



Estimating the Economic Impacts of Reduced Gambling Expenditure: Evidence from a Discrete Choice Experiment

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Introduction & Motivation

- Industry claims stricter regulation would harm the economy - via lost tax, jobs, and growth (BGC, 2022).
- But these figures reflect gross contributions, not the net impact of reallocated consumer spending.
- Evidence from other sectors (e.g. alcohol) shows reduced harmful consumption doesn't mean lost economic value - spending can shift to other areas (Sachdev et al., 2023).
- Gambling Act White Paper estimates a reduction in Gross Gaming Yield of between 498 million to £1.3 million per year (DCMS, 2023)
- This amounts to between £329 million and £812 million retained by consumers instead of being spent on gambling.



Introduction & Motivation

- Industry claims stricter regulation would harm the economy - via lost tax, jobs, and growth (BGC, 2022).

Key Question:

Where does this money go?

- - Lost, saved, unlicensed gambling, spent elsewhere?
 - Good evidence for substitution effects from other sectors
 - Prior reports estimated 1:1 substitution, with results of net benefit to economy of
 - But what would people who gamble actually do?
 - consumers
- Instead of being spent on gambling.



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Practice and Theory

Policy change = Reduction in gambling spend
/ change in consumption level



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Reduction in gambling
expenditure
Is it saved or reallocated?



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**Reduction in expenditure
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(Money retained but not
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Practice and Theory

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**Reductions spent elsewhere =
Change in consumption
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(Money reallocated to other
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Practice and Theory

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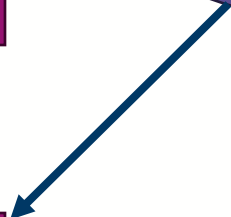


Reduction in gambling
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Is it saved or reallocated?

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Output Effect: Estimated based on
redistribution of resources
(e.g. multiplier effects across sectors)



Net Economic Impact:
Assessed from reallocation vs.
original gambling expenditure
– Positive, Neutral, or Negative



Practice and Theory

Policy change = Reduction in gambling spend
/ change in consumption level

**Reduction in expenditure
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(Money retained but not
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Reduction in gambling
expenditure
Is it saved or reallocated?

Reallocation decisions
informed by:

- Discrete Choice Experiment
- Consumer preferences
- Trade-offs between spending categories

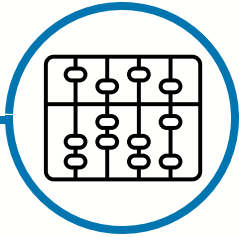
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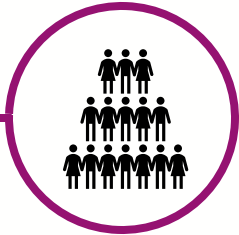
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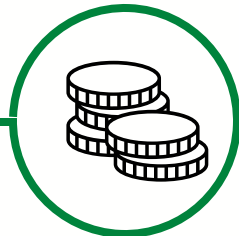
Conceptual Framework



Micro to Macro approach: detailed results from consumer behaviour (micro level) that are scaled to estimate broader, economy-wide effects (macro level)



Micro: conduct a DCE to evidence how people might choose to spend the money they no longer spend on gambling, following a change in gambling legislation

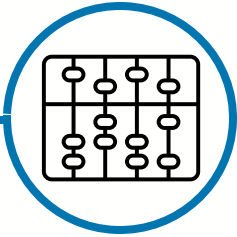


Outputs:

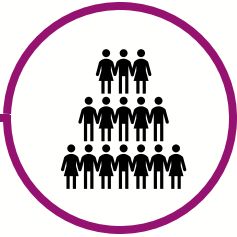
- Identify the value participants place on different spending categories and the trade-offs they make
- Provide insights into the marginal rate of substitution between spending categories



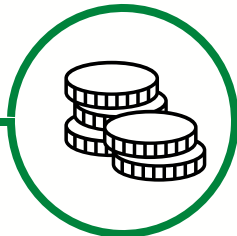
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Research Aim:
To use a Discrete Choice Experiment (DCE) to estimate how reduced gambling expenditure is redistributed across other spending categories, in order to assess the demand-side macroeconomic impacts of gambling regulation.



- Identify the value participants place on different spending categories and the trade-offs they make
- Provide insights into the marginal rate of substitution between spending categories

DCE mirrors decisions we make every day...

	Option A	Option B	Option C no chocolate
Chocolate type	Milk	White	n/a
Extras	Fruit and nuts	None – plain white	n/a
Size	180 grams	90 grams	n/a
Brand	Cadbury	Green and Blacks	n/a
Price	£2.24	£2.40	No price – no chocolate

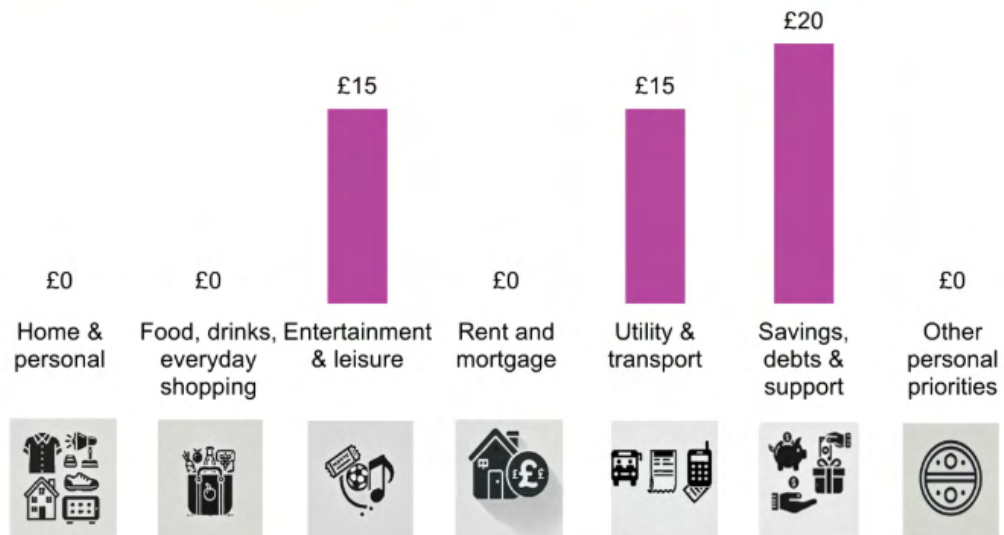




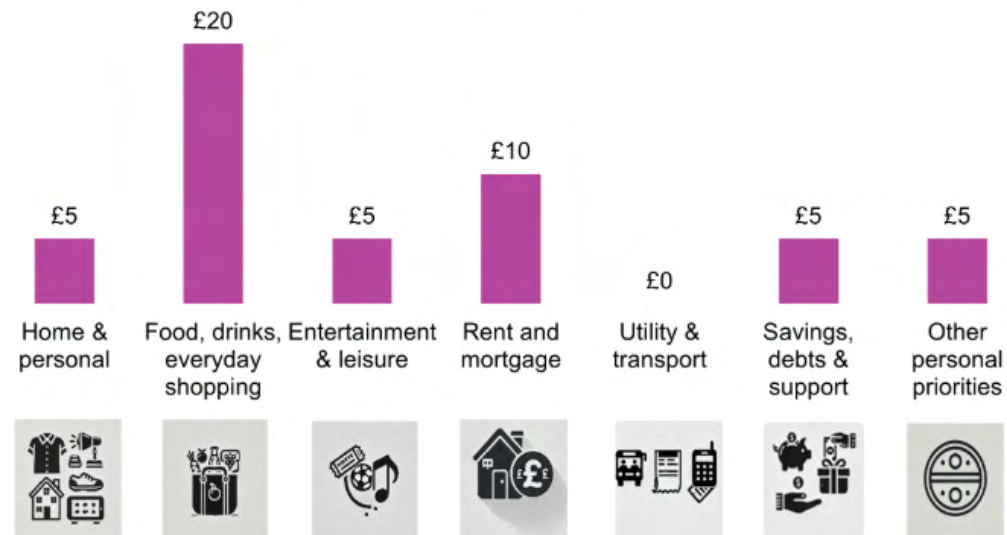
Our choice card

Because of gambling policy changes, imagine you now have an additional £50 to spend on other things, which of the two options (A or B) best represents how you would spend this additional £50?

Option A



Option B



Select only one answer



Option A



Option B

Spending Categories / Attributes

	Attribute	NiGEM Mapping	Description
	Home and Personal Items	MANUFACTURING	Covers your spending on clothing, shoes, and accessories and your spending on household items like electronics, furniture, and other home essentials
	Food, Drinks and Everyday Shopping	PRIVATE TRADED	Covers your grocery shopping, including all food and non-alcoholic beverages, as well as spending on alcoholic drinks, tobacco products, and vapes
	Entertainment and Leisure	PRIVATE NON-TRADED	Covers your spending on entertainment and leisure, such as day trips, holidays, cinema or event tickets, TV streaming services, hobbies, and dining out
	Rent and Mortgage	SAVINGS	Covers your regular housing payments, whether you're paying a mortgage or renting your home
	Utility and Transport	REST OF INDUSTRY	Covers essential expenses like transport (fuel, vehicle costs, public transport), utility bills (electricity, gas, water), and communication costs (phones, internet)
	Savings, Debts, and Financial Support	SAVINGS	Covers money you set aside for future use, such as savings or paying off debts, as well as any money you give to others—whether it's donations to charities or financial support to friends and family
	Other Personal Priorities		Covers any additional spending areas that are uniquely important to you and not included in the categories above that reflect your individual needs and lifestyle.



DCE Survey Overview

Part I Respondent eligibility

Screening Questions

General survey information

Consent forms

Part 2 Choice experiment

A) Choice tasks

B) Choice tasks
– unlicensed
spend

Part 3 Personal attitudes and characteristics

- Current spend on gambling and betting products
- PGSI Questions
- Awareness of unlicensed market for gambling and betting products
- Wellbeing: Short Warwick-Edinburgh Mental Wellbeing Scale
- Socio-demographic characteristics



Survey Development & Data Collection

Stage 1: Survey of approx. 1500 people who regularly gamble: To understand consumption patterns and propensities (Feb 2024)



Stage 2: DCE survey developed and pre-tested with Lived Experience group members (Nov 2024)



Stage 3: Pilot Survey 1 (Jan 2025) n = 122



Stage 4: Pilot Survey 2 (Feb 2025) n = 45

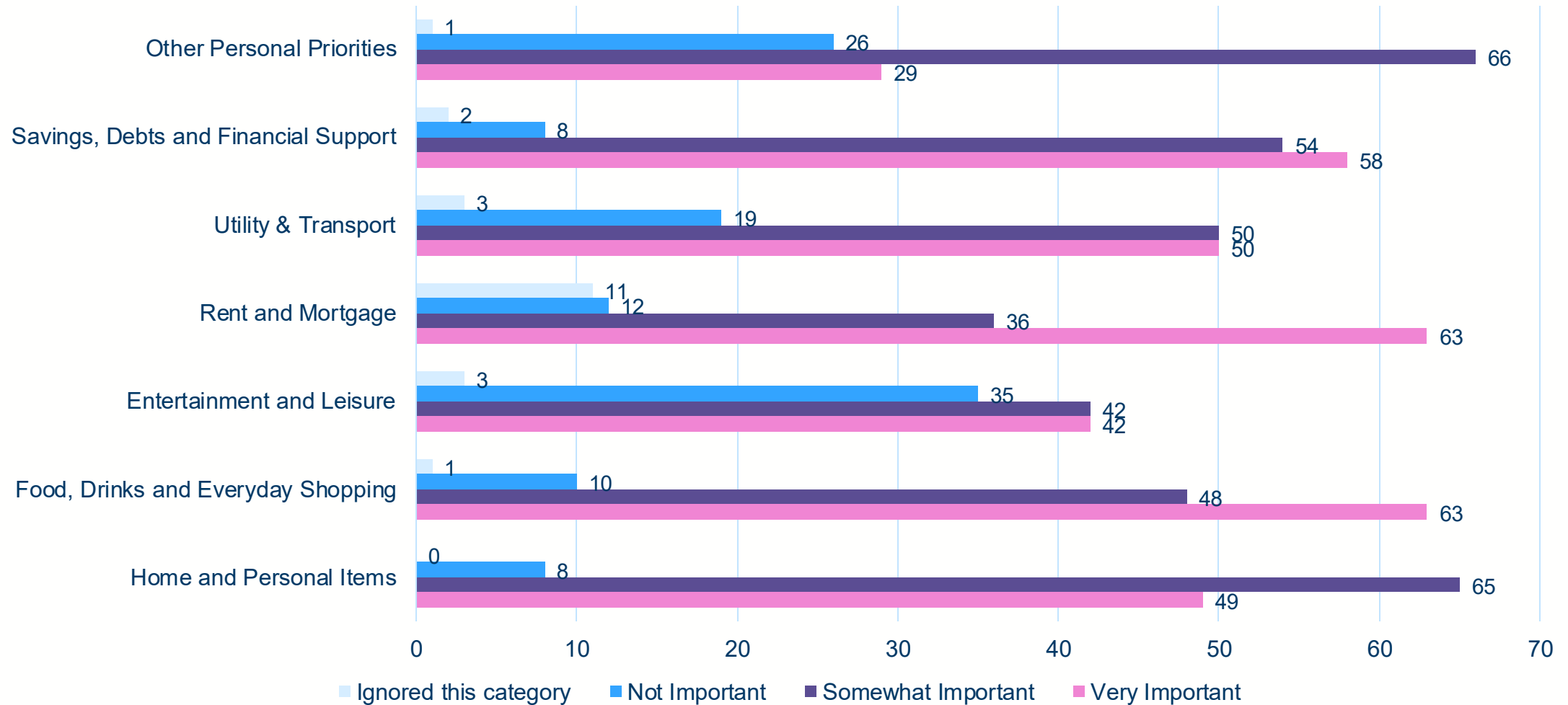


Stage 5: Main Stage (May 2025) n = 642

Online Panel Survey: respondent has gambled in the last four weeks, excluding lotteries and scratch cards aged 18 and over









Understanding Spending Patterns: Redistribution of £50






Understanding Spending Patterns: Redistribution of £50

	Spending Category	Coefficient	Robust SE	p-value	Significance
	Home & Personal Items	0.203	0.079	0.01	***
	Food & Everyday Shopping	0.218	0.089	0.015	**
	Entertainment & Leisure	0.137	0.085	0.106	
	Rent & Mortgage	0.139	0.089	0.121	
	Utility & Transport	0.18	0.091	0.047	**
	Savings & Financial Support	0.302	0.112	0.007	***



Understanding Spending Patterns: Redistribution of £50

Spending Category	Coefficient	Robust SE	p-value	Significance
 Home & Personal Items	0.203	0.079	0.01	***

People Split into Savers vs. Spenders

When asked how they'd reallocate a £50 reduction in gambling expenditure, respondents showed two distinct patterns:

- Some prioritised saving and financial support
- Others preferred spending on daily essentials like food, home & personal items and transport & utilities



Savings & Financial Support

0.302

0.112

0.007



Understanding Spending Patterns: Exploring the relationship between everyday expenditure and personal characteristics

Variable	Class1	Class2
Choice Parameters		
Home and Personal Items	-0.023 (0.131)	0.245*** (0.079)
Food, Drinks, and Everyday Shopping	0.352*** (0.117)	0.094 (0.086)
Entertainment and Leisure	0.104 (0.137)	0.210** (0.086)
Rent and Mortgage	0.542*** (0.162)	-0.155 (0.095)
Utility and Transport	-0.254 (0.160)	0.259*** (0.085)
Savings, Debts, and Financial Support	0.664*** (0.178)	0.038 (0.087)

Variable	Coefficient	Significance
Female	2.324*** (0.805)	***
Saving	1.042* (0.623)	*
PGSIsc	0.150* (0.085)	*
PGSIgrhi	-0.782 (1.206)	
Constant	-3.550** (1.521)	**



Understanding Spending Patterns: Exploring the relationship between everyday expenditure and personal characteristics

Two Spending Groups Identified

Class	Key Characteristics	Share
Class 1 (Budget-Conscious)	More focus on savings & debts, housing costs, and food, drinks & everyday	42%
Class 2 (Routine Spenders)	Prioritise entertainment, utility & transport, and home & personal items	58%

- Women and those with savings are more likely to be in Class 1
- PGSI scores (continuous variable) had only a weak and slightly-significant effect on membership
- PGSI score by split (8 or above versus 7 or less) had no effect on spending choices



How People Trade Between Spending Categories: “If I spend more X, what will I cut back on?”

	Home	Food	Entertain.	Rent	Utility	Saving
Home	-	-0.93	-1.48	-1.46	-1.13	-0.67
Food	-1.07	-	-1.59	-1.57	-1.21	-0.72
Entertain.	-0.68	-0.63	-	-0.99	-0.76	-0.45
Rent	-0.69	-0.64	-1.02	-	-0.77	-0.46
Utility	-0.89	-0.83	-1.31	-1.30	-	-0.60
Saving	-1.49	-1.39	-2.20	-2.17	-1.68	-



How People Trade Between Spending Categories: “If I spend more X, what will I cut back on?”

People are willing to **give up £1.48 in entertainment** to keep £1 in home and personal items.

This means **home & personal related items are valued more than entertainment** by these respondents.

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How People Trade Between Spending Categories: “If I spend more X, what will I cut back on?”

To keep £1 in savings, people are willing to give up:

- £2.20 in entertainment
- £2.17 in rent and mortgage
- £1.68 in utility/transport

So **saving and paying down debt is highly valued**, especially compared to discretionary spending.

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How People Trade Between Spending Categories: “If I spend more X, what will I cut back on?”

Why It Matters

Shows what people really prioritise when under financial pressure.

Savings, debts and financial support are “must-keep” areas.

Entertainment more “negotiable”

Important for understanding how people manage financial scarcity

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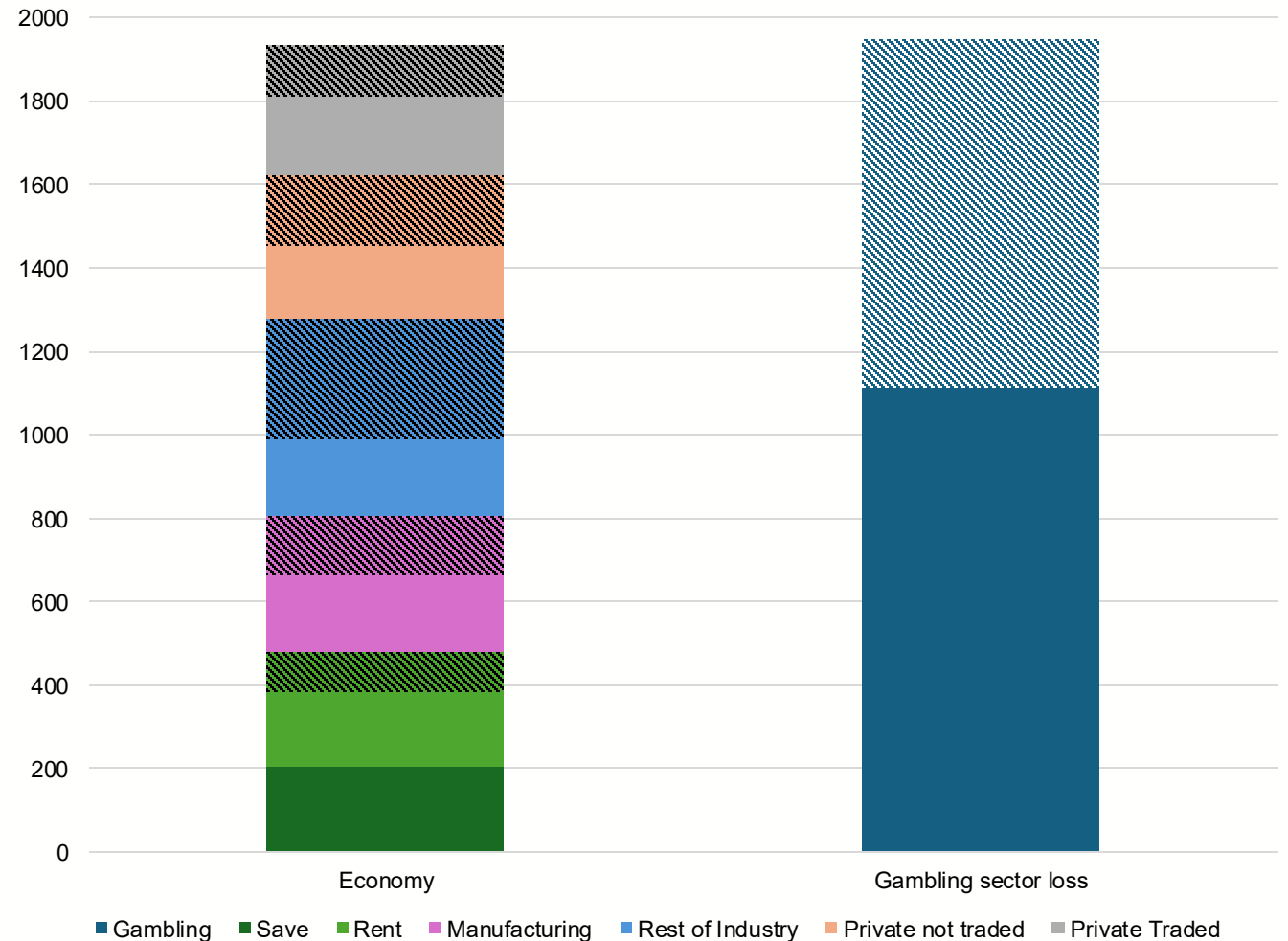


Implications: Modelling the Economic Impact of Reduced Gambling Spend

Left column → spending redistributed across sectors (rent, savings, manufacturing) based on choices people made in our surveys.

Right column → current size of gambling losses in the economy.

If money moves from gambling sector to other sectors with stronger economic multipliers (like manufacturing), the overall economic impact could be positive.





Unlicensed Spend

A Reminder of What We Did

- Included two choice cards with an unlicensed gambling site option
- Aim: Test if participants would select an unlicensed outlet for their full £50 expenditure

Pilot Results

- 8.2% chose the unlicensed option on both cards
- 14.75% chose it on the first card, 15.57% on the second

Current Unlicensed Use

- Despite high PGSI scores within sample - only 2.46% reported using unlicensed websites
- Only 8.2% consistently chose unlicensed options

Implication: Even those with higher PGSI scores show limited use of unlicensed operators

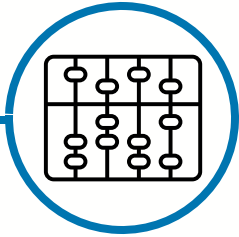


Implications

- **Two distinct spending profiles** emerged—**budget-conscious** vs. **routine spenders**
- People show strong preferences for **savings, home & personal items, and utilities & transport**
- **PGSI gambling severity scores do *not* predict spending group membership**
- Despite high PGSI levels, **actual and hypothetical use of unlicensed sites was very low**

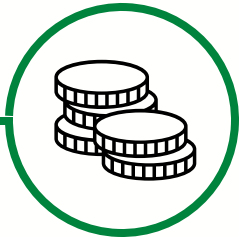


Timeline and Next Steps



DCE Main Stage Data Collection now complete (n = 642)

- Analysis ongoing (results expected mid-August)
 - More detailed analysis of unlicensed market and gambling behaviour effects
 - Exploration of new predictors (e.g., wellbeing)



Translation into the Macro-Economic Model (August 2025) results expected end September 2025.



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