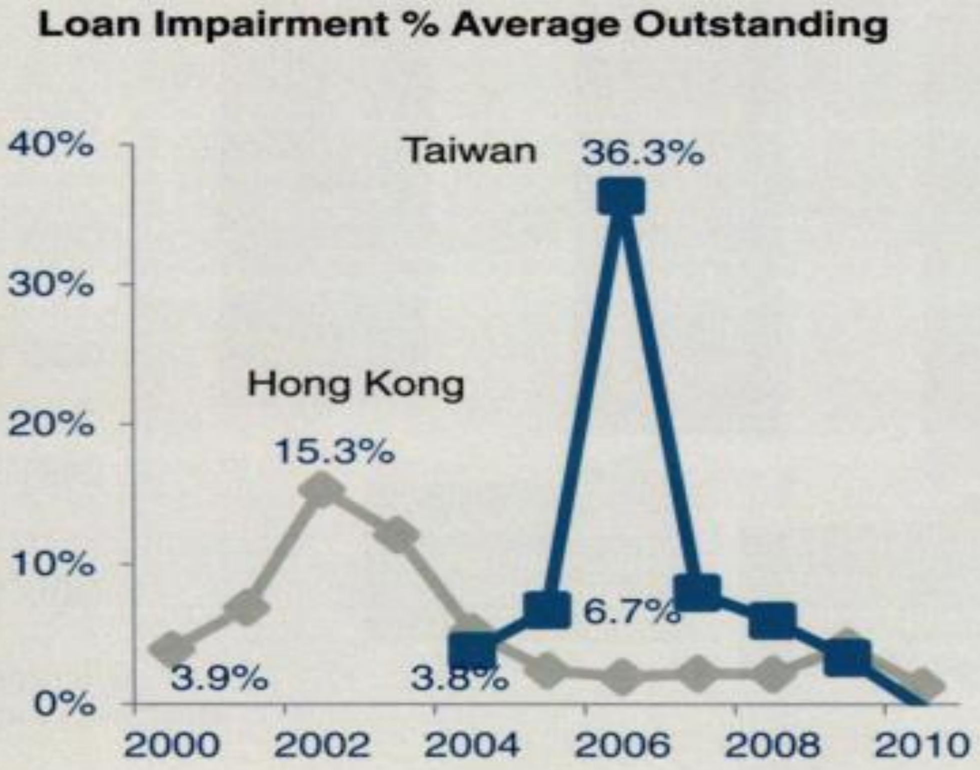
Frequent Pre-crisis Realities

- New Management
- Material reorganization
- Sharp slowdown in income growth
- Strategy re-assessment
- Mixed messages
- 'It will be different this time around'

What Causes a Crisis in Retail Banking ?

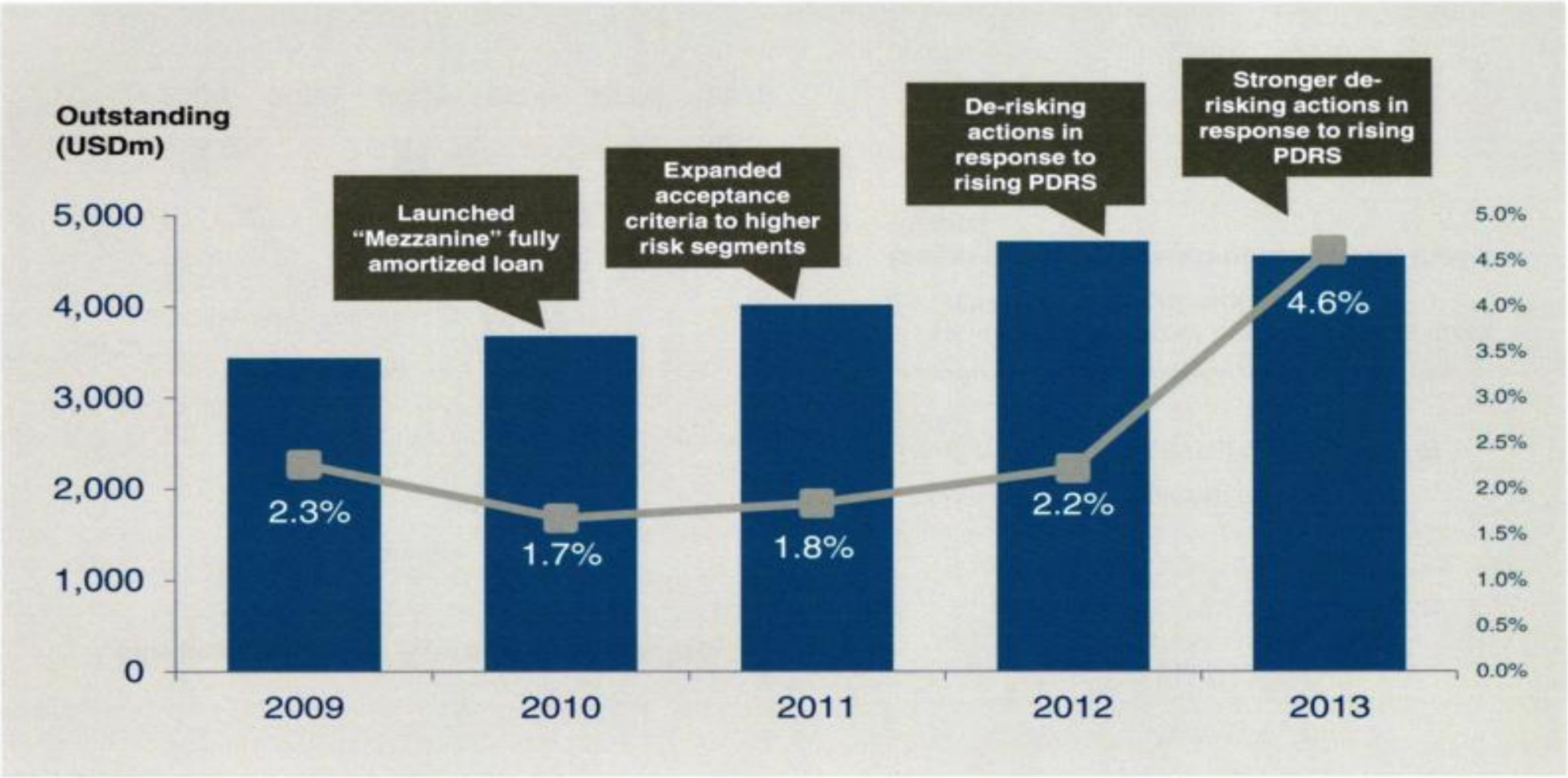
- Typically not one but several events that have a compounding effect over time
- Sometimes but not always associated to economic indicators
- In fact, good economic conditions are sometimes an indicator of poor lending practice
- Regulatory or legal changes can often be a trigger
- Market behavior must be factored in
- No two crisis are the same, some similar characteristics, but no text book exists

Looking Back: Hong Kong (2002) & Taiwan (2006) Experiences

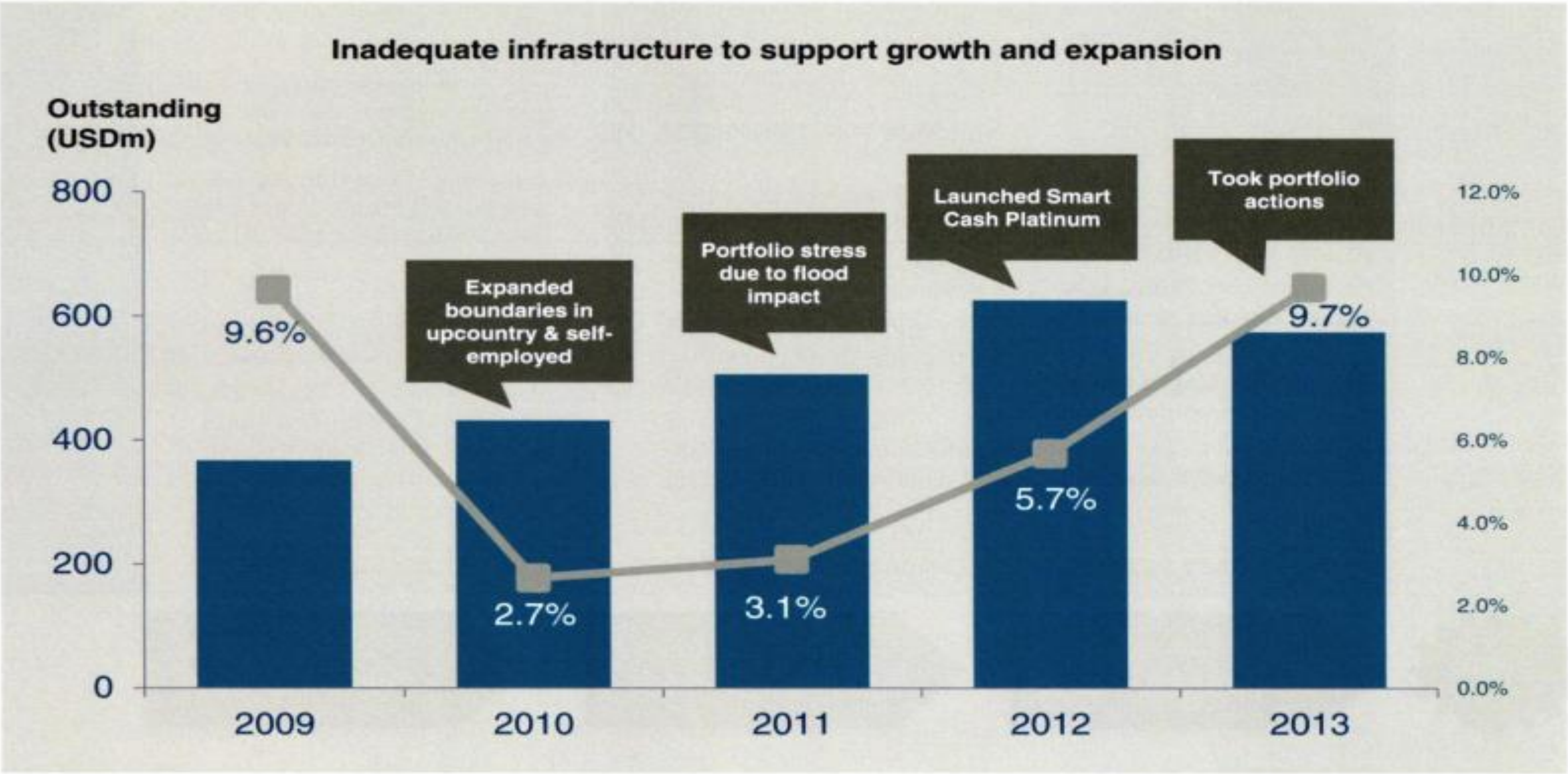


- Convergence of multiple factors
- Small proportion of borrowers at core of crisis
- Losses wipe out several years of profits
- Crisis de-coupled from cyclical factors such as GDP growth & unemployment
- Material socio-political implications & moral hazard

Korea Personal Loans



Thailand Personal Loans



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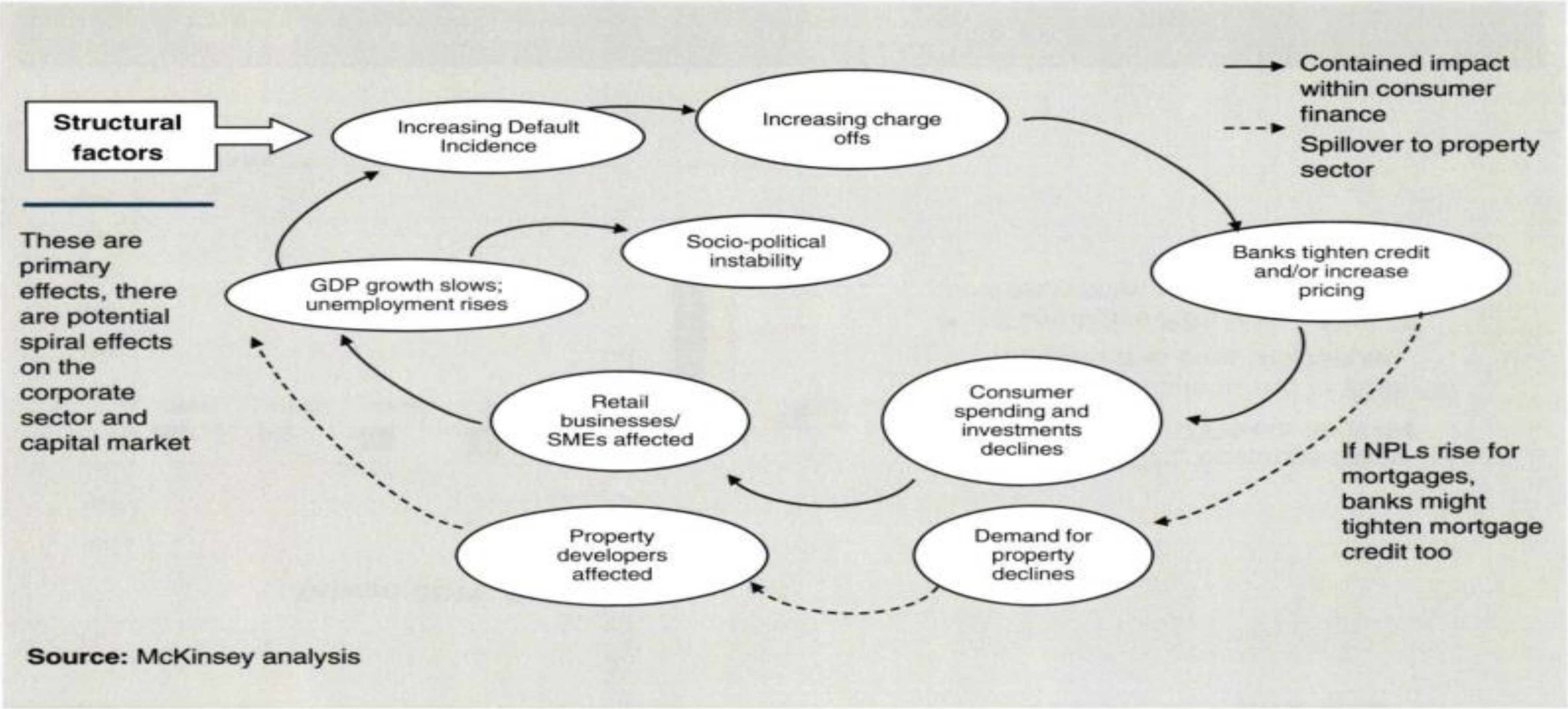
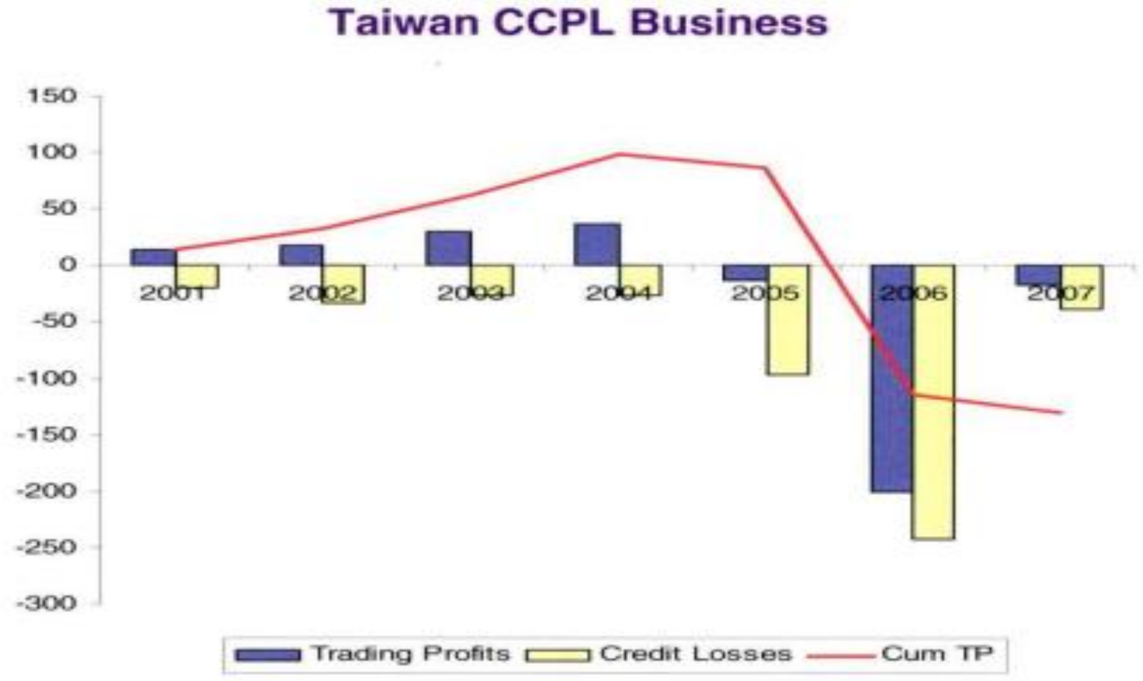
Warning Signs and Causes of a Credit Crisis

	"Early" warning signals	"Mid-term" warning signals	"Late" warning signals
Timing	**-2 years before crisis**	**-1 year before crisis**	**Onset of crisis**
Top Signs	1. Yearly growth rate of new products exceeding 100%, or entire market growing at more than 30%. 2. Unsecured lending strongly driving total profit growth and contributing > 50% to total bank profits. 3. Poor performing banks/ new entrants flooding the market with lower pricing ("Price War). 4. Industry approval rates rise as banks eased credit standards to grab market share.	1. Decreasing quality of applications and loosening of credit standards. 2. Fierce and often "irrational" competition in customer acquisitions. 3. High available credit limits per customer ("Line War"). 4. Non-specific purpose cash portion of all loans goes up. 5. "Collections "problems emerge	1. Customers' flow-through rates rise 2. Delinquencies rise steadily despite possibly low NPL rates 3. Growth of industry credit limit stops 4. High balance utilization of customers

Recent Crises Not Driven by Economic Slowdowns but More Likely to Have Helped Cause Them



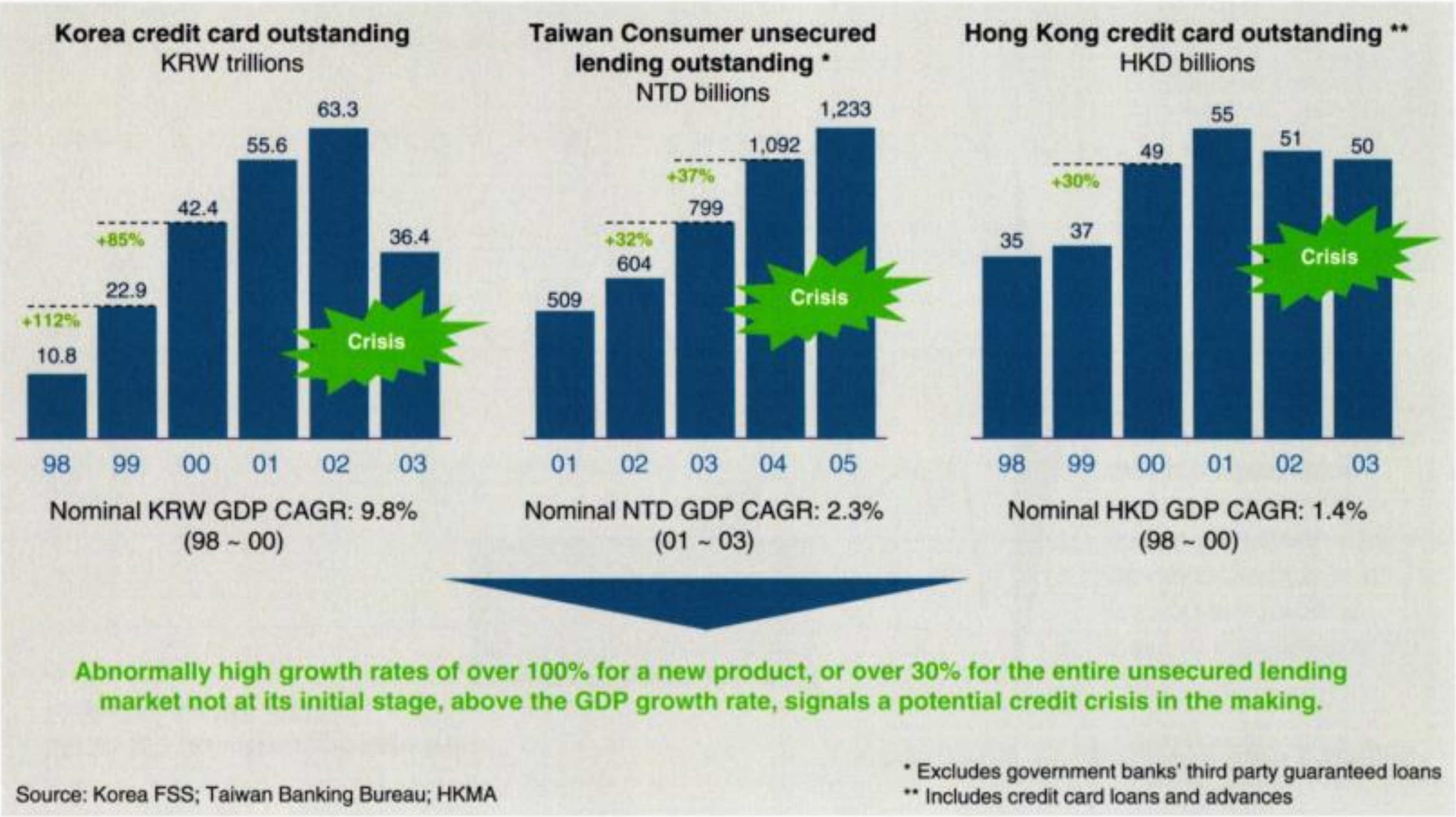
Credit Losses Can Wipe Out Cumulative Profits Over Many Years



- Taiwan CCPL business made USD102m in TP from 2001-04
- Credit losses incurred in 2005-06 amounted to over USD330m
- Cumulative P&L was a loss of USD130m

Highlights importance of controlling risk profile within Risk Appetite

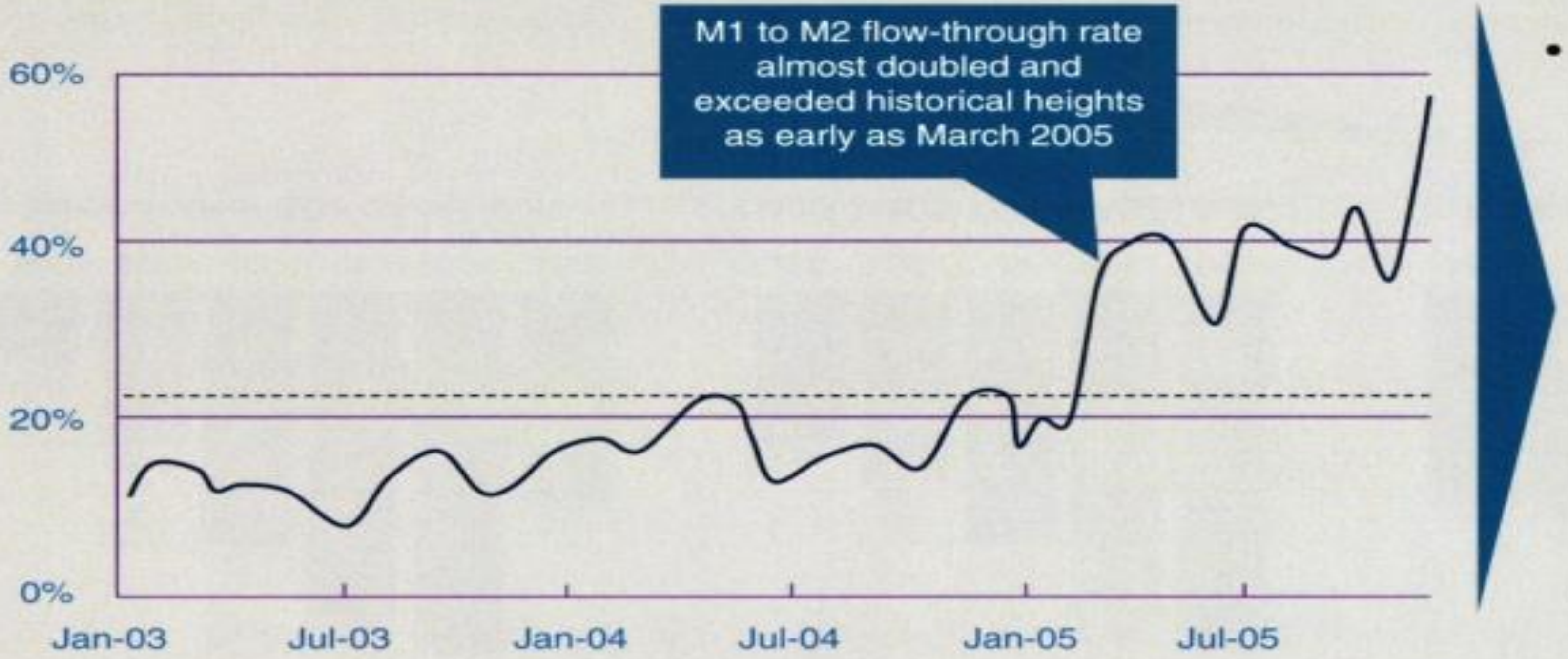
One Culprit: Rapid Outstanding Growth



Late Stage Indicators : X-3ODPD Flow Rates Rising Rapidly Signals Onset of Crisis - Mitigate!

Disguised Taiwan Credit Card Example

M1 to M2 flow-through rate trend*
Indexed, Jan-03 = 15%

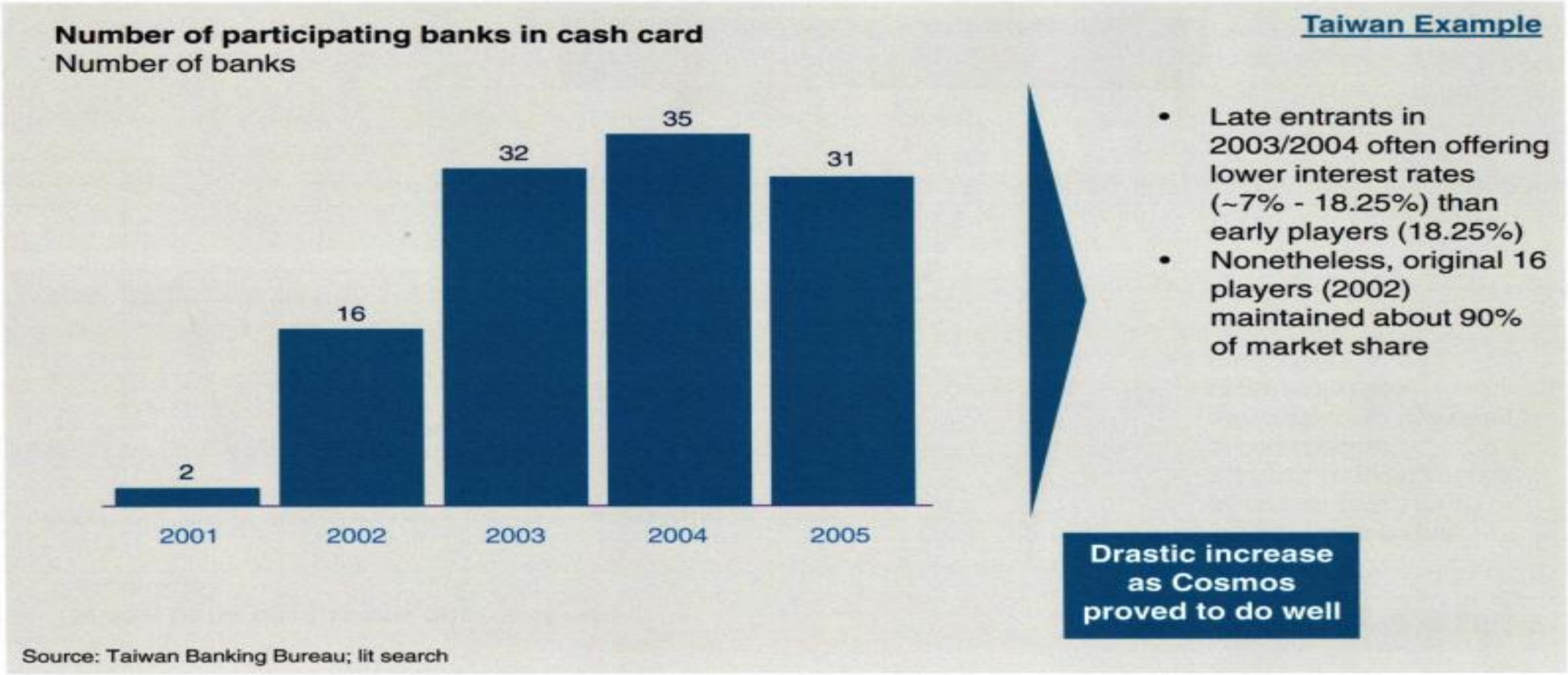


- If M1 to M2 flow-through rate breaks through historical heights and still keeps increase for a few months without dropping back, near-term trouble is imminent

* M1 = 1 to 29 days past due, M2 = 30 to 59 days past due

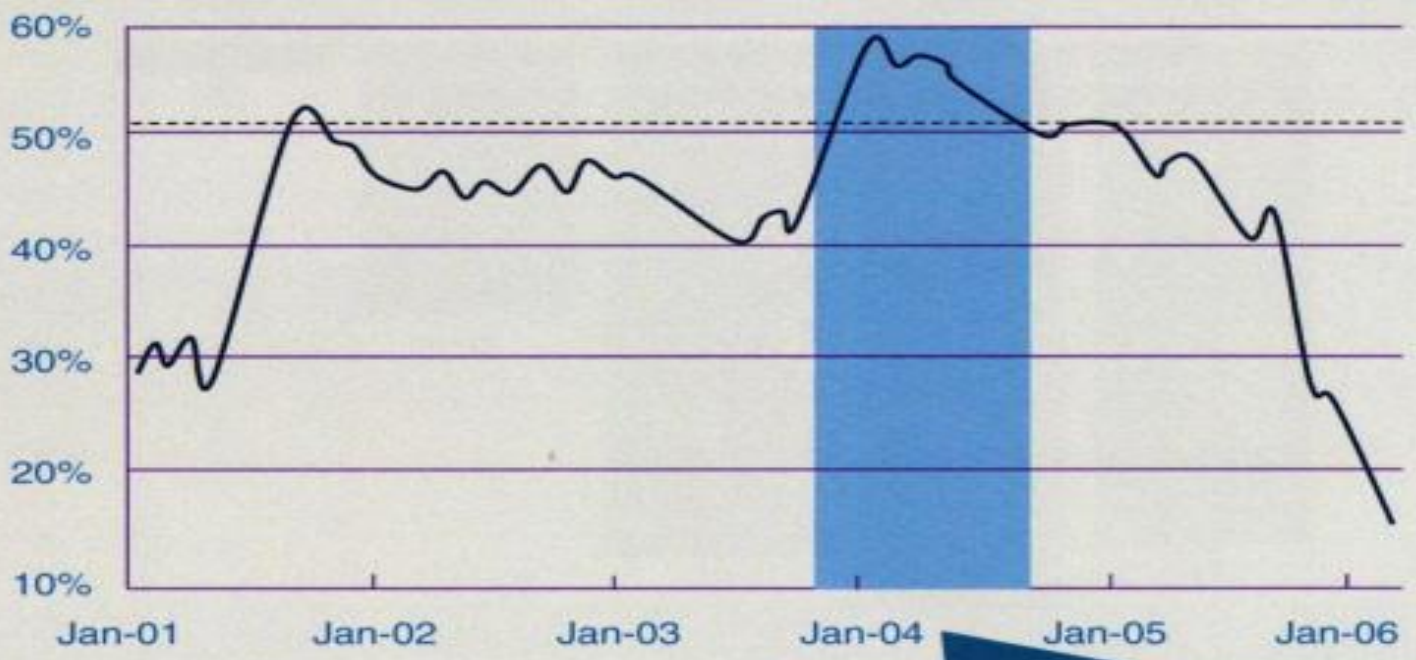
Source: Review of several banks' data supplemented with industry information

Growth Fuelled by Influx of New Entrants Competing on Lower Price & Looser Credit Standards



Relaxed Underwriting Standards are Frequently an “enabler’ of Growth in Credit Bubble

Taiwan bank credit card approval rate
Percentage



The industry saw abnormally high approval rates at the end of 2003 and beginning of 2004

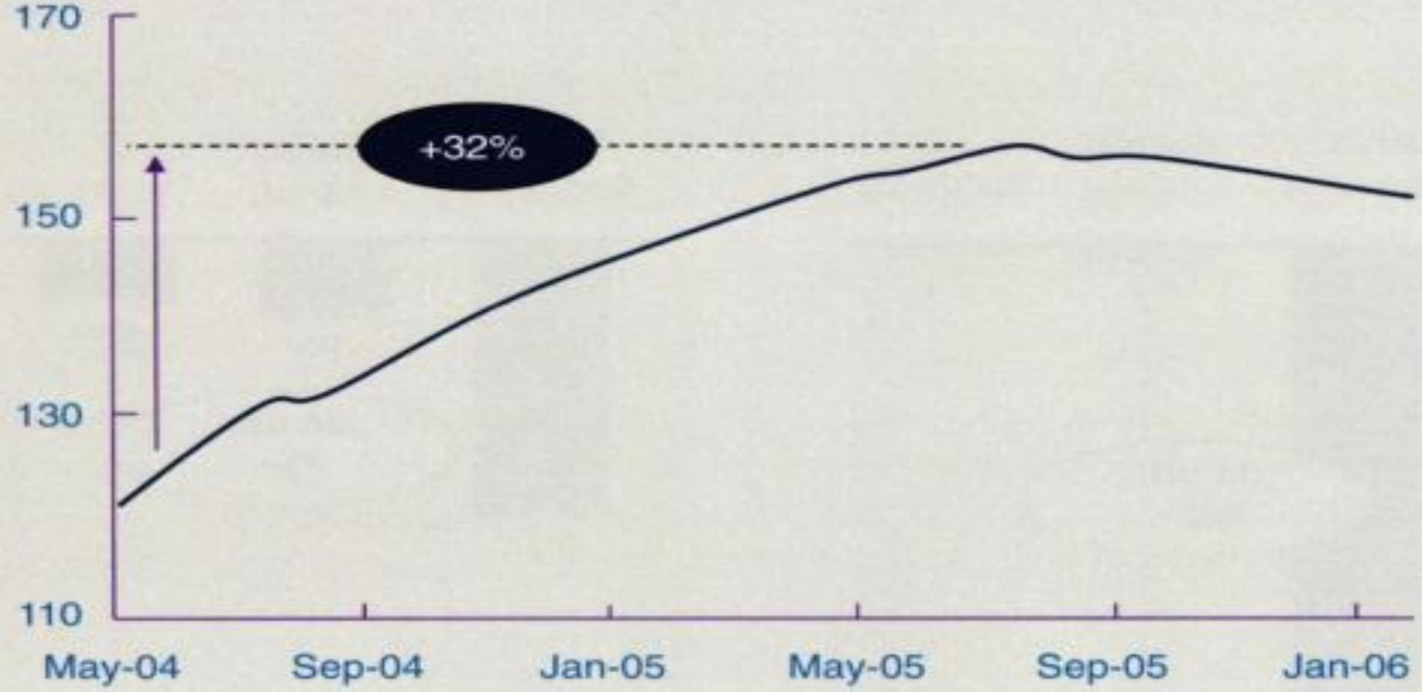
Taiwan Credit Card Example

- Banks used higher approval rates in an attempt to grab market share, further exacerbating the quality problem of the customers

Source: Review of several banks' data supplemented with industry information

Rapid Increases in Credit Lines Per Account

Industry average line per cash card*
NTD Thousands



Taiwan Cash Card Example

Vicious cycle fuelling growth

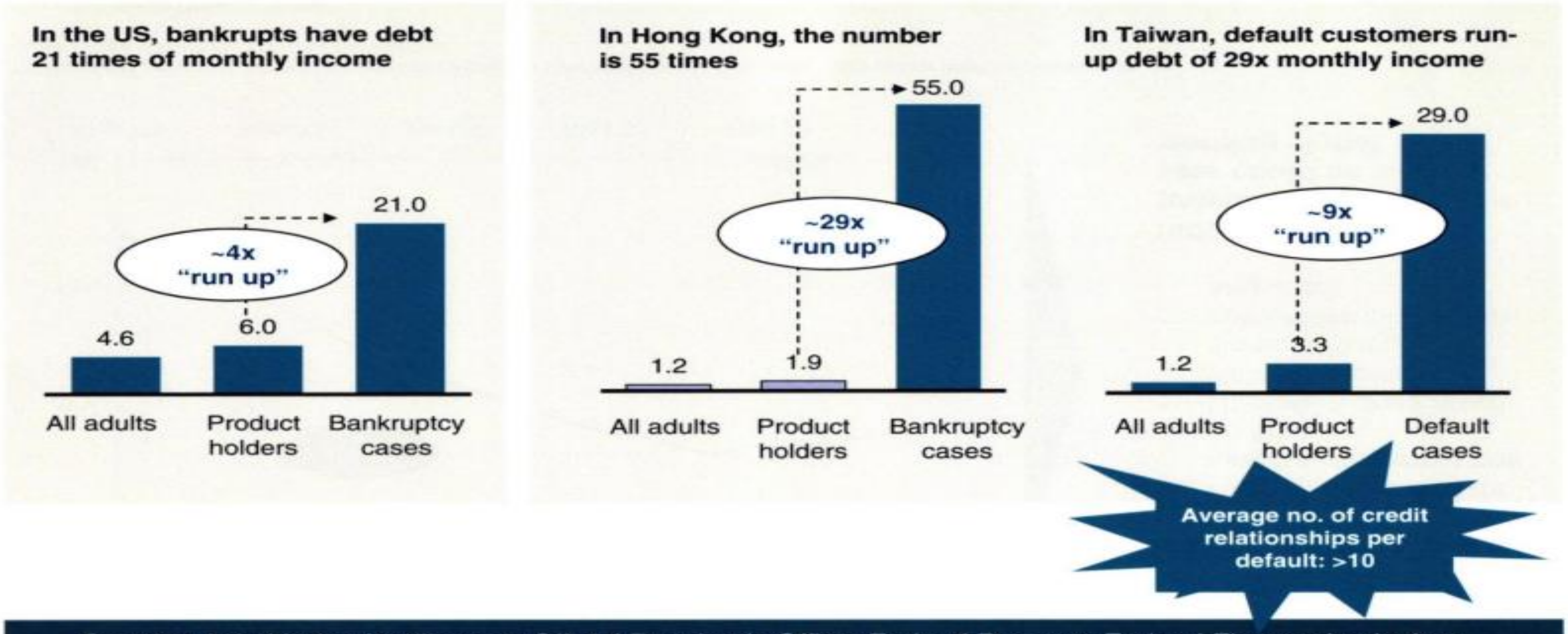
- High lines granted as long as customers pay on time
- Utilisation goes down with the increase in limits, making these customers look better and letter

Industry average line growth of over 30% in a year could be a crisis warning signal

* Calculated using total active line amount divided by total number of used cards. Two outlier months due to data quality, Nov 04 and Dec 05, are normalized.

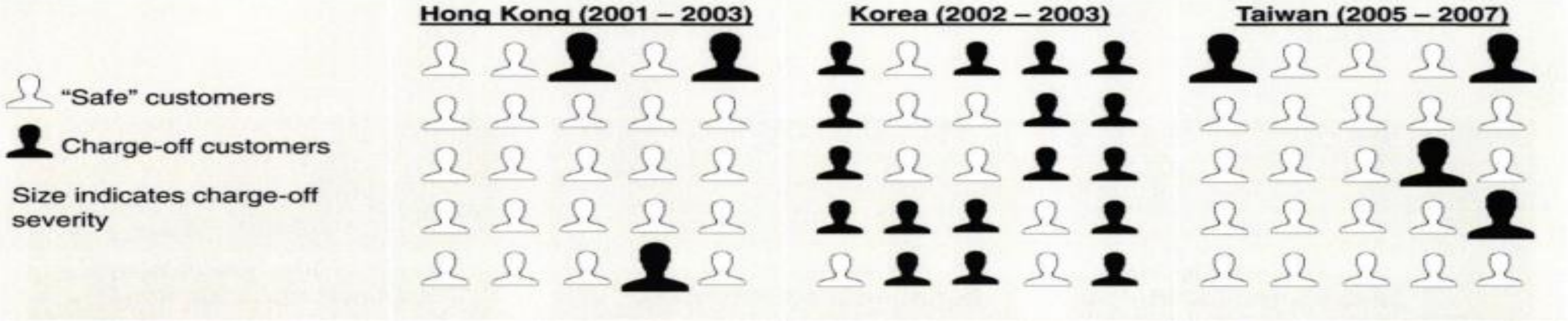
Source: Taiwan Banking Bureau

A Highly Indebted Minority with Disproportionate Amount of Debts



Source: Asia Market Intelligence; Official Receiver's Office; Federal Reserve; Federal Finance Institutions Examination Council; SCB Taiwan JCIC Data Analysis; McKinsey analysis

A Small Population of Defaulters & Bankrupts Can Cause a Significant Economic Impact



	Hong Kong (2001 – 2003)	Korea (2002 – 2003)	Taiwan (2005 – 2007)
Incidence per thousand	11	70	16 - 21
Total charge-off USD billion	2.5	47	12 - 15
Charge-off / GDP percent	1.2	7.5	3.5 - 4.7
Unemployment Thousand persons	80	66	60 - 85

Source: Mckinsey analysis; Company IR reports; Korea National Statistical Office; Hong Kong Official Receiver's Office; government statistics

Lessons: Managing Risk

Strategy & Approach

- Scale & Balance
- Product suitability
- Risk appetite, volatility, loss absorption
- Portfolio shape

Operational

- Policy caps
- Infrastructure
- Performance monitoring

Sense & Response

- Market growth & realities
- Customer mix
- Appropriateness of response

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Dashboard of Indicators & Related Actions

	Early (c.2 yrs before crisis)	Medium Term (c.1 yr before crisis)	Late Term (onset of crisis)
Top Warning Signs	• Strong Growth: portfolio growth rate >75% or market growth of >30% • Unsecured Lending increase proportion of TP (>50%) • New entrants into market • Price war • Rise in industry approval rates • Total debt to income velocity • Rate of utilization • Average TTD score distribution	• Decreasing quality of applicants • Demand to loosen credit standards • 'Irrational' competition in customer acquisitions • High available credit (Line wars) • Non-specific purpose cash increases • 'Collection problems' emerge • Skips • Cash usage • 30+ @ 6MOB	• Flow rates increase • Growth in industry stops • Steadily rising delinquencies despite low NBD • High balance utilisation
Economic Warning Signs	• Unsecured consumer debt >7% of GDP • Unsecured consumer debt is >20% of Mortgage debt • Year on Year growth of consumer debt >20% • Average Unsecured debt > GDP per capita	• Unsecured consumer debt >10% of GDP • Unsecured consumer debt is >30% of Mortgage debt • Year on Year growth of consumer debt >30% (peak time) • Reduction in Stock Market >30%	• Unsecured consumer debt >15% of GDP • Unsecured consumer debt is >35% of Mortgage debt • Year on Year growth of consumer debt down from peak but remains high 20%
Required Approach	• Monitor • Scrub the bureau • Track high risk channels • Refine risk models • Track approval rates by segment • Watch Market (Economic / regulatory environment)	• Proactively Manage • Re-examine business strategy • Freeze lines (high risk) • Build up collections infrastructure • Align Channels / Sales to better segments • Authorization based strategies • Block high risk segments	• First Mover Advantage • Rapid collections deployment • Rehabilitation programmes (iDRP) • Short Settlements • Accelerate legal actions • Industry centric actions • Curtail Exposure

Four Key Elements in Credit Crisis Management

I Recognition

- How does a credit crisis look like?
- What are the warning signs of a credit crisis?
- How long do we take to recognize a credit crisis?

II Resourcing

- How do we resource against a credit crisis?
- Where do we resource?
- How do we manage these resources?

III Remedies

- How can we minimize impact of a crisis?
- What are the tools we can deploy to manage a credit crisis?
- How do we optimize?

II Re - entrance

- Do we re-enter? When do we re-enter?
- How does credit crisis change the way we operate?

Remedial Actions Once a Crisis Has Hit

- Form Crisis Management Task Force
- Identify problem segments & dimension impact
- Acquisition / Underwriting
- Portfolio management
- Collections & recoveries
- Communication

Crisis Management Task Force: Area of Focus

Good Growth

- To improve sales targeting
- To exit bad segments & to ensure continued growth in the "Good" segments of the market

Policy/Portfolio Management

- To conduct segmentation to identify 'bad' segments for containment
- To ascertain the extent of the issue and forecast likely scenarios through stress testing
- To recommend appropriate credit policy actions
- To develop containment actions on bad segments and credit intervention strategy to manage good segment
- To develop segment monitoring MIS and improve loss forecasting

Collections

- To ensure maximum operational efficiency and effectiveness
- To develop appropriate collections/ DRP strategies to minimize flow rates
- To improve recoveries, explore debt sale

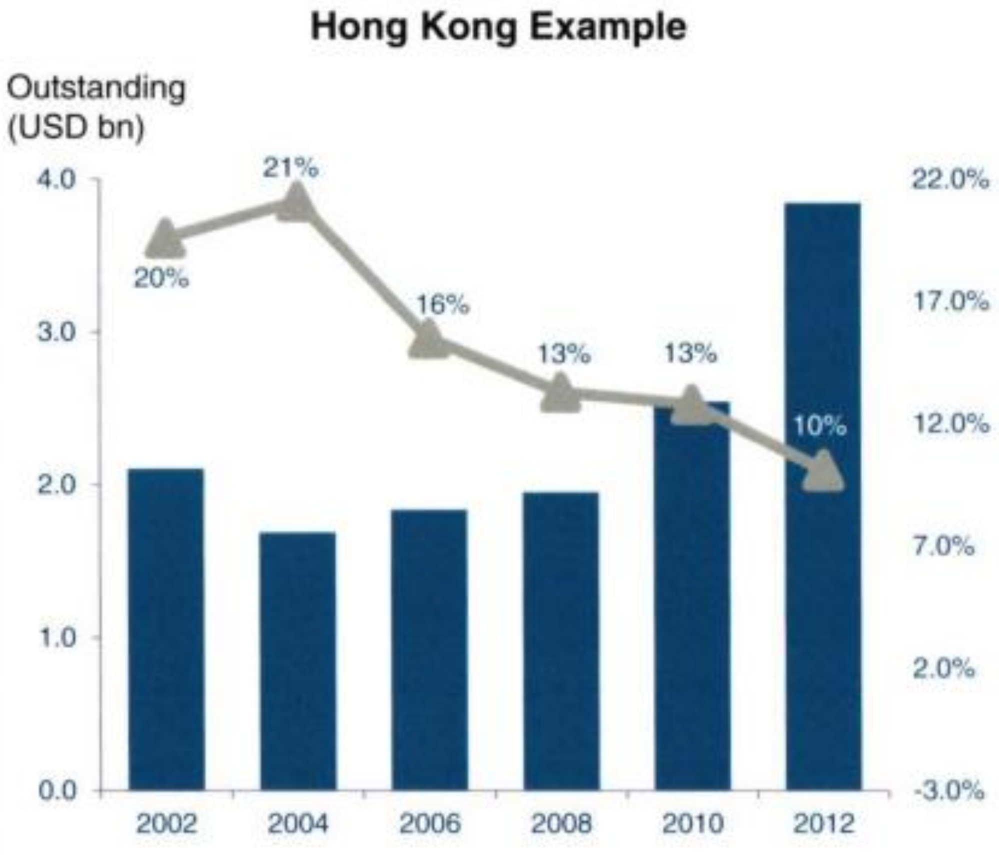
Research

- To research and quantify causes of the credit deterioration
- To gather market / competitive data for benchmarking purpose
- To conduct bureau / profile analysis for "market bad" segment analysis

External

- To establish and lead industry forum to address issues, including interbank debt relief and debt counseling efforts
- To keep track of media and regulatory responses

Lessons: Post Crisis Revival



- Resume good growth as soon as possible
- Avoid “boom & bust” re-enter strategies
- Isolate “bad bank”
- Consider relationship value of customers, not just product value
- Monitor market development

Lessons from 2010-13 CCPL Growth Initiative

In early 2010 two realities faced Consumer Banking ("C8"). First, CB's strategy that was refreshed in 2008 envisaged a customer-centric business pivoted toward high-value segments ("HVS") and secured products. This meant a reduced focus on direct sales driven product selling, which had underpinned CCPL in the past. Second, income momentum had slowed considerably since 2007 as a consequence of the effects of the global financial crisis and the decision to deemphasize CCPL for both strategic and risk containment reasons (post credit crises in Taiwan, India, Pakistan, and UAE between 2007 and 2009).

Table 1 below provides a snapshot of CB's income and assets momentum between 2007 and 2009. Consumer credit crises have frequently occurred independently of economic downturns – or even linked with rapid growth.

Table 1: CB Income and Assets - (2007 - 2009)

Usd bn	2007	2008	2009
Period End Assets	82.26	85.94	97.55
Of which CCPL Assets	13.18	13.27	13.24
Income	5.81	5.50	5.59
Assets growth		4.5%	13.5%
Income Growth		-5.3%	1.7%

The CCPL growth initiative of 2010 was. justified on the grounds that the economic environment in many markets was improving, CCPL was a material and profitable business that fulfilled legitimate product needs of target customers and, a strong medium-term push would provide CB a source of income growth while the core HVS focussed strategy took root. This view was further strengthened by the fact that CB's principal competitors continued to grow while CB was losing market share in most key countries.

The initiative had two distinguishing features. It was centrally driven by the Risk and Product teams working with prioritized countries and it adopted, for the first time, the risk-appetite framework with its emphasis on portfolio performance under conditions of stress and on return risk-weighted assets ('RORWA') to determine the optimum risk-return profile for a business.

The initiative launched in 2010 was underpinned by rigorous analysis, characterized by strong collaboration between business and risk, monitored closely during the initial period and governed adequately al various levels.

Lessons from Korea and Thailand

However, the initiative also led, or contributed, to undesirable outcomes, the most striking of which were the credit challenges subsequently experienced in Korea and Thailand. It is worth noting that Korea and Thailand were not the only countries that needed course correction. There were other markets that experienced pockets of stress (Malaysia, Hong Kong, Taiwan) or found their growth strategies untenable in the face of emerging regulation (Singapore and Malaysia).

An attempt has been made to capture the key lessons from this period by isolating the key issues that were at the root of some of the subsequent challenges. As the intent is to isolate the key issues not all changes to policy or underwriting standards that yielded adverse results have been catalogued.

Lessons under the following headings - as explained in section 5 - have been learned and these lessons have shaped changes to business and risk policies and processes.

- Approach biased toward higher risk and without hard limits
- Accounting measures not aligned with economic measures
- Predicting effects of massive simultaneous change is difficult
- Customer Indebtedness and debt servicing ability matter
- Reacting appropriately and in time to changed circumstances
- Rigorous monitoring is critical
- Product suitability, participation strategy, and infrastructure readiness shape outcomes

CEOs BE AWARE!

- Product and product structures matter
- Products, channels, target segments and strategy need to be aligned
- Decision tools employed for underwriting must be appropriate
- Changes in 'through the door' profile of new business must be understood
- Early performance indicators need to be monitored with rigour
- Performance that is 'too good to be true' may well be just that!
- Portfolios, especially high risk-high return ones, must be stressed for sustainability
- Intervention must be early and decisive
- Market context is critical

Module Summary

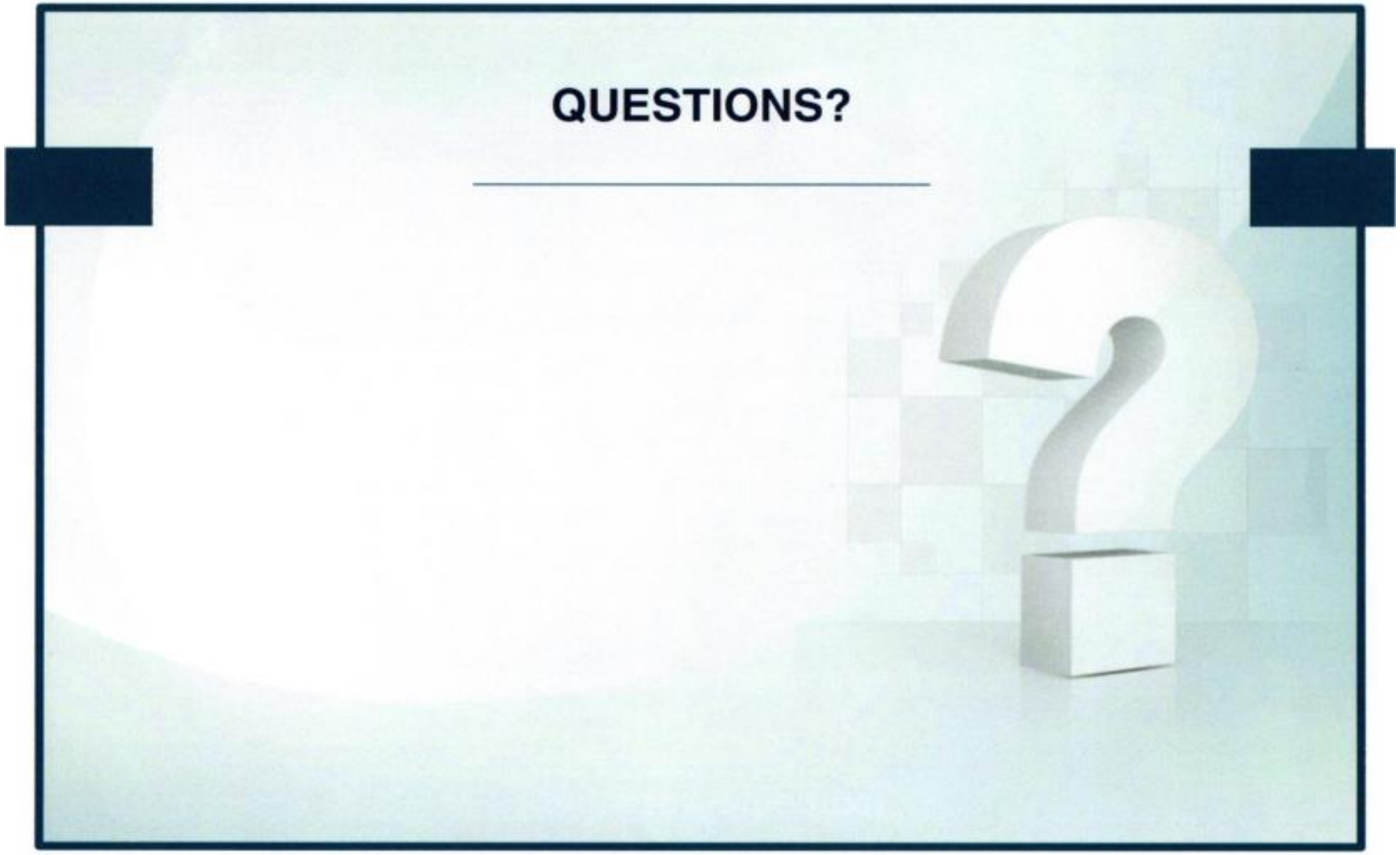
Let’s revisit some of the most important points in this sections

- Consumer credit crises have frequently occurred independently of economic downturns – or even linked with rapid growth.
- Single dynamic change in a market may not cause a problem.
- Multiple dynamics changing and converging at the same time.
- Customers are often shared and not mutually exclusive.
- Rapid growth may be linked with poor lending practices.
- Legal & regulatory action can often trigger or exacerbate crises.
- Collections actions including restructuring should be used for mitigation.

The lessons learned are simple, clear &consistent.

Applying the lessons with intensity is the best defense against volatility

Questions



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