

Irrational beings


- a user guide for
behavioural finance



 Introduction

 Irrational brains

 Irrational beings...

 Irrational consequences

Contents

Introduction

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Client Partner



- Previously: Solvency II Senior Design Actuary
- Previously: Head of Modelling Centre
- Previously: Head of Actuarial Change
- Still: Hilarious



About 4most

**BANKING &
FINANCIAL
LENDING**

**MODELLING,
ANALYTICS &
REPORTING**

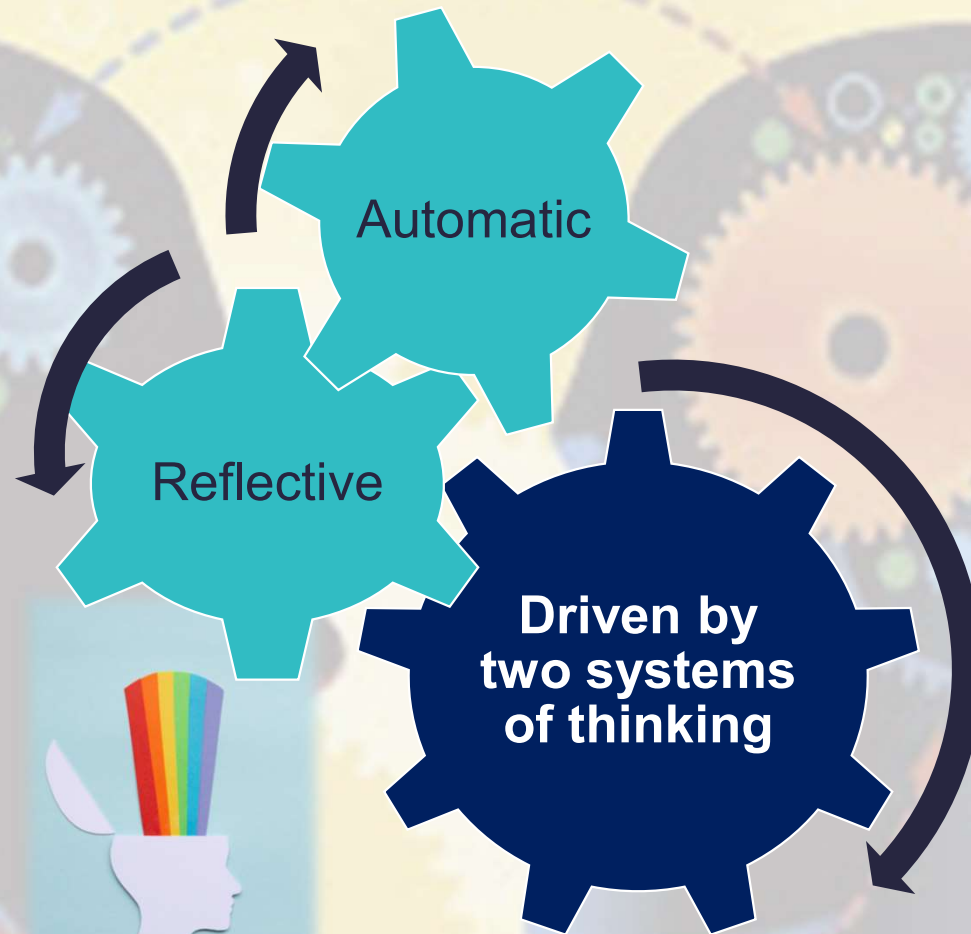
INSURANCE

About 4most

Modelling
& Change

IFRS17

Actuarial
reporting



Our brain switches between these modes

*Slower deliberate
thinking*



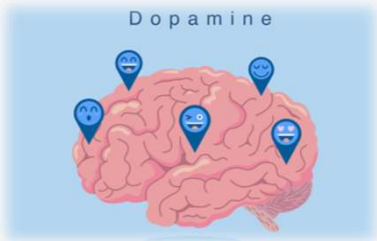
*Fast automatic
responses*

We often use the irrational side of our brain...

WHY?



Not enough time to think everything through



Hits of dopamine for immediate gratification....



Lack of willpower!

Even corporations are irrational...



Often bonus schemes reward upside risk, but don't penalise downside risk



Budget setting based on prior year's spending

How are we irrational?

(1) We take shortcuts

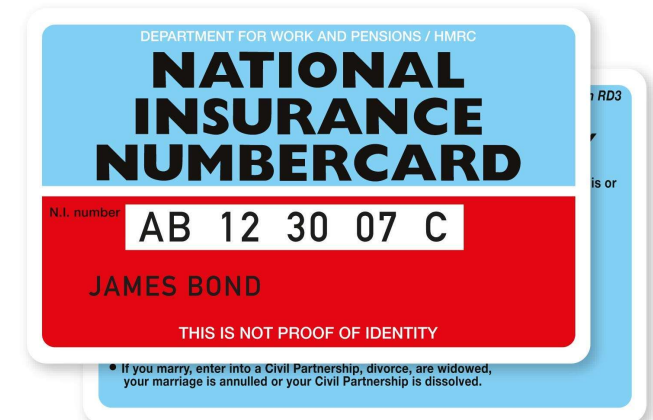
We use comparisons rather than working things out from scratch



How are we irrational?

(1) We take shortcuts

	Premium	Standard	Essentials	Free
PLAN	Advanced features for pros who need more customization.	Better insights for growing businesses that want more customers.	Must-have features for email senders who want added support.	All the basics for businesses that are just getting started.
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Anchoring

How are we irrational?

(2) Our brains access some things faster than others

Availability Error



How are we irrational?

(2) Our brains access some things faster than others

MISSING



HAVE YOU SEEN 23 YEAR OLD JACK?

He was last seen in **Barnet, Wvg.**, walking toward the **Primord Bridge** to the **Camden Road** area at approx **3.40 am on Saturday 3rd March.**

A lot of vehicles travel past him in the early hours of the morning so please do check dash cams or pass these details onto anyone that may have been in the area when Jack disappeared.

Jack is 5'11" (175cm) tall, of slim build and has short brown hair.

When last seen, he was wearing a quilted green/cream Barbour jacket and a beige winter jacket navy stripes and brown Maltby Brothers with white soles.

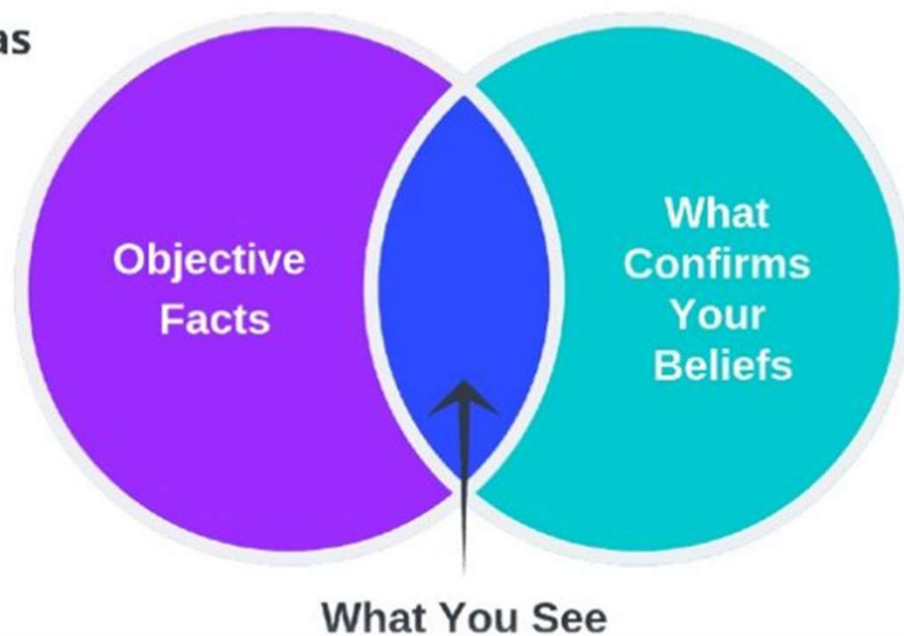
If you see Jack, call 999 quoting reference 5224055172, alternatively phone 101 if you have any other information.

Identifiable Victim Effect

How are we irrational?

(2) Our brains access some things faster than others

Confirmation Bias

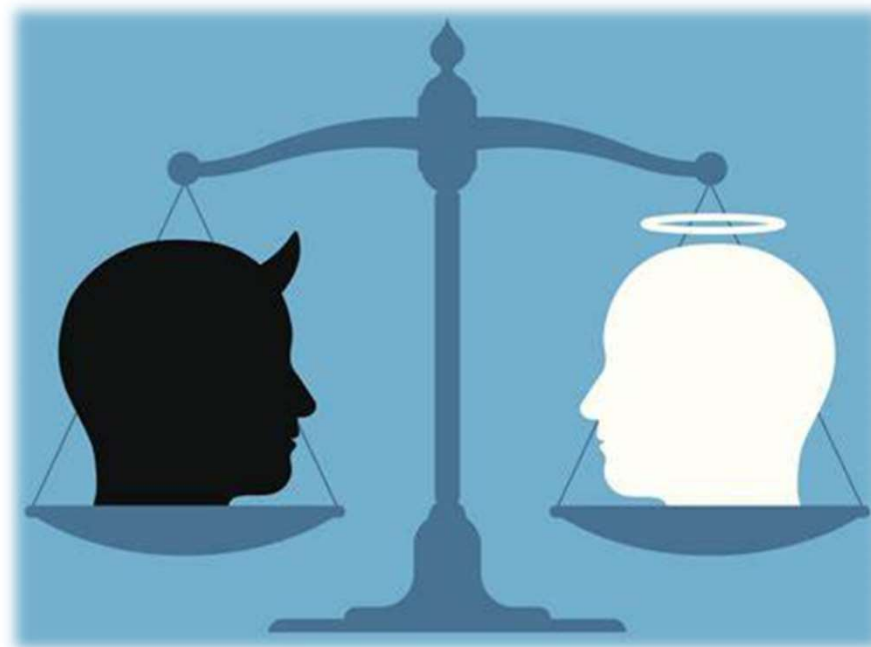


Confirmation
Bias

How are we irrational?

(3) We have biases

**Primacy Error and
the Halo Effect**



How are we irrational?

(3) We have biases

Creators Bias



How are we irrational?

(3) We have biases

Value the familiar



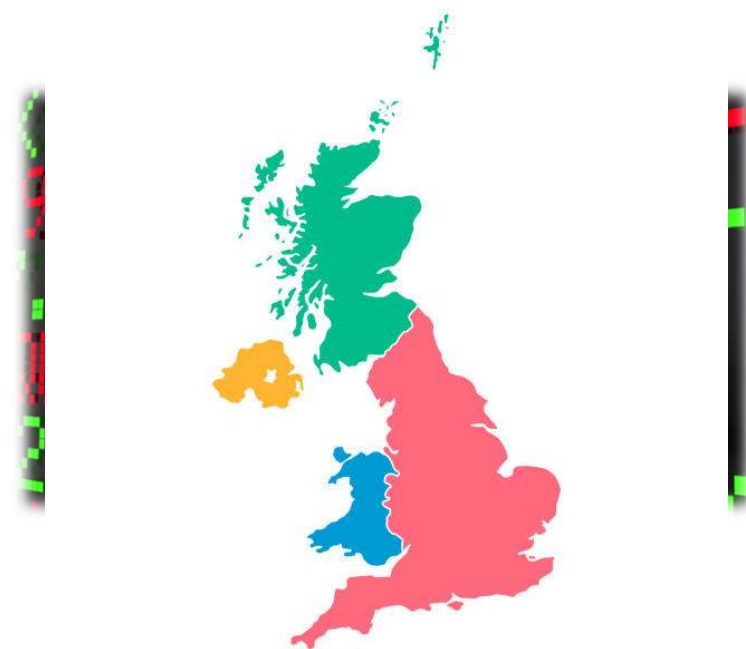
April 1452 – May 1519



How are we irrational?

(3) We have biases

Value the Familiar



How are we irrational?

(3) We have biases

Endowment Effect



How are we irrational?

(3) We have biases

Loss aversion



BEHAVIOR GAP

How are we irrational?

(3) We have biases

Power of free

New Postage Costs -
FREE POSTAGE
for orders of
£50 and over!



How are we irrational?

(3) We have biases

Normalcy Bias



Queues of traffic leaving before Hurricane Harvey

How are we irrational?

(4) We form our opinions based on our own experience

e.g. assessing our likelihood of having a stroke against how many people we know who have had a stroke



How are we irrational?

(5) We use different norms for different situations

MARKET NORMS

VS

SOCIAL NORMS



So what?

We tend to make bad decisions



... especially when trading off immediate benefit for long term payback...

And when we don't have the right experience to interpret the information available to us.



Personal Loan – Terms and Conditions

- 1 Your agreement**
You agree to pay the Total Amount Payable for the Personal Loan shown in this Agreement, by the monthly installments shown and on the dates shown or on other dates not only to you, but to liquidate or satisfy a commitment to you. This monthly installment must be paid to Santander UK plc by Direct Debit.
- 2 Application of payments**
a) The amount of Cash shown in this Agreement will be paid directly to you by Santander unless it is otherwise instructed by you or by change unless you otherwise act to settle an existing loan in accordance with Condition 6.
b) Payments made under this Agreement will be applied first towards the interest and charges, then to the principal (in respect of the amount of Cash shown in this Agreement).
c) Foreign payment is essential (see further below).
- 3 Default**
a) You are in any monthly installment within 14 days of the due date or if you default, the terms of the Agreement in some other way. This is what will happen:
i) the unpaid balance of the Total Amount Payable shown in this Agreement (less any rebate to which you are entitled) will become due and payable to us;
ii) we shall give you at least 14 days' notice in writing, to give you a chance to pay anything that you owe us or, if not, to try to arrange another loan for you. This is called a default notice.
iii) we may charge you a default fee if the amount overdue at the same date of default, charged on the last day of the date of the date of the overdue amount, is over £10.
iv) we will charge your account under this Agreement, if your account is with the credit reference agencies, under this Agreement, including to bring credit reference agencies, and to arrange legal costs recovery. Any such costs charged to us will form part of your payable immediately and will not be subject to the terms of any default notice issued to you.
- 4 Bankruptcy**
a) The unpaid balance of the Total Amount Payable shown in this Agreement does not when it is due or when you are entitled to become due and payable to us and we shall be entitled to recover payment of such amount before provided that we give you at least 14 days' notice in writing, if any of the following events occur:
i) if any court order or judgment obtained by us against you in any court is not paid as ordered by the court and remains unpaid for more than seven days;
ii) if a court order is issued against any of your property (that is, if a bailiff or other court officer is visiting any of your property following a court order);
iii) if a bankruptcy order is made against you; or
iv) if you enter into any arrangement or composition with your creditors.
- 5 Personal Information**
The name of your personal information we set out in the Personal Loan Document provided to you when you applied for your loan. Your data may be used in other ways as agreed by you and in accordance with the conditions set out in the Privacy Statement on our website.
- 6 Settlement of existing accounts**
If you have indicated that you intend to settle any of your existing credit accounts with us or with other lenders out of your funds, we are authorized to do so and to set you have any balance left.
- 7 Your insolvency**
Your monthly payments are made up partly of fees (payments on capital and partly of interest). Interest is charged on a day-to-day basis on the outstanding balance of your loan and will be debited by your account at the end of each month.
- 8 Early settlement**
a) You are able to settle this Agreement in full or in part at any time. If you pay off your loan before this Agreement is due to end, you may receive a rebate of interest calculated in accordance with the Consumer Credit (Early Settlement) Regulations 2004. This rebate notice will be sent to you at the appropriate time.
b) If you wish to repay your loan in part, you must give notice of this intention at the address set out in this Agreement or provide us on 0845 802 2173. You have the right to settle your loan in full or in part. A maximum amount of the amount of the loan will be used to repay the loan. We will apply any part payment received to the capital balance with the effect of reducing the term of your loan.
- 9 Personal Agreement**
a) You understand that we may refuse to enter into this agreement with you.
b) If we do enter into this agreement with you, it is personal to you, and any of your obligations under it may not be transferred by you or merged, assigned or used as security by you in any way.
c) You must notify us of any change of address, if you do not, you must pay to us all of the money due if it is necessary to do so to find your new address.
- 10 Transfer by us**
This Agreement and the sums payable by you under this Agreement may be transferred by us at any time without your consent but not in such a way as to reduce any of your rights before it ends unless we advise you in writing on the Santander Group or to some other person, firm, company or other organization.
We will give you clear notice in writing should we decide to transfer our rights and obligations under this Agreement.
- 11 Debtors**
In this Agreement:
a) the words "we" and "us" mean Santander UK plc, its successors and any person, firm, company or other organization acting as trustee for Santander UK plc and "it" is to be read accordingly; and
b) when the word "them", the singular includes the plural and vice versa.
c) the "Santander Group" means Santander UK plc and all its subsidiaries.
- 12 Two or more customers**
Where there are two or more of you, you are jointly under this Agreement to joint and several. This means that you are liable together and also that each of you is separately responsible for performing the obligations of the customer(s) under this Agreement.
- 13 Set-off**
We may use any money you have with us or any member of the Santander Group to reduce or repay any amount which has become payable under this Agreement. We make this without prejudice to you and without giving you notice of set-off.
- 14 General**
a) If any term of this Agreement is not capable of being enforced against you, this shall not affect any of the other terms.
b) Unless otherwise clearly and expressly stated, all communications under this Agreement shall be in English and the sending of any notice or any other communication to you by electronic means to the email address under the Direct Debit Mandate notified to us in writing shall be sufficient for legal purposes.
c) Any terms which apply to you as a result of your entering into this agreement are subject to you.
d) This agreement is governed by English law.

Santander is able to provide literature in alternative formats. The formats available are: large print, Braille, audio tape and PC disk. If you would like to register to receive correspondence in an alternative format please give us a call and ask for a 'Preferred Communication Request' form.

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Which makes us vulnerable

Eye level shelves
in supermarkets

Free trials where
you must cancel
or get charged

Decoy items on
the menu

XXL Sizes

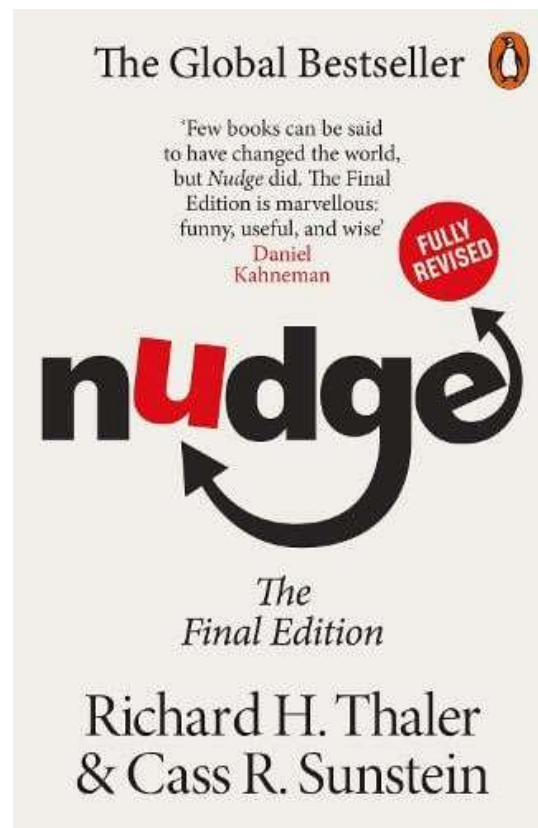


CAFE ROUGE
PETIT DÉJEUNER
Available daily until noon

CAFÉ ET CROISSANT 3.50 choose from our baked in-house pâtisseries and any hot drink	L'ANGLAIS 7.50 two free-range eggs, sausage, bacon, beans, mushrooms, tomato and toast
PÂTISSERIES 2.50 croissant, pain au chocolat, pain aux raisins or almond croissant	LE VÉGÉTARIEN 6.95 two free-range eggs, avocado, mushrooms, spinach, beans, tomato and toast
CAFÉ COMPLET 6.95 baked in-house baguette with preserves, d'igny butter, your choice of hot drink and juice	ŒUFS BÉNÉDICTE free-range poached egg, toasted muffin and hollandaise sauce with your choice of: - ham 3.95/5.95 - spinach 3.95/5.95 - truffled mushroom 3.95/5.95 - smoked salmon 4.95/6.95
GRANOLA 4.95 crunchy oats and raisins with fresh blueberries and yoghurt	POUR LES ENFANTS 4.50 free-range egg, sausage, bacon, beans and toast
PAIN PERDU BRIOCHÉ classic egg dipped brioche with your choice of: - crème fraîche & honey 5.95 - banana & maple syrup 5.95	POUR LES ENFANTS VÉGÉTARIENS 4.50 free-range egg, avocado, beans and toast
ŒUFS 4.95 free-range eggs scrambled, poached or fried, served with toast - add crispy speck ham @ 1.00 - add smoked salmon @ 1.00 - add bacon @ 1.00	Add herb potato wedges to any dish 1.50



Nudges



Richard Thaler: Nobel prize winner for behavioural economics

And not all 'nudges' are bad

Car warning beeps (e.g. petrol, seat belts, lights, etc)



And not all 'nudges' are bad

Asking companies to divulge their carbon emissions



And not all 'nudges' are bad

Teen moms' 'dollar-a-day' scheme



We can also help ourselves with smart nudges

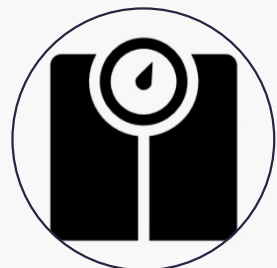


Public Weigh-Ins

Making bets with friends

Only listening to a favourite podcast when running

Cold hard thinking: listing our pros and cons, and the use of statistics



Our industry can be a force for good

FCA

“It can deliver better outcomes for all parties. It will become a standard part of an insurance company’s approach to customer interactions.”

Auto-enrolment



Use defaults in investment choices



Design retail finance vehicles



How we communicate with customers



Influence public policy



Conclusion

Humans are irrational...

...extremely irrational

Corporations exploit our irrationality...

... but if we know about it, we can also use this knowledge and be a force for good

4most
ANALYTICS CONSULTING

Questions?

