

ROTTERDAM SCHOOL OF MANAGEMENT, ERASMUS UNIVERSITY

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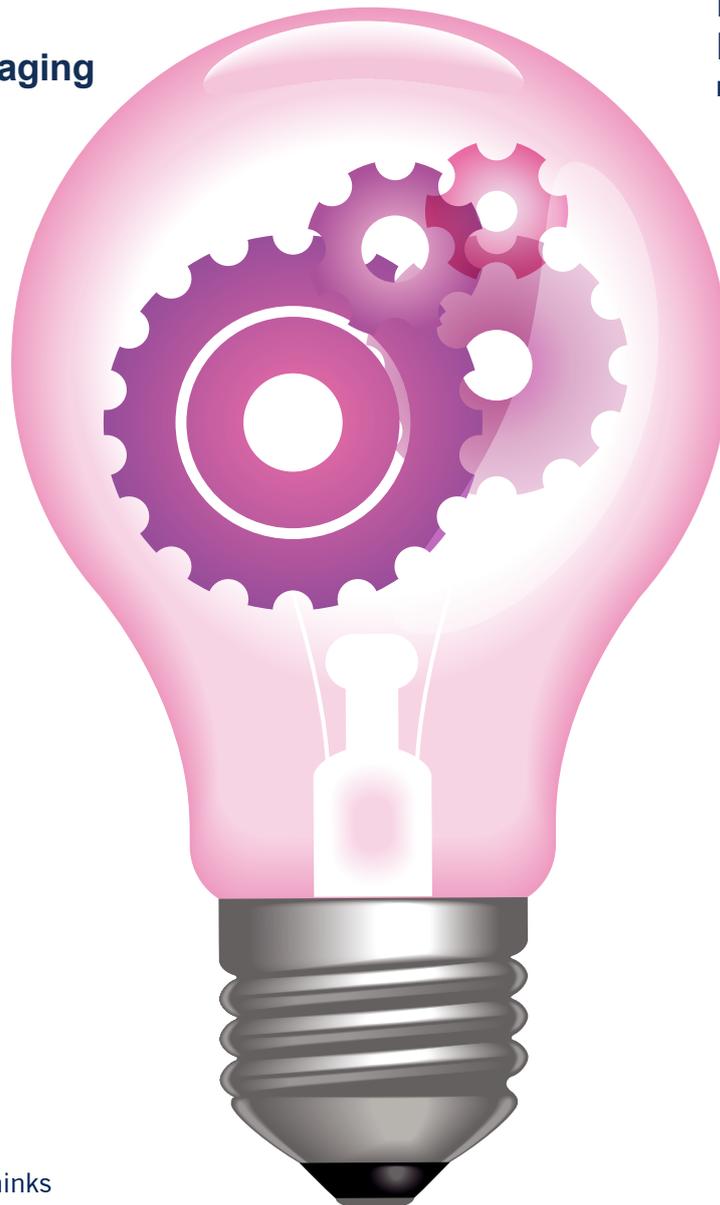
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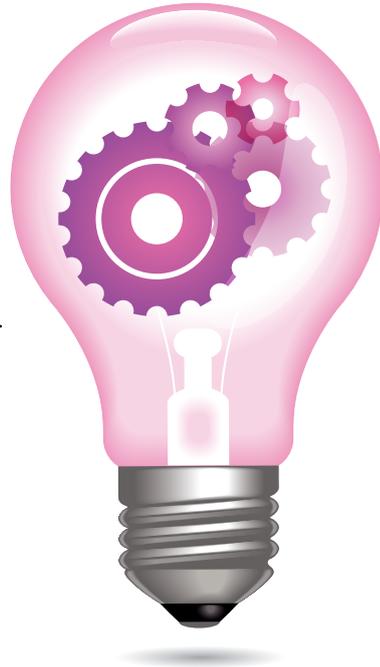
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by René de Koster

Self-storage is a booming industry, one that has seen remarkable growth in the United States and Europe, and across the rest of the world. While an obvious success story, new research shows that by taking a unique facility design approach, warehouse operators can do much to maximise their revenue potential.

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by Lars Norden, Peter Roosenboom and Teng Wang

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How performance appraisals can encourage ethical behaviour

by Gabriele Jacobs

All kinds of remedies have been suggested to minimise ethical problems in organisations, but recent research suggests that managers can significantly improve their employees' ethics simply by being fair and respectful for 30 minutes a year – provided they choose the right 30 minutes.

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Change for change's sake? Internal responses to external challenges

by Henk W. Volberda

In today's increasingly volatile business environment, senior managers have to stay one step ahead by making the necessary internal organisational and strategic decisions, before it is too late to react to external changes.

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Why mortgage lenders need better-educated borrowers

by Ruben Cox

Might the time be right to introduce the financial equivalent of a driving licence? I think the answer could well be a resounding yes. A study of events in housing markets across the developed world over the past years has pushed me towards this view.

Introduction



The renewal of the fittest

Given the uncertain and in many respects uncharted nature of business today, firms must do more than just survive if they want to assure themselves of a future worth having. As we march through the first decades of the 21st century, success is less about the survival of the fittest and more about the renewal of the fittest. Businesses need to adapt to change and evolve so that they can benefit from it if they want to not only stay ahead of competitors, but also remain sure-footed as they blaze new trails.

By developing unique insights into the drivers and consequences of change, and by providing leaders with the expert guidance they need to make sense of the issues and challenges that they face, the world-class faculty members at RSM play a critical role in helping businesses to succeed. *RSM Insight* is published with exactly this in mind. In each edition we present a number of primarily research-based articles that explore new ground and allow us to showcase the expertise offered by the school.

To exemplify that point, the articles in this edition explore: how the Centre for Eco-transformation is helping scientists and business leaders make sense of the effects of climate change; how operators in the already booming self-storage warehousing sector can further maximise revenues; why understanding consumers' perceptions of packaging is of critical importance to marketers; the positive effects of government intervention during the banking crisis; how ethical behaviour can be encouraged through performance appraisals; the essential need for businesses to be responsive to external change, and how housing markets would benefit from having better educated borrowers.

I am sure you will find these articles both stimulating and insightful, and I welcome any feedback that you might wish to give.

Henk W. Volberda

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Sustainability as a team sport

Lesah Sawahata interviews Gail Whiteman

Making sense of climate change and understanding the impact that changing earth systems will have on business globally is one of the aims of the Centre for Eco-Transformation. Finding credible management solutions to these immense challenges is another.



The ERIM Centre for Eco-Transformation is a dynamic web of sustainability-focused research, teaching and initiatives with a particular focus on impacting business. From the centre's website: 'Specifically, we aim to connect scientists, students and business practitioners worldwide in an effort to further our understanding of planetary limits and the implications for organisations and society.'

How is the Centre for Eco-Transformation fulfilling its purpose? 'This centre is unique,' says its Founder and Scientific Director, Professor Gail Whiteman. Unlike other sustainability research centres that focus on ecological issues as distinct from management, 'we are very much taking a multidisciplinary approach to transforming the role of business and its leaders in mitigating issues such as climate change,' she says. 'For that we need multiple perspectives and expertise,' she continues. 'Lots of strong research is needed, but also deep engagement with companies and with NGOs. Sustainability is a team sport.'

Broader perspectives for business

Professor Whiteman's own specific area of research expertise – climate change and its effects upon the earth and business – was the initial trigger for the centre's launch in 2010, under the name the Sustainability and

Climate Research Centre. But with the ecological cost and economical scale of climate change gaining momentum daily, the centre's scope has grown.

'We want to have a diverse collection of top researchers or connectors who can help trigger change, or report on transformation happening in a number of key areas,' says Whiteman. The centre has grown to encompass a large team working across seven research themes:

Theme A: Systems Thinking and Corporate Sustainability

Theme B: Sustainable Innovation

Theme C: Ecosystems & Biodiversity

Theme D: Urbanisation

Theme E: Social Movements and Climate/Sustainability

Theme F: Chinese MNEs and Corporate Social Performance in the Telecoms Industry in Africa

Theme G: Ecological Sensemaking and Organisational Vulnerability

Significant research themes for business

Prof. Whiteman is particularly active in the areas of systems thinking, sustainable innovation, and ecological 'sensemaking' within organisations. 'At the broader systems level, I connect earth systems science such as the nine Planetary Boundaries, proposed by Johan Rockström ▶

Sustainability as a team sport (continued)

Lesa Sawahata interviews Gail Whiteman

and international colleagues, into management,' she says.

On the theme of Innovation, the centre is carrying out a large research project on sustainable innovation, examining "front running firms" such as DSM, InterfaceFLOR, Eastman Chemicals and others, and just how they became – and remain – front runners. 'I have a research team in conjunction with RSM's Professor Jan van den Ende,' she explains, 'and we're looking at how to enable and trigger the change to sustainable innovation – what is the "wake up call" that puts this in motion, and what do we understand about really breakthrough sustainable solutions and innovations in business?'

A study on the theme of Urbanisation is in the launch phase with the new coalition of Leiden University, Delft University of Technology and Erasmus University Rotterdam; and PhD researchers Romy Kraemer and Ona Akemu are working on, respectively, the themes of Social Movements and Sustainability and Chinese MNEs and Corporate Social Performance in the Telecoms Industry in Africa.

Ecology meets economy

For the question of biodiversity loss and its enormous implications for people and business, the centre has appointed Willem Ferwerda as Executive Fellow Business and

Ecosystems. 'Eva Rood, Co-Director of our centre, was instrumental in getting Willem on board to work on the business role in land restoration and the biodiversity problem,' she says. Ferwerda, the former Director of the Dutch branch of the International Union for the Conservation of Nature (IUCN), brings deep knowledge of ecology and land restoration to the centre.

'Willem's dream is to ensure that the two billion hectares of degraded land in the world will be restored by a consortium of local farmers, NGO's and governmental organisations,' says Rood. 'What he wants to do is bridge ecological and economic knowledge, and is using the centre's research to make the business case for land restoration. In return, we get his network and knowledge from the world of nature organisations,' she says. Ferwerda will publish a book of land restoration case studies for business in 2015.

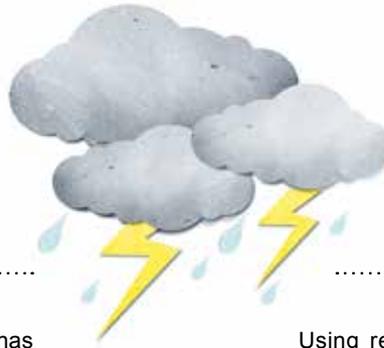
Going viral with the Arctic

Professor Whiteman is an atypical academic. Her background includes several years spent in the private sector as a marketer. Perhaps this is what makes her a scientist who can speak directly to the human heart of business management – a voice a broader audience can hear. This accessibility is a quality that complements her

academic rigour; while Whiteman's relentless schedule of publications includes scholarly articles in peer review journals such as the *Journal of Management Studies* and *The Academy of Management Journal*, she seems to effortlessly bridge science and business.

Notably, the article *Climate Science: vast costs of arctic change*, co-written with Chris Hope of Judge Business School and Peter Wadhams, a professor of ocean physics at Cambridge, and published in the scientific weekly *Nature* in July 2013, resulted in a tsunami of high-profile media coverage including CNN, BBC, CNBC, Bloomberg, FT.com, *The Guardian* and *The Huffington Post*. The message, that the rapidly melting Arctic ice cap is an 'economic time bomb' likely to cost the world at least US\$60trillion, has clear implications for business and specific industry sectors like agriculture and insurance.

'This ties into the centre's research theme: how do we make sense of ecological change, and learn from nature? The science is there, but how do you get the Arctic into the boardroom and onto the radar of world leaders?' she says. 'With that piece in *Nature*, we went absolutely viral. Now, all eyes are on the Arctic, and from the economic perspective, not just the perspective of the polar bear, and that is exciting.'



Accelerating change

This is, however, no time to rest on the laurels of media virality. Momentum and acceleration are the order of the day and is one reason the centre recently appointed Marcello Palazzi, another impressive frontrunner in the fields of entrepreneurship, innovation and CSR, as executive fellow Enterprise Acceleration.

Whiteman has in academia: he has held top positions in the UN's World Food Programme and War Child, and in the International Integrated Reporting Council.

Upon Professor Whiteman's appointment, Bakker said: 'We need to accelerate the pace of change toward sustainability... Gail will bring access to a wide ranging network of

Using research from the Centre for Eco-Transformation to contribute to the WBCSD Action 2020 Plan is that concrete use of science to reinvent business. 'The action plan will clearly outline the responsibility of business; the CEOs in attendance will consider how they can be part of the social movement that is a new paradigm of business, and how to join with some of the best business leaders,' says Whiteman.

She mentions DSM and AkzoNobel, and leaders like Unilever CEO Paul Polman and Bakker, lauding them for being part of a 'coalition of the willing' in driving the case for sustainable business development from the leadership level. In business and in business schools such as RSM leaders 'aren't pushing the sustainability agenda sufficiently – we've got to scale up,' she says, adding that 'we can't keep waiting for our customers to demand it.'

And that is the key purpose of the Centre for Eco-Transformation, she says – to present the proof and make the connections for leaders in every part of business and society. 'Look at the science and the need for sustainability becomes very clear.' ■

More information about the centre, it's goals and research themes can be found at [WEB www.irim.eur.nl/ecotrans](http://www.irim.eur.nl/ecotrans)

“...we are very much taking a multidisciplinary approach to transforming the role of business and its leaders in mitigating issues such as climate change.”

Prof. Gail Whiteman, Scientific Director, Centre for Eco-Transformation.

At time of writing, Professor Whiteman is on her way to Istanbul to take part in a meeting of the World Business Council for Sustainable Development (WBCSD), for which she is the first Professor-in-Residence; an honour conferred upon Professor Whiteman by WBCSD President Peter Bakker in April 2012. An alumnus of Erasmus University Rotterdam and the former CEO of TNT, Bakker has the same “networkability”, boldness and broad reach in the world of business and corporate governance as Gail

academic perspectives and will play a key role in bringing about this change.' In response, Professor Whiteman said: 'Corporate sustainability faces a paradox: on the one hand companies have begun to integrate sustainability in all decision making. On the other, data indicates a worsening, and in some cases, alarming state of affairs for our planet. Why this disconnect? Part of the problem may be that we are not harnessing the power of science to help us reinvent the system.'

Boosting revenues in the self-storage warehouse industry

by René de Koster

Self-storage is a booming industry, one that has seen remarkable growth in the United States and Europe, and across the rest of the world. While an obvious success story, new research shows that by taking a unique facility design approach, warehouse operators can do much to maximise their revenue potential.

There is good reason to be optimistic about the global self-storage warehouse business. In the United States, this type of warehousing generates some US\$22 billion annually, with one in ten households renting self-storage space. Between 2007 and 2008, European countries reported an increase of between 19 and 117 per cent in self-storage warehouses. And in the rest of the world, this business is also growing rapidly.

A typical self-storage warehouse contains storage spaces of varying sizes and qualities. A customer rents a storage unit of an appropriate size for one or more months. Such a facility is of course ideal for university students, for instance, who need a temporary place to store their belongings during their summer break (when they are required to vacate their dormitories until the start of the next scholastic year).

where traditionally in warehouses labour is the largest cost-component. However, there are good reasons for improvement.

For instance, the existing storage sizes or the number of storage units available per size may not fulfil the needs of the market: certain storage types may be scarce, while others plentiful. This results in either lost customers and revenue, or inefficient utilisation of capacity of one type, and the potential loss for another. In short, these self-storage operators should seriously consider taking steps to maximise expected revenue at a stable cost-level.

Now, the design of self-storage warehouses differs from other facility designs in its focus on revenue maximisation. An obvious question is therefore whether it is possible to design such a facility so that it offers a better fit between storage design (types and numbers) and market demand, and at the same time maximises the revenue based on limited and somewhat “perishable” capacity. If it is indeed possible, the next question is: how do you design self-storage facilities so that they fit market segments and accommodate volatile demand, and thus maximise revenue?

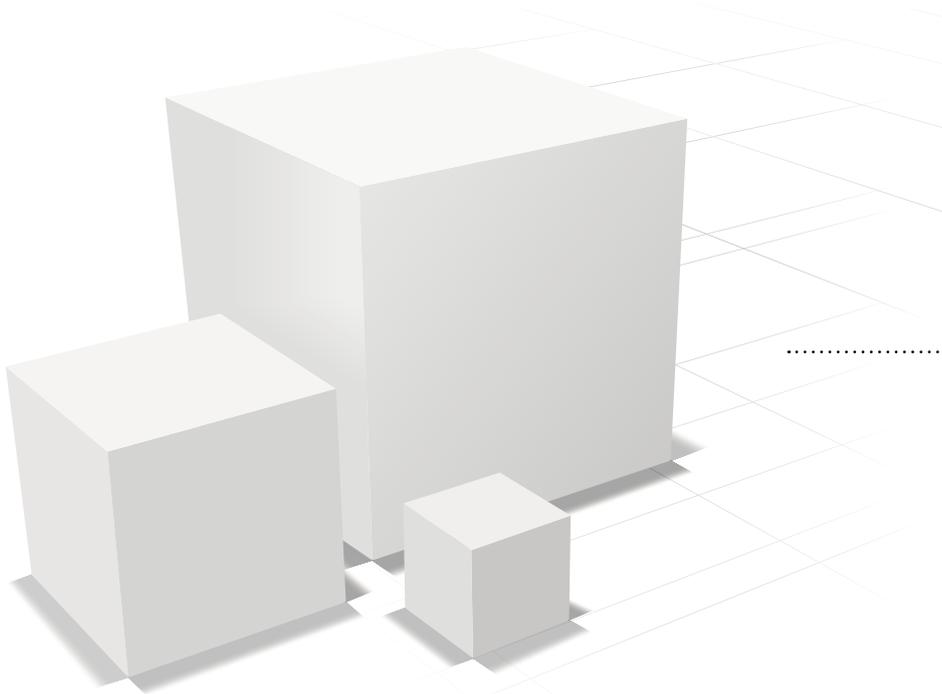
In seeking answers, there are two key issues to consider: customers who cannot be accommodated with a

“...self-storage operators should seriously consider taking steps to maximise expected revenue at a stable cost-level.”

The self-storage business focuses on providing private individuals, households and small businesses with public, temporary storage at centrally located facilities. Importantly, with self-storage customers handle storage operations themselves and without the intervention of warehouse personnel.

Designing for maximum revenue

With decades of management experiences in cost-control, this industry has been able to manage costs well. For example, large self-storage facilities in the USA only employ an average of 3.5 employees per facility,



storage-unit size of their choice can be either rejected or upgraded to a larger space; and demand forecasts (based on historical data) should trigger a space allocation and division into the necessary unit sizes that reflect this demand.

Change is just a snap

In general, warehouse facility design is a tactical decision: once a facility has been designed and built, it is difficult to adapt it to a changed environment. This is of course true of “traditional” warehouses. With self-storage, warehouse designs appear to be more flexible, thanks to the wide application of modular steel-base products, like modular corridors, standardised internal wall panels, standardised swing doors, and roller doors.

In particular, the internal panel has a special patented “snap together” interlocking seam rather than fixed jointing, which makes repartitioning of warehouse space easier. Most self-storage warehouses use a limited

number of storage sizes (in the United States, usually eight types) and most sizes are an integer multiple of a standard size. It is usually possible to remove (or add) non-supporting walls, for example, to create one 9m² room from a 3m² and a 6m² one. (Admittedly, there are some constraints: it is impossible to merge split rooms while they are still occupied; and adding a wall still requires that both newly created rooms have an access door). This space flexibility enables self-storage operators to adapt the layout of their facility to a changing demand at relatively short notice (like six months).

With no reservations

We started our study by formulating three different model sales policies where:

1. The warehouse company simply rejects customers (typically in a high-demand situation) if the requested space is not available. In this case, the company does not try to convince customers to upgrade to a larger, more expensive space.

2. The company does try to convince customers to upgrade, and extra spaces of the popular types (based on historical data) are reserved.
3. The company tries to convince customers to upgrade, but no extra spaces are reserved.

Thanks to 54 self-storage warehouses in Europe, Asia and the USA, we had access to historical business data (including demand, contract type, price, and storage-space configurations) to help us investigate our three sales policies to determine the best at maximising total revenues based on optimised space allocation and division. We did this by inputting this data into mathematical models to which we subsequently applied dynamic programming (a useful mathematical technique for creating a sequence of interrelated decisions) to determine the optimal combination of decisions.

Let me use an example to illustrate how we conducted our experiments. If we received a company’s data over, say, the last four years, we used the data over the first three to forecast demand in the fourth year, and to optimise space allocation and division accordingly. We then tested all three sales policies using the scenarios we created and subsequently compared the “simulated” results to the actual fourth-year ones.

Boosting revenues in the self-storage warehouse industry (continued)

by René de Koster

Experiment results showed that a new space-allocation design could indeed improve expected revenue of self-storage warehouses. Furthermore, small changes in load and upgrade-acceptance probabilities will not affect the overall design. Therefore, we recommend that self-storage warehouses review and adapt storage-space distribution as frequently as possible in order to benefit from changing demand rates. Considering how easy it is to redesign the storage space of a self-storage warehouse, there is no reason not to do it.

In addition, we discovered that the “upgrade without prior reservation” policy yields larger revenues than the one with prior reservation, although the differences in revenue are slight.

may be justified due to its simplicity and near-optimal revenue.

However, because there are so many factors (some unknown) to consider, the best course of action may not always be that obvious. For example, a warehouse we investigated is in Chicago, close to the central business district and a university. Surprisingly (or perhaps not), this warehouse did not allocate and divide its storage space according to the needs of its two main customers with contrasting storage demands: small for students, and large for small businesses. By optimising space allocation based on customer demand and applying the rejection sales policy (policy number 1) our experiment achieved a revenue increase of 14.7 per cent.

can be applied to other fields as well, particularly to hotel design and management (in deciding which room types to build), parking-lot businesses (a parking lot layout has features similar to the layout of a self-storage warehouse), or to restaurant revenue management (to determine the optimal table mix). Equally interesting is applying it to construction equipment leasing. This is a huge market, since most civil construction engineering companies tend to rent such equipment as bulldozers, shovels, and cranes. Here our algorithms can help these leasing companies to determine the types and quantities of equipment they need to stock. ■

“...our design approach can be applied to other fields as well, particularly to hotel design and management, parking-lot businesses, or to restaurant revenue management.”

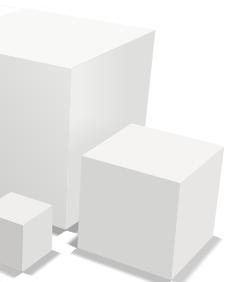
However, a prior-reservation policy may slightly outperform the no reservation policy for low demand and occupancy times that increase with unit size. In both cases, the difference in revenue decreases with increased load. Hence, selecting the prior-reservation policy

Wider applications

Notably, this study is one of the first to apply capacity and revenue management to facility design and management, taking into consideration market segmentation and uncertainty of data. In fact, our design approach

This article is based on the paper *Increasing the revenue of self-storage warehouses by facility design*, written by Yeming (Yale) Gong, René B. M. de Koster, J.B.G. (Hans) Frenk, and Adriana F. Gabor, and published in *Production and Operations Management* Vol. 22, No 3, May-June 2013, pp. 555-570. DOI: 10.1111/j.1937-5956.2012.01380.x

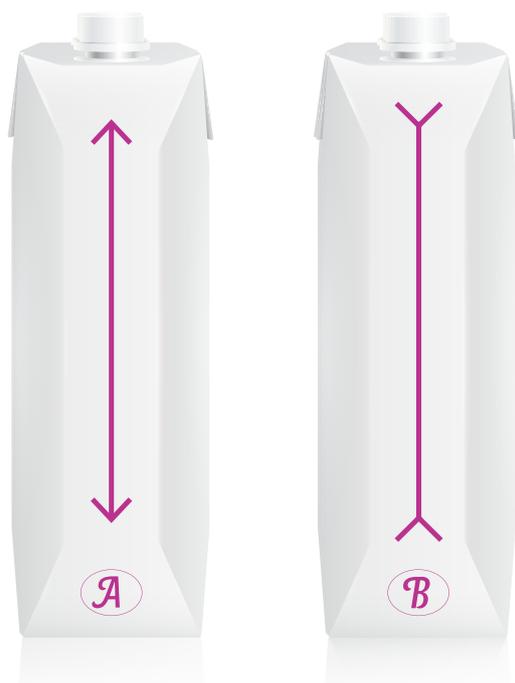
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How to manage consumers' packaging perceptions

by Nailya Ordabayeva

Marketers are constantly confronted with new complexities in consumer markets. Withstanding significant changes in the economy, as well as growing competition from private labels, is a major challenge. In today's turbulent environment, packaging has emerged as a tool to help marketers preserve profitability.



The packaging of fast moving consumer goods has changed frequently and dramatically for years, especially since the 1960s, as producers have fought for positioning, brand recognition, and customer loyalty. In this context, it has become crucial to understand more about how consumers perceive and respond to changes in product packaging.

Package impressions play an important part in consumption patterns, and when consumers' impressions do not match expectations, disappointment and dissatisfaction may not only have an immediate impact on sales and profitability, but can also lead to longer-term damage to brand credibility. While many past studies documented errors in consumers' judgments of relative

differences in package size, little has been known about what causes these errors and how they can be avoided.

Our research unveils a major cause of biased package perceptions: people's tendency to use an incorrect strategy to estimate the changes in package size. This process is captured by our AddChange model, which can effectively predict and manage consumers' impressions of package and portion size.

Why size matters

With rising costs of commodities and changing legislation concerning waste and pollution, companies need to find ways to retain customers without raising prices beyond an affordable level. At the same time, they must take consumers' needs and preferences into account.

Over the past several decades, people have become accustomed to the supersized packaging in many product categories that reflected a sense of affluence and abundance. The supersizing trend has been especially pronounced in the food industry, where supersized fast food and snack portions have become the norm in many places. However, unforeseen negative side effects are beginning to take their toll. In addition to increased waste disposal issues, supersizing is considered to have contributed to ▶

How to manage consumers' packaging perceptions (continued)

by Nailya Ordabayeva

over-consumption, weight gain, and a rise in obesity to epidemic proportions. Public health authorities in Western countries have therefore become concerned about the influence of supersizing on consumer health.

To address these concerns and to retain profits in the recent recession, many marketers have started to downsize their products. Yet the downsizing attempts have raised the suspicion of customers who are afraid of being tricked into paying the same price for less volume. In the wake of these developments, it has become crucial for marketers to be able to accurately predict consumers' perceptions of changes in packages, and to design packages that can boost

on labels and instead infer product size from their perceptions of packages. But perceptions are biased. Specifically, perceptions are influenced by the shape and size of the packaging. For example, elongated containers are often seen as larger than equivalent wide and short containers. In addition, people generally underestimate the changes in package volume, especially when packaging changes along two or three spatial dimensions as opposed to just one dimension.

In a series of studies, we attempt to explain these perceptual errors. We find that when judging the changes in package size, people tend to use an incorrect mathematical rule to arrive at their conclusion: they add, instead of

= 2), people will add the 26 per cent in height, width and depth. As a result, they will think that the size of the box has increased by 78 per cent (because $26 + 26 + 26 = 78$ per cent) when in reality it has increased by 100 per cent.

Formula for accuracy

The AddChange model, which we have developed to capture this additive process, can accurately predict consumers' perceptions of package size without the need to develop prototypes and conduct market tests. It can also be used to predict consumers' perceptions across various conditions: when packages change along one, two, or three dimensions in space and when packages become elongated.

A particularly useful function of the model is that it can be used at the outset of a design or redesign process to create packages that will achieve the desired perceptions of volume. For example, in one study we used the model to downsize packages by up to 24 per cent in such a way that consumers would perceive all of the volume reduction, or no change in volume whatsoever.

In other words, the AddChange model can be used to effectively increase or decrease the accuracy of consumers' package perceptions, depending on marketers' goals. Thus, given strict legislation and the growing

“...the AddChange model can be used to effectively increase or decrease the accuracy of consumers' package perceptions, depending on marketers' goals.”

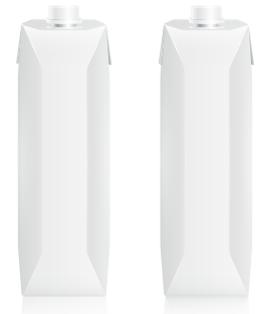
profitability while securing customer acceptance. In our new research, we have developed a model that can help managers achieve these goals.

Deceptive appearances

It is a well-known fact that many people don't read the size information printed

multiplying, the changes in individual package dimensions. In other words, people choose an easier additive rule to solve a multiplicative problem.

For example, if a box of popcorn doubles in size through a proportionate 26 per cent increase in height, width, and length (because $1.26 \times 1.26 \times 1.26$



desire of many companies to achieve genuine sustainability goals, increasing the accuracy of consumers' perceptions of package sizes has multiple benefits, in addition to preventing consumer backlash and loss of customer loyalty due to disappointment and feelings of deception.

Sustainable solution

The benefits of the AddChange model apply to everyone concerned: marketers can use the model in order to determine the changes required to produce packaging that effectively creates a desired perception of volume. To help managers with this task, we have developed a downloadable Microsoft Excel tool, which is based on the AddChange model and can be readily applied. Managers can use this tool to learn which package changes will trigger the most or the least accurate response by consumers without spending any money on developing prototypes or market testing.

Consumers can use our findings to better keep track of actual package size changes and to make more informed consumption decisions. Specifically, armed with this knowledge, they can stay more informed about package size. Understanding the impact of different sizing, consumers can choose packages that change along a single spatial dimension and avoid packages

that change along multiple dimensions or grow more elongated. In addition, our studies show that consumers can also help themselves to make more accurate size comparisons by weighing packages by hand, where possible, prior to buying them.

Broad implications

The use of the AddChange model can bring about positive results from many points of view. Consumers can use the model to keep track of the changes in packages and food portions and to better monitor consumption. Public health officials can use the model to endorse certain types of package changes that enhance consumers' accuracy and reduce over-consumption and waste.

Finally, marketers can use the model to predict consumer response to various package changes and to design packages that can effectively boost profits. Such packages should naturally balance consumer perceptions against package production costs, design aesthetics, and shelf placement issues. In sum, the AddChange is a useful managerial tool that can help marketers retain their customers, while promoting consumer wellbeing at the same time. ■

The AddChange macro is downloadable from hdl.handle.net/1765/39532.

This article is based on the paper *Predicting and Managing Consumers' Package Size Impressions*, written by Nailya Ordabayeva & Pierre Chandon and published in the *American Marketing Association Journal of Marketing*, Vol. 77 (September 2013), 123-137.

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Do bank bailouts have a silver lining?

by Lars Norden, Peter Roosenboom and Teng Wang

Much criticism was levelled at the USA's Troubled Asset Relief Program (TARP) at the time it was announced in the autumn of 2008. Many of its opponents argued that not a penny of taxpayer money should have been spent on shoring up US banks. But were they right?

As we came to realise during the research of our paper – *The Impact of Government Intervention in Banks on Corporate Borrowers' Stock Returns* – the argument against the use of taxpayer money to prop up ailing private sector financial institutions does in fact have a number of weaknesses.

Hindsight enables us to take a more rounded view. Through the Capital Purchasing Program (CPP) component of TARP, the banking industry received an infusion of quasi-equity. This played a key role in ensuring that no major bank would follow Lehman Brothers and go out of business because of an unnecessary shortage of liquidity.

of the US Treasury, bank TARP repayments showed a 111.4 per cent recovery rate as of end-October 2013. The money injected into banks via the CPP programme is thus already largely repaid; it is a matter of fact that no taxpayer money has been wasted.

The repercussions reverberate well beyond the banking industry, which doesn't exist in isolation but is very much connected to the real economy. The benefits were more widespread. Corporates, their investors and their staff also benefitted from the dramatic stabilisation of the market enabled by the US Government's temporary capital injection.

universes. Our findings highlight the importance of the spillover effects from the banking industry to the corporate world via the relationship between banks and corporates: the bank lending channel.

Capital injections

Previous research shows that negative shocks were transferred to corporate borrowers during the financial crisis. This is popularly referred to as the shift from Wall Street to Main Street. Our paper documents clearly just how the positive shocks of the government-initiated capital injections into banks can also be transferred to Main Street via the same channel, the bank-corporate relationship.

In particular, we investigate whether and how government interventions in the US banking sector came to influence the stock market performance of corporate borrowers during the financial crisis of 2007-2009.

We measure firms' exposures to government interventions with an intervention score that is based on combined information on the structure of their relationships with banks and their banks' participation in the government capital support programmes. We find that government capital injections into banks have a significantly positive impact on the stock prices of the borrowing firms.

“Our study highlights the positive effects of government interventions during the crisis...”

Indeed, official figures show that the bulk of the funds injected were repaid in a relatively short time. According to the department of financial stability

The bailout boosted the corporate borrowers as the positive impacts of the injection of liquidity spread through and around the financial and industrial



The effect is more pronounced for smaller and bank-dependent firms and those that borrow from banks that are less capitalised and smaller. Our study highlights the positive effects of government interventions during the crisis; it documents how the alleviation of financial shocks to banks led to significantly positive valuation effects in the corporate sector.

The overall evidence shows that the government-initiated capital injection programme helped support the flow of funds to corporate borrowers; companies that might otherwise have gone out of business were able to continue operating.

Our results also provide strong evidence on the existence of an important link between the financial industry and the real economy, and how shocks can spill over across industries. This causes us to reconsider the nexus between the financial sector and the real economy.

Our evidence suggests that in an economic recession, policy makers could restart the economic engine by carefully implementing a policy with the specific goal of reactivating the

bank lending channel. If a government implements this policy carefully, capital injections into banks could be one effective way to restart bank lending to the real economy.

As observed in our paper, such a policy would especially benefit businesses that are smaller and subject to tighter financial constraints; those firms are the keys to boost economic recovery and to provide new and continuing employment opportunities.

It might offend staunch capitalist fundamentalists. But there can be little doubt that at least some of those who criticised the programme so vocally might well still be gainfully employed in a business that has survived as a result of government intervention into its bank. ■

This article is based on the paper *The Impact of Government Intervention in Banks on Corporate Borrowers' Stock Returns*, which was written by Lars Norden, Peter Roosenboom and Teng Wang. The paper is forthcoming in the *Journal of Financial and Quantitative Analysis* and can be downloaded at <http://ssrn.com/abstract=2021134>

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▶ RSM Expertise

The internationally focused Department of Finance at RSM conducts research that has both business and academic impact in two main areas: corporate finance, and investment. The department is a meeting place for ambitious academics and dedicated educators in the field of corporate finance and investments and is part of the Erasmus Finance Group. More information on its activities can be found at:

WEB www.rsm.nl/fin

How performance appraisals can encourage ethical behaviour

by Gabriele Jacobs

All kinds of remedies have been suggested to minimise ethical problems in organisations, but recent research suggests that managers can significantly improve their employees' ethics simply by being fair and respectful for 30 minutes a year – provided they choose the right 30 minutes.

A study of 332 German policemen by Frank D. Belschak, Deanne N. Den Hartog, both professors at the University of Amsterdam, and I, found a significant link between the officers' perception of fair and respectful treatment during their performance review and the degree of personal ethics they exhibited over the next 12 months.

well as from the federal police forces receive training to qualify them for promotion to higher ranks), we drew the respondents for our study from a representative sample of two German police forces.

Our survey found that police officers evaluated their performance appraisals in terms of how fair it seemed to them, and that their perceptions had strong

which employees perceived their performance appraisal as fair correlated with the degree of support they felt they received from their supervisor, and to a lesser extent, from their organisation. If employees felt supported by their supervisor and their organisation, they tended to behave more ethically at work. If the officers felt they had been treated shabbily, they tended to cut more corners afterwards – showing up late, taking over-long breaks – and continued to hold that grudge for the entire year.

More surprisingly, we discovered that the performance of the messenger tended to matter more than the message. Many officers who received negative reviews said what bothered them most was not the review but how the news was delivered. The police officers told us, 'I don't mind, I understand... but just be honest and open about it. Don't try to treat me like a little child.' But even positive reviews delivered badly could also have a negative effect: officers who had received positive reviews that they felt were disrespectful were also less inclined toward ethical behaviour.

The results suggest to us that employees see their own performance appraisal as a key test of the trustworthiness of their superior and of the organisation toward themselves. Fair or unfair behaviour by managers

“If employees felt supported by their supervisor and their organisation, they tended to behave more ethically at work.”

We found that when officers felt that in their performance review they had been treated respectfully by their superiors, they tended to behave more ethically.

In co-operation with the German Police University (the single training centre within the German police where senior police officers from all states as

implications for their subsequent behaviour, as observed by a colleague of the respondent's choosing. Although a performance appraisal is at most 30 to 60 minutes of a full working year, it has a very strong symbolic effect on the employee.

In line with the existing literature, we discovered that the extent to

in a performance appraisal is likely to affect their perception of the degree of supportiveness they receive from their supervisor and translate ultimately into ethical or unethical behaviour by the employee.

To me, this study shows that you don't always have to do something big to make a difference to a culture. Sometimes even a seemingly minor act, such as just being respectful to a co-worker and demonstrating that you realise how important a particular moment is to that person, can have quite an impact.

Lessons Learned

Managers can draw a number of lessons from this study into the ethical impact of performance reviews:

- * Leaders lead. Supervisors play an important role as mentors for ethics. If they show good ethical behaviour, employees often follow their lead,
- * Performance reviews matter a lot to employees. We care a lot about what other people think about us and especially our bosses,
- * Don't avoid the situation. If you have to deliver bad news, avoiding the news is worse than saying it.
- * Deliver bad news calmly. When you need to say something negative, do it but do it in a transparent way, and a respectful way. Because emotion can be vented in this conversation



then you can make sure that there is less negative emotion that can travel with the person throughout the year..

- * Be respectful. If you use respectful behaviour towards employees, not only can you prevent unethical behaviour, but you can also trigger ethical behaviour. At the same time, the interaction needs to be genuine. You need to be transparent and authentic and you need to allow for voice and the venting of emotions of employees. ■

This article draws its inspiration from the paper *(Un)Ethical behaviour and performance appraisal: the role of affect, support, and organizational justice*, written by Gabriele Jacobs, Frank D. Belschak and Deanne N. Den Hartog, and published in the *Journal of Business Ethics*, 1–14. doi:10.1007/s10551-013-1687-1

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► RSM Expertise

Every part of business depends upon one thing: people, and their relationship to each other and the organisation in which they work. Understanding this, the education and research of RSM's Department of Organisation and Personnel Management focuses on this relationship using a strong interdisciplinary approach.

Research within the department has always been ahead of the curve, and pioneering faculty members work at the forefront of such 'human' issues as diversity and leadership studies.

Find out more about the department and its work at www.rsm.nl/opm

Change for change's sake? Internal responses to external challenges

by Henk W. Volberda

In today's increasingly volatile business environment, senior managers have to stay one step ahead by making the necessary internal organisational and strategic decisions, before it is too late to react to external changes.

Decision-makers in firms are facing an unprecedented frequency and amplitude of change in the business environment. More than ever, and in the interests of sustaining their firm's performance and competitive advantage, they must be sensitive to the nature of the marketplace, well-informed as to the latest developments, and well-equipped to respond.

Close examination of the case of Royal Dutch Shell over the period 1980-2007 suggests concrete ways in which firms can accurately assess external change and implement internal change, with a long-term strategic outlook firmly in mind.

Absorptive capacity

The first step in this process is to be fully aware of the ongoing changes in the sector and industry. This embraces such actions as constant monitoring of the competition through to regular analysis of one's own clients, their expectations and any discernible shift in expectations.

The second step is to assimilate the information obtained and understand

its potential ramifications for the firm, from its internal organisation through to finances, technical operations, and overall strategy. The third step comprises the transmission of this knowledge into tangible actions for the long-term benefit of the firm.

These three steps add up to what research defines as the "absorptive capacity" of a firm, meaning its ability to not only gather and digest information about the external business world but then respond accordingly by taking operational and strategic decisions in-house to ensure that performance levels are maintained.

The in-depth look at Royal Dutch Shell across a turbulent period for the oil industry illustrates empirically the correlation between the time it takes a firm to respond internally to external change and the impact on performance.

A test case

The potential of the firm to take decisions in response to or in anticipation of change can be based upon the level of research and development (R&D)

investment, specifically the intensity of investment (calculated by dividing R&D expenditure by annual revenues). The highest level of intensity (0.84 per cent, for the period 1986-1994) coincided with the oil price collapse, suggesting that forward planning was made.

More sophisticated analysis can be made by correlating this with the difference between the rate of internal and external change.

Internal changes over the period 1980-2007 comprised the launch of new products and services, process innovations, internal and external venturing and organisational restructuring. Some 465 examples were traced, and the relative percentage of each sub-category of action calculated in order to then reach an average rate of internal decision-making and actions per period. The highest internal rate of change came in the period just before the oil price collapse (17.4 per cent, for 1980-85), suggesting that strategic decisions had been taken in advance.

For the oil industry, the external rate of change can be measured via the rate of change of the price of crude oil and its subsequent impact on a firm's profitability, as reflected by its market share. The most volatile periods saw the highest external rate of change and a relatively small gap between the internal and external rates: in



“...the reality of business today is that not all firms are willing or able to overhaul their internal operations in response to external change.”

response to the oil price collapse, the period 1986-1994 saw a 14 per cent internal rate of change compared to a 10.5 per cent external rate, proof that the industry was reacting to external change in an attempt to avert the potentially negative impact of future crises.

This observation is backed up the highest level of R&D investment for the same period and the joint-highest market share (32 per cent). To underline this point, the period marked by the largest negative gap between internal and external rates of change (8.7 per cent vs. 21.2 per cent) and the least intensive level of R&D investment (0.26

per cent) saw the lowest market share result (22 per cent).

Realising potential

On paper the above test case makes perfect sense, but the reality of business today is that not all firms are willing or able to overhaul their internal operations in response to external change.

Research suggests that larger, longer-standing firms are likelier to have the infrastructure to process information and the resources to *potentially* implement change but are often confronted with greater internal resistance to change. It is for this

reason that research also underlines the discrepancy between *potential* and *realised* absorptive capacity – having the intention to respond is one thing but if a dominant culture within a firm prevents it from translating the need to respond into action then the risks for performance and profitability are far greater.

However, the highs and lows for Shell measured in the test case suggest that by narrowing the gap between internal and external rates of change or, better still, implementing internal change at a higher rate than external change, firms can give themselves every chance to weather the storm when the business environment is at its most volatile.■

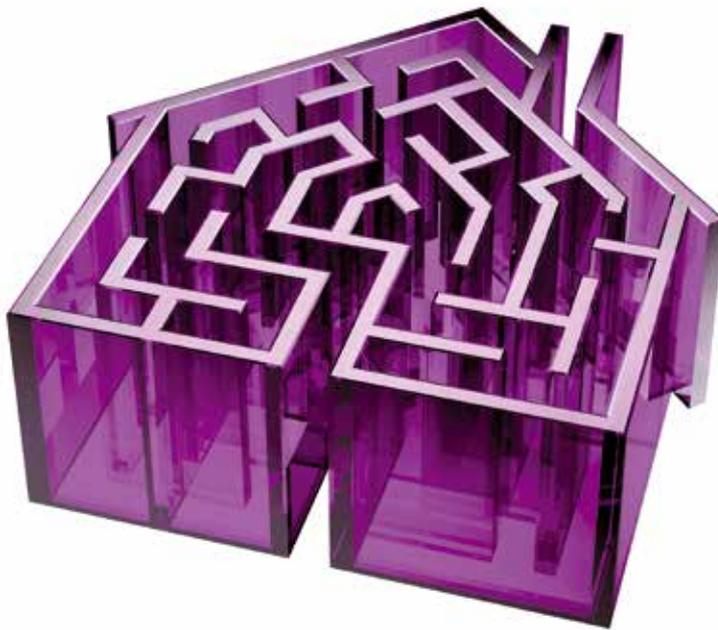
This article draws its inspiration from the paper *Strategic Renewal Over Time: The Enabling Role of Potential Absorptive Capacity in Aligning Internal and External Rates of Change* by Shiko M. Ben-Menahem, Zenlin Kwee, Henk W. Volberda and Frans A.J. Van Den Bosch (2012), <http://dx.doi.org/10.1016/j.lrp.2012.09.012>.

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Why mortgage lenders need better-educated borrowers

by Ruben Cox

Might the time be right to introduce the financial equivalent of a driving licence? I think the answer could well be a resounding yes. A study of events in housing markets across the developed world over the past years has pushed me towards this view.



The outright collapse in pricing in a number of markets demonstrates how damaging it can be to allow almost unfettered access to long-term mortgage financing in large amounts when those borrowing the money have little or no understanding of the products in question.

In many cases, they are not only agreeing to buy products that are unsuitable for their circumstances, they are actively clamouring to buy

products that are unsuitable for their circumstances. If it is illegal to drive unsupervised without a valid driving licence, which demonstrates a minimum level of competence, perhaps it should be illegal to borrow unsupervised without the financial equivalent.

Libertarians and free marketeers will almost certainly object to this proposition. Yes, it goes against the ethos of free will that underpins most

Western thinking. But it could help prevent property car crashes, which on occasions since 2008 have more closely resembled motorway pile-ups. Would we issue a gun licence to a blind person? Certainly not. So why are people who find it impossible to envisage their financial future be allowed to burden themselves with debts that are simply unaffordable?

These thoughts, and others, arise from discussion of my thesis on the subject of the acquisition, financing and insurance of housing entitled *To Own, To Finance, and To Insure Residential Real Estate Revealed*. I suggest that they merit further and wider debate in the long-term best interests of a financial services industry that has been plagued by disaster after disaster over the past five years.

Educating borrowers

I wonder if it would be possible to launch an organisation that could enhance the financial IQ of millions of people internationally. Its prime objective would be the prevention of financial ills rather than their cure; increasing people's ability to understand personal finance matters could help transform lives.

Consider, for instance, the case of a young couple eager to acquire their first home, flying in the face of financial reality in their determination to

secure a mortgage. Both are working. They have no children. They have a comfortable level of disposable income month to month. They have savings. In short, they tick every box on the creditworthiness spectrum. A bank would be foolish not to lend.

But this is today. What about tomorrow? Next month? Next year? When they have a baby? And they lose an entire income? And have another baby? And realise they need a larger house?

Their profile has changed, underlining the case for the argument in favour of making a long-term credit decision based not on current affordability, but on future, sustainable profitability. A bank that refused them credit on that basis might later find itself with a higher quality loan book that it would otherwise have had.

If it is illegal to borrow, then it will be illegal to lend. This neatly circumvents the reality uncovered in the writing of my original thesis. Who is to blame for the mortgage finance mess – is it profit-driven lenders mis-selling? Is it commission-based brokers and other intermediaries mis-advising? Is it borrowers mis-buying? The allocation of blame, or, perhaps a better word, responsibility, is far from easy.

A licence to lend

How might this concept be translated

into reality? Let's return to the original driving licence analogy. Obtaining a driving licence involves the acquisition of driving knowledge through formal lessons from a wide range of private sector teachers, and practice on the road, and the passing of tests in motoring practice and theory at official government-sponsored centres.

Existing financial advisers would be obvious candidates to create a national network of instructors. In those countries where they are already required to carry out a thorough review of a would-be borrower's financial situation before making a recommendation (which they must be able to justify should the regulators come calling), this would represent only a slight reshaping of their current role.

The focus would shift away from hand-holding and advising their clients and move towards teaching them. The new emphasis would be on

equipping them with the tools needed to understand personal finance, and to pass a formal examination at a government-approved test centre.

The UK already has an established network of Citizens Advice Bureaux (CAB), which, especially in difficult financial times such as those experienced recently, sees a surge

“If it is illegal to drive unsupervised without a valid driving licence, which demonstrates a minimum level of competence, perhaps it should be illegal to borrow unsupervised without the financial equivalent.”

in demand for independent financial advice. It would be interesting to examine how simple it might be to adjust their operating model in order that they might help on a preventative basis rather than a curative basis.

This in turn would provide a template for other countries that lack such a service. The resulting structure would surely represent an improvement on the prevailing system, in which are embedded clear conflicts of interest on the sell-side, and often widespread ignorance on the buy-side. ▶

Why mortgage lenders need better-educated borrowers (continued)

by Ruben Cox

In the Netherlands, we have the Institute for Budget Education (NIBUD), which educates and advises (primarily through public media) households on financial issues in general (mortgages, insurance policies, personal loans, etc.). However, this advice is tailored towards general issues rather than individual problems. Maybe this could provide a bridge towards the UK's case-based CAB, which is generally highly thought of by its troubled clients.

My original research uncovered remarkably little hard evidence of mis-selling. My dissertation contains four studies that cover aspects of homeownership in the Netherlands. It examines the effects of homeownership and the decision making process by households regarding mortgage type. Furthermore, the functioning of the mortgage origination process including the effect of brokers is studied. The last paper examines which factors characterize household demand for mortgage insurance.

Aligned interests

The central question in the third study (chapter four) is concerned with the question of whether there is evidence for a misalignment of interest between financial intermediaries and their clientele. Studies on the role of mortgage brokers in the US show that the objectives of mortgage brokers

and their clientele are not necessarily aligned. This occurs when they are not responsible for, or compensated conditional on, loan performance. Moreover, commission-based pay can induce brokers to recommend and sell those products that are most profitable to themselves.

There is, however, a counteracting force because credit risk exposure creates an incentive for the originator to monitor the underwriting behaviour of intermediaries and screen applications. In the presence of reputation and credit risks, it is unlikely that they will employ different underwriting standards for credit that is originated through an intermediary compared to what they would originate directly (so-called direct-written).

Proposals to alter the compensation structure of intermediaries, for example, to hourly billing rather than based on commission from sales, are probably ineffective in reducing conflicting interests and come with their own incentive problems. In addition, the effectiveness of broker regulation to avoid a misalignment of broker and client interests has received mixed empirical evidence. The results indicate that the regulation of lenders is perhaps more important than either of these two approaches.

I will add that even after careful consideration of the issue, I remain

uncertain as to whether I would advocate training for intrinsically unmotivated people versus mandatory advice for those people who do not have (but perhaps also do not want to have) the "financial driving licence". The former could be very ineffective.

One direction for future research might be to compare the UK's tailor-made CAB approach to the Dutch general approach NIBUD system to attempt to identify whether one is more effective than the other in altering consumer behaviour. In the meantime, perhaps households need to be reminded of that ancient warning - *caveat emptor* - rather than develop an ever-deepening dependence upon the protection of regulators and other official figures. ■



This article is based on Ruben's PhD thesis *To Own, To Finance, and To Insure Residential Real Estate Revealed*. <http://hdl.handle.net/1765/1>

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