

# **Money Matters**

## **(Behavioral economics of cash payments, and how to influence the choice of payment)**

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# What is Money?

- It is a medium of exchange (a mode of payment)
- It is a store of value (something that appreciates)
- It is a unit of account (e.g., a price)
- It can be a currency
- It can be objectively and subjectively valued
- It can be physical or digital
- It can be paid or received (or stored or spent)



Caputs: Origin of “Capital”



Cowrie Shells



Coins

# Money differs in Form and Function

Currency



Material



Color



Size



Physical/  
Virtual form



Fungibility



Images



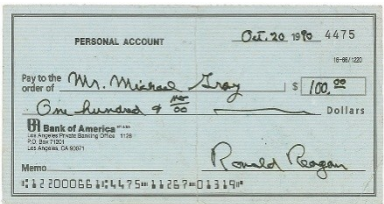
Time



Denominations



Shape



**And, the Principle of Descriptive Invariance says  
that this should not affect how people spend**

But, that assumption has been questioned in the past, and continues to  
be questioned.

# Research Question 1:

Does the **currency** used affect consumers' spending intentions?



- Studies 2-6 used a tourist souvenir shopping scenario (n's = 96, 81, 123, 76 & 58)
- In Bahrain/ Malaysia/ US (\$1 = 4 Malaysian ringgit = .4 Bahraini dinar)
- DV: PWP (and # choices) for ties and scarves
- Robust to:
  - Exchange rate framing (Study 3)
  - Currency types (Study 4: In HK with Indian Rs/ US\$/ Chinese Yuan)

Raghubir and Srivastava, *JCR*, 2002

#### Appendix 1: Stimuli used in Study 4

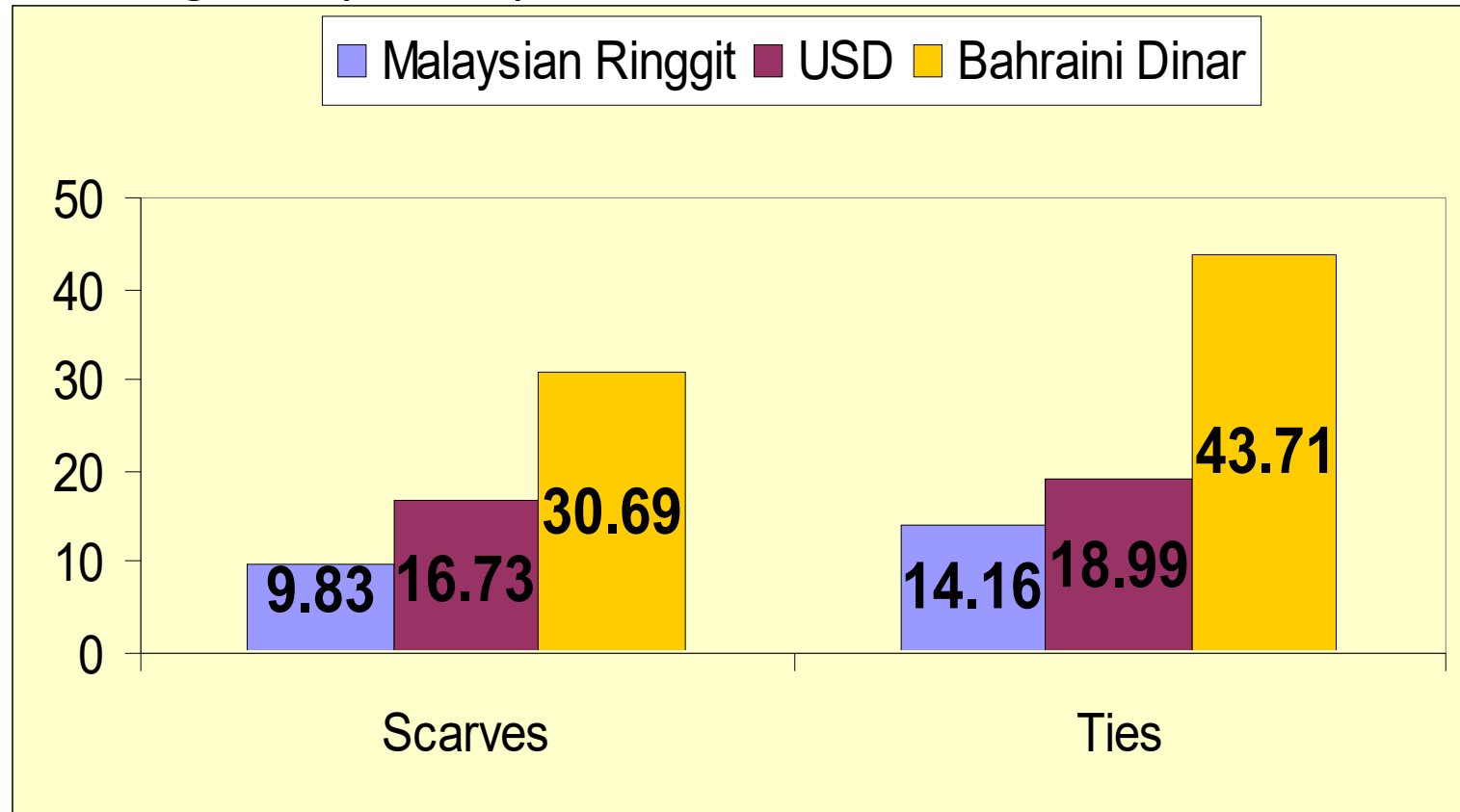
Each scarf is 100% fine silk twill (14mm weight). Scarves are 90cm square (35.4 inches).



These knock-out ties are truly among the finest available anywhere, at any price. Each tie is 100% fine silk twill (14mm weight).



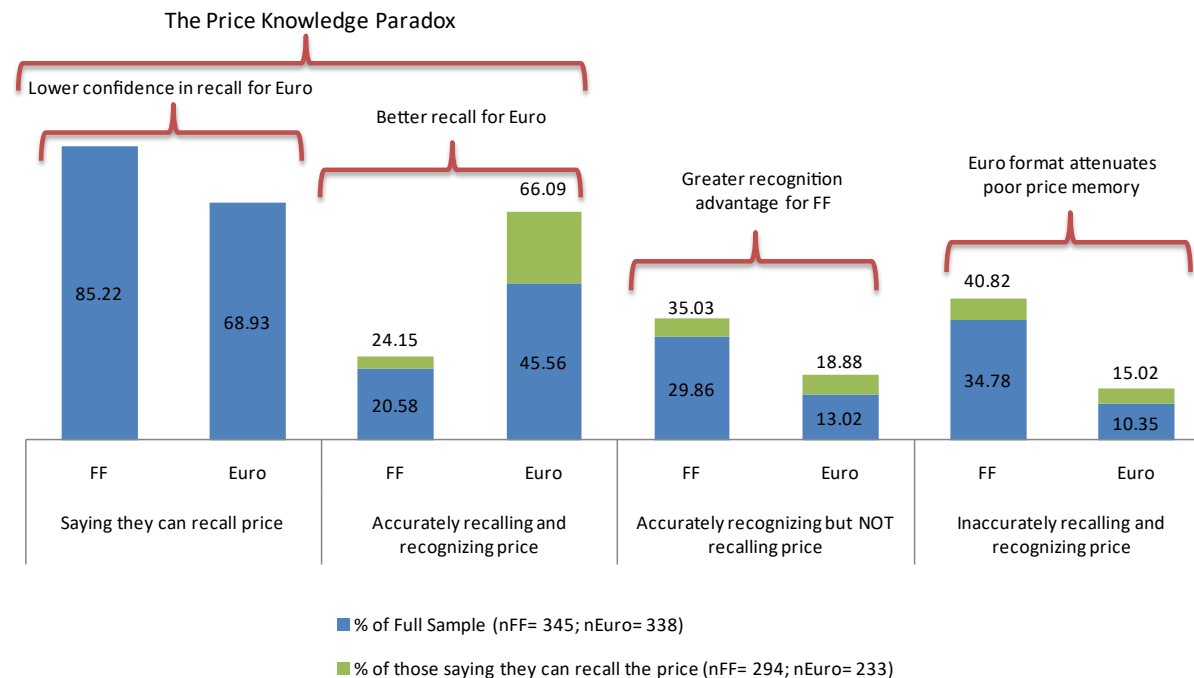
Local versus Foreign Currencies: The face value effect – People under-(over-) spend in a currency with a higher (lower) face value



Raghubir and Srivastava, *JCR*, 2002

# Euro effects within the country: The Price Knowledge Paradox

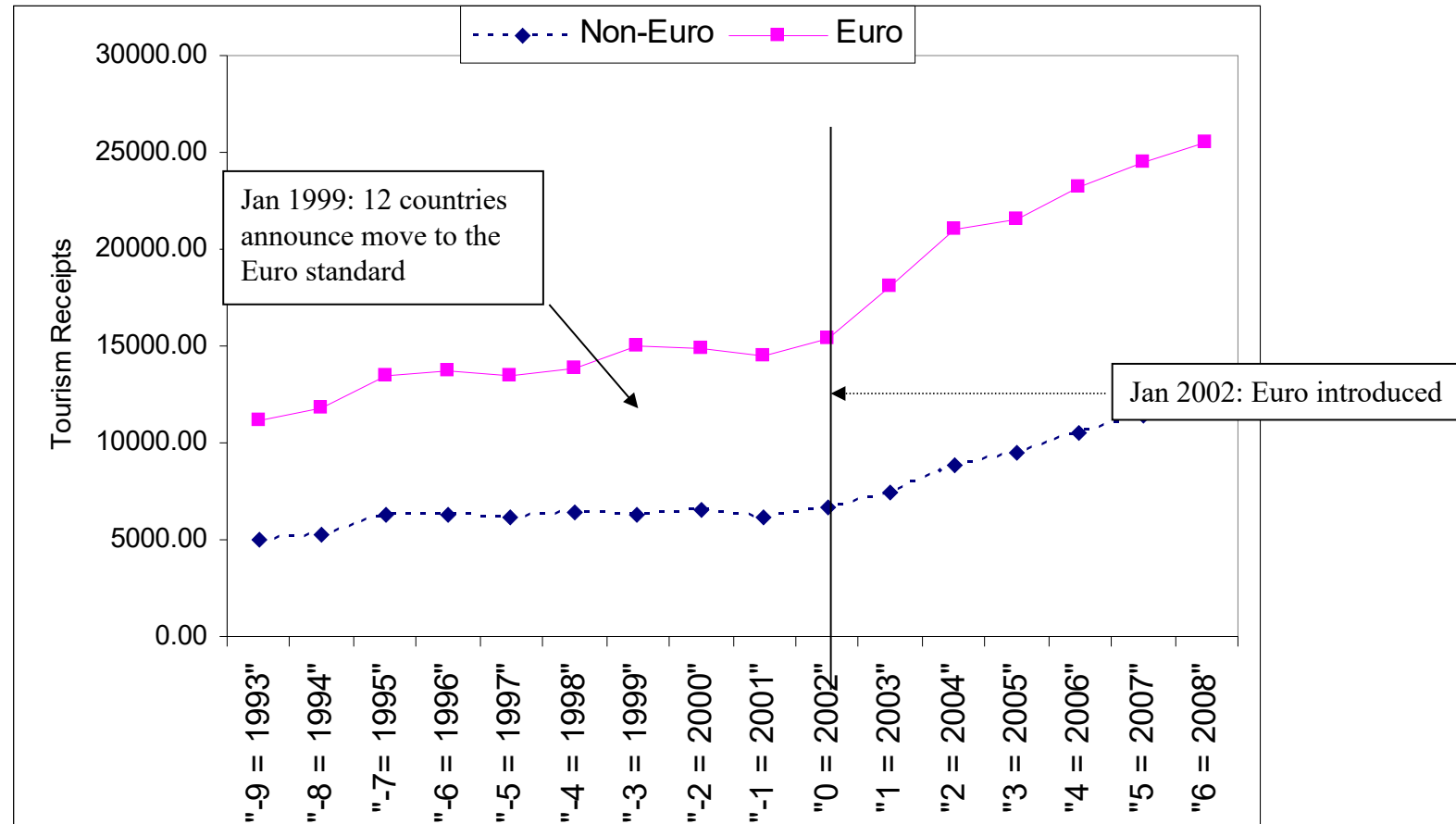
- n = 683 French shoppers, 6 months < Euro intro
- Price (€/ FF); Recall, recognition, attitudes, demographic



Gaston-Breton and Raghubir, *CNS*, 2014



# Change in local currency: Effect of moving to the Euro on tourist spending



Raghubir, Morwitz, and Santana, Europoly Money, JR, 2012

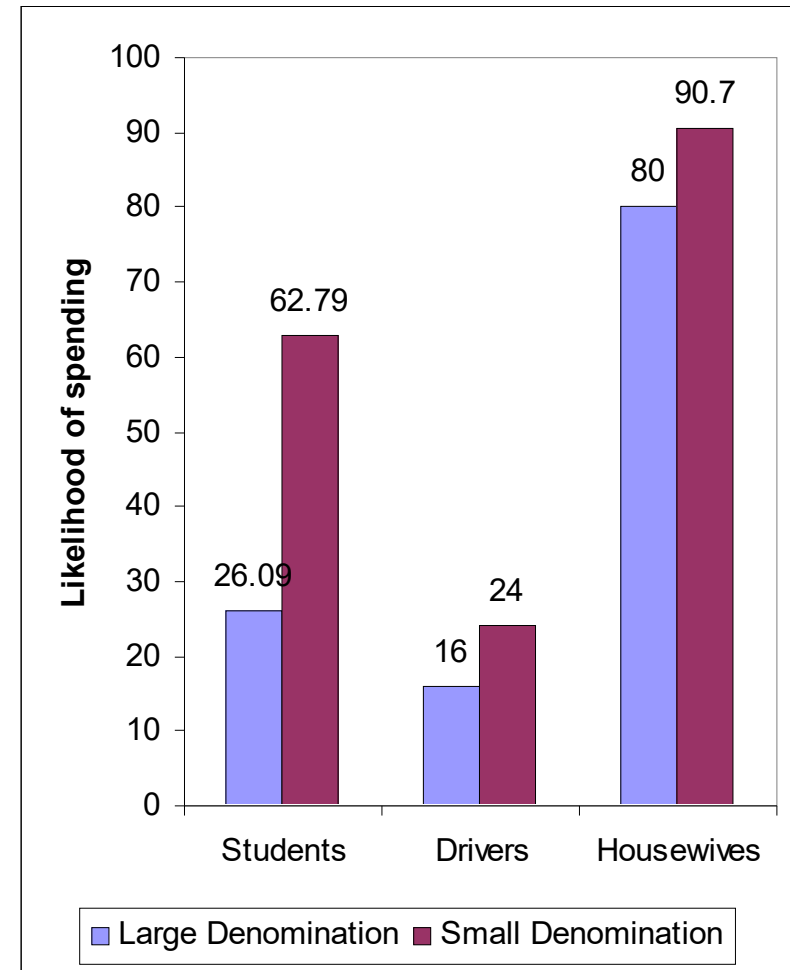
## Research Question 2:

Does the **denomination** of currencies affect consumers' spending intentions?

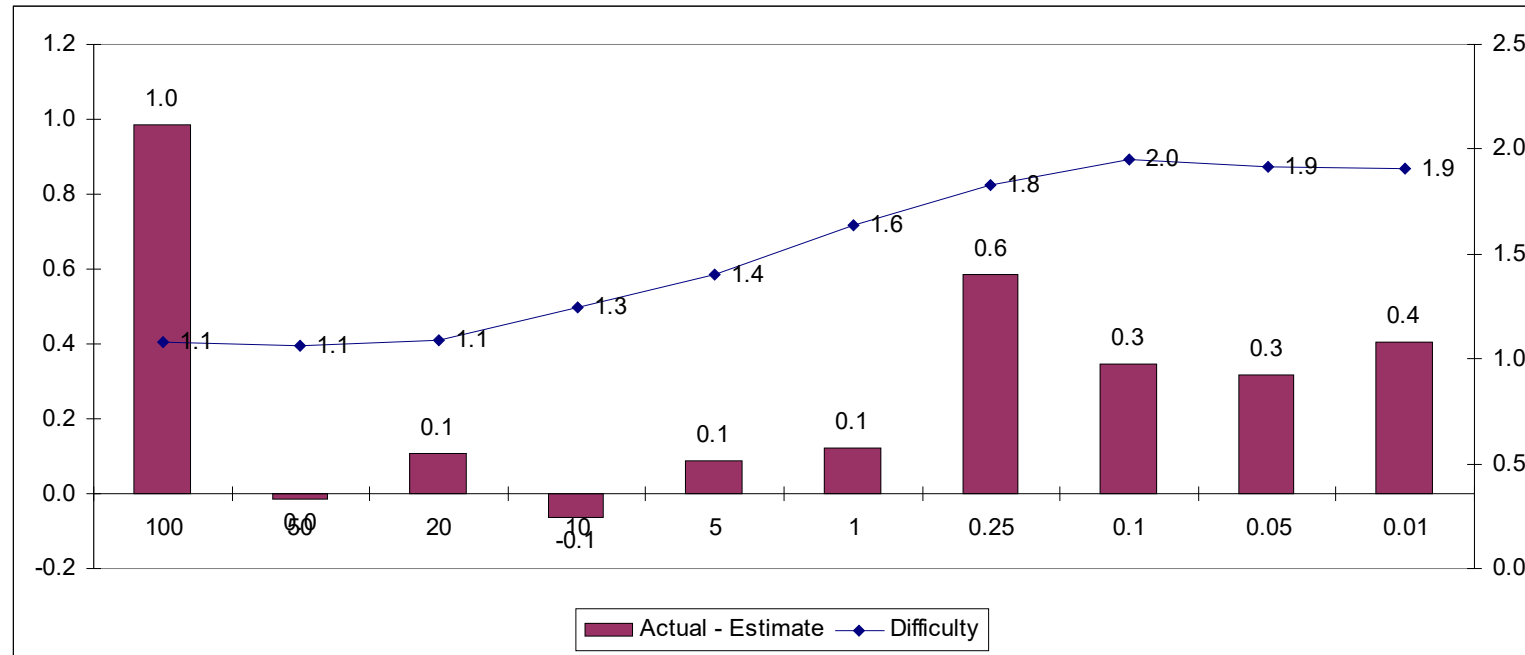
# Denominations of cash: Larger denominations are less likely to be spent

- Study 1
  - 89 students given \$1 or 4x\$.25; candy purchase measured
  - 75 drivers in Omaha given \$5 or 5x\$1 (coins/ notes); purchase on non-gas items at convenience store measured
  - 150 women in Xiang Tan China given RMB 100 (note/ change = a week's salary); purchase of soap, shampoo, bedding, utensils.

Raghubir and Srivastava, *JCR*, 2009



# Larger denominations are easier to track and more accurately recalled



- “Wallet” studies: Participants recalled currency in wallet and then counted it.
- Smaller denominations (especially coins) underestimated and perceived to be more difficult to recall
- Examined the accuracy and ease of recalling money of different denominations

Raghubir, Capizzani, and Srivastava, *JACR*, 2017

# Research Question 3:

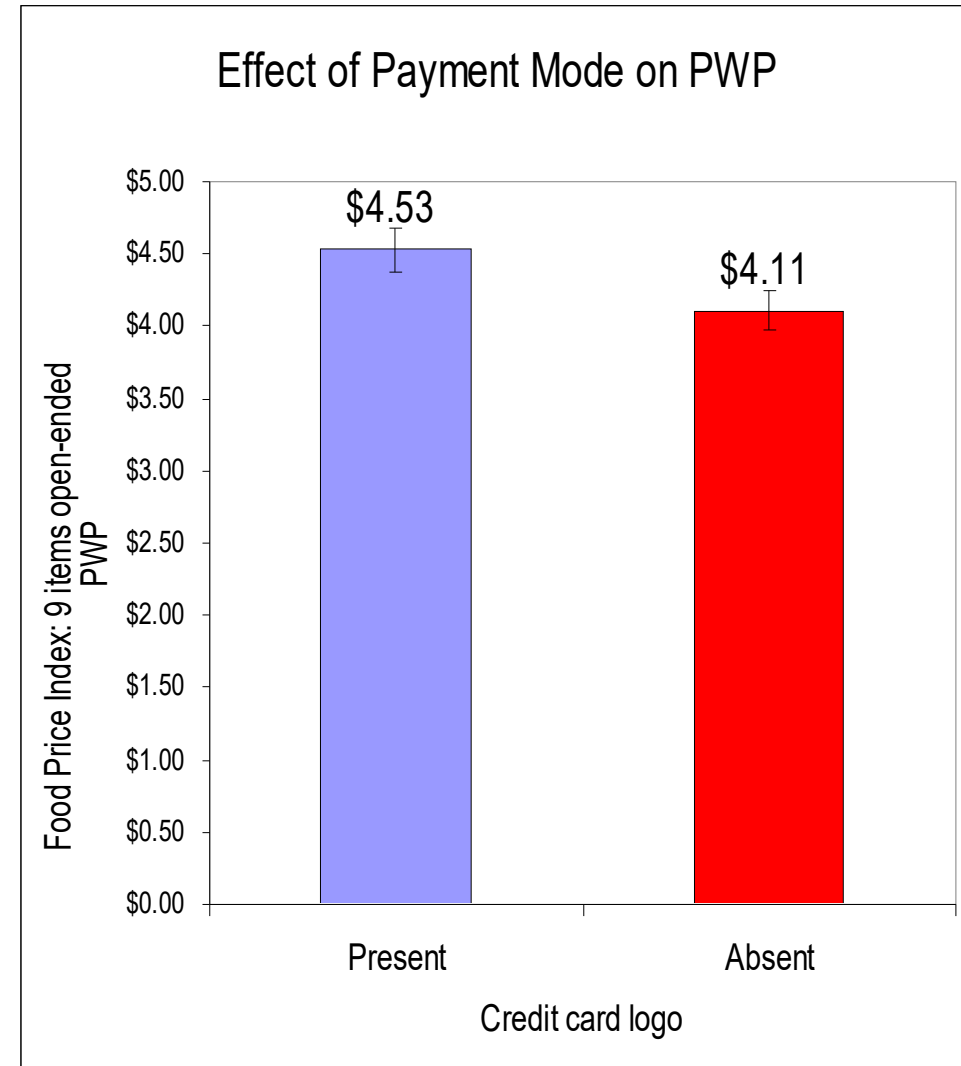
Does the “**monopoly form**” of a source of payment affect spending intentions?

- Original Studies
- Studies on Loyalty Currency
- Second Order Effects
- Virtual Currencies

# Credit cards encourage spending

- N = 114 undergrads
- 2 (credit card logo: absent/present) x 2 (replicate: lunch/dinner)
- DV: Price Willing to Pay (PWP) for 9 menu items ( $\alpha = .84$ ) for a fictitious new restaurant
- On average 10% higher when a credit card logo is present.

Raghubir and Srivastava, *JEP-A*, 2008

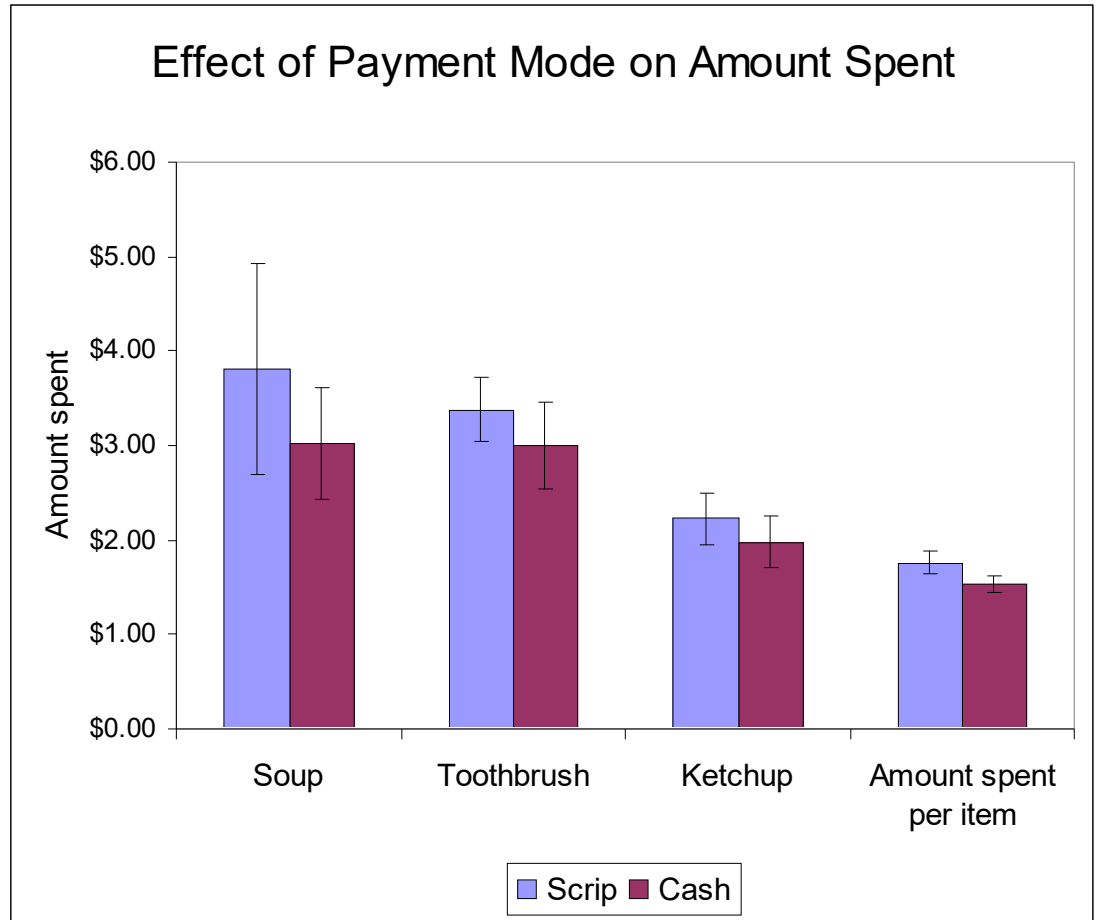




# People spend about 15% more using gift certificates

- 28 students
- Given \$50 as cash or scrip along with a shopping list for three items expected to cost < \$20 overall
- List had the following options:
  - 35 toothbrush (\$1.99-\$89.99),
  - 34 canned soup (\$0.69-\$1.19),
  - 9 ketchup (\$1.39-\$4.29)
- Choice of items measured

Raghubir and Srivastava, *JEP-A*, 2008

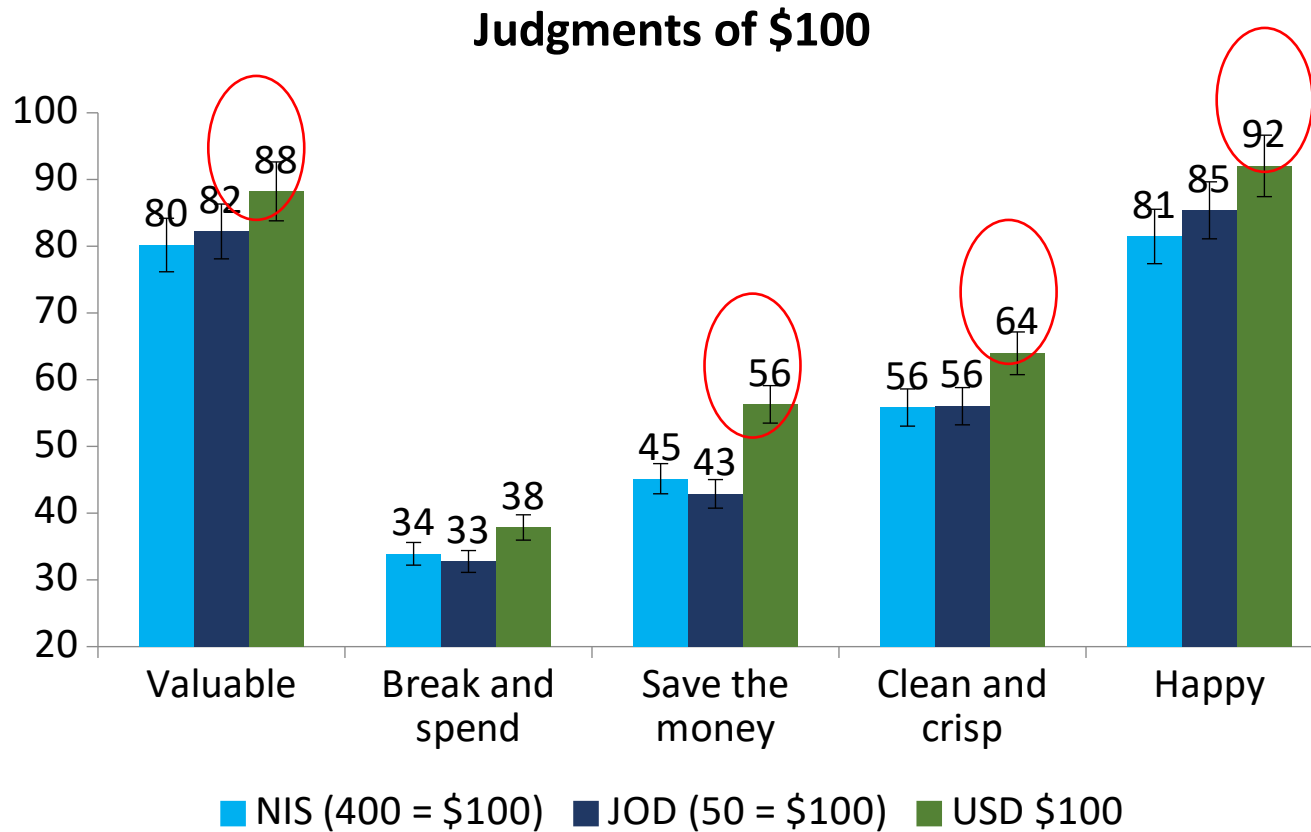


I also examine the second order effects of currencies:

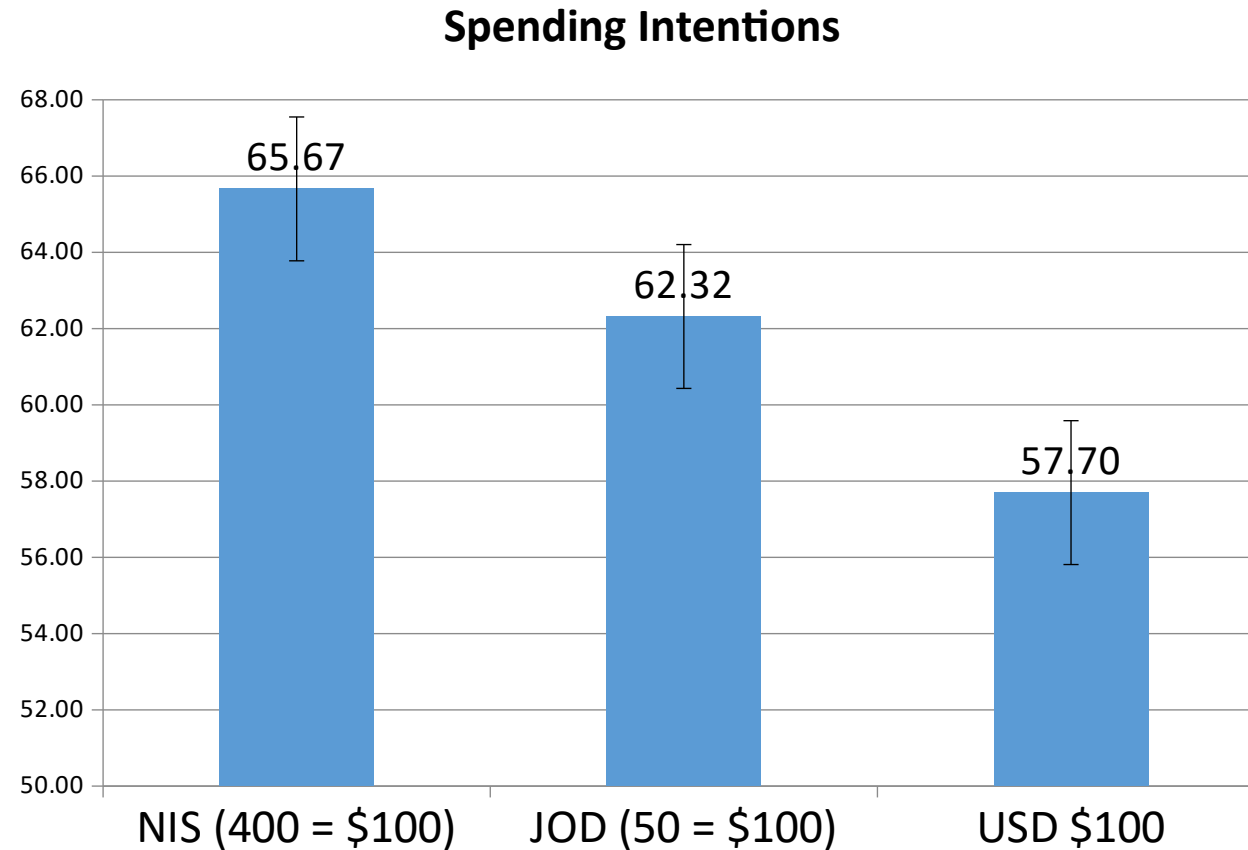
Does the subjective value of a currency include judgments of not just its **current form**, but judgments of its **source**: that is, the form it was converted from?

I term this the “Malleable Monopoly Money” Effect

# A \$100 by another source is not the same

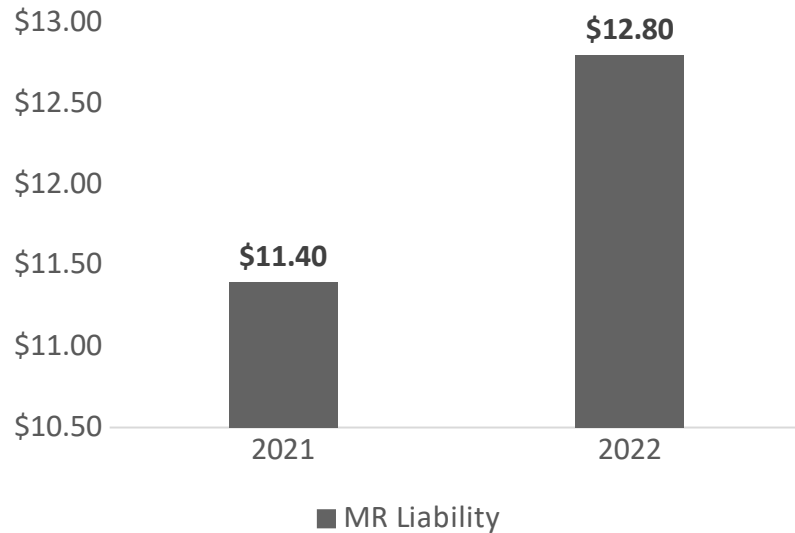


# More of a US\$100 is more likely to be spent when it is converted from a foreign currency



This also affects Loyalty Currencies

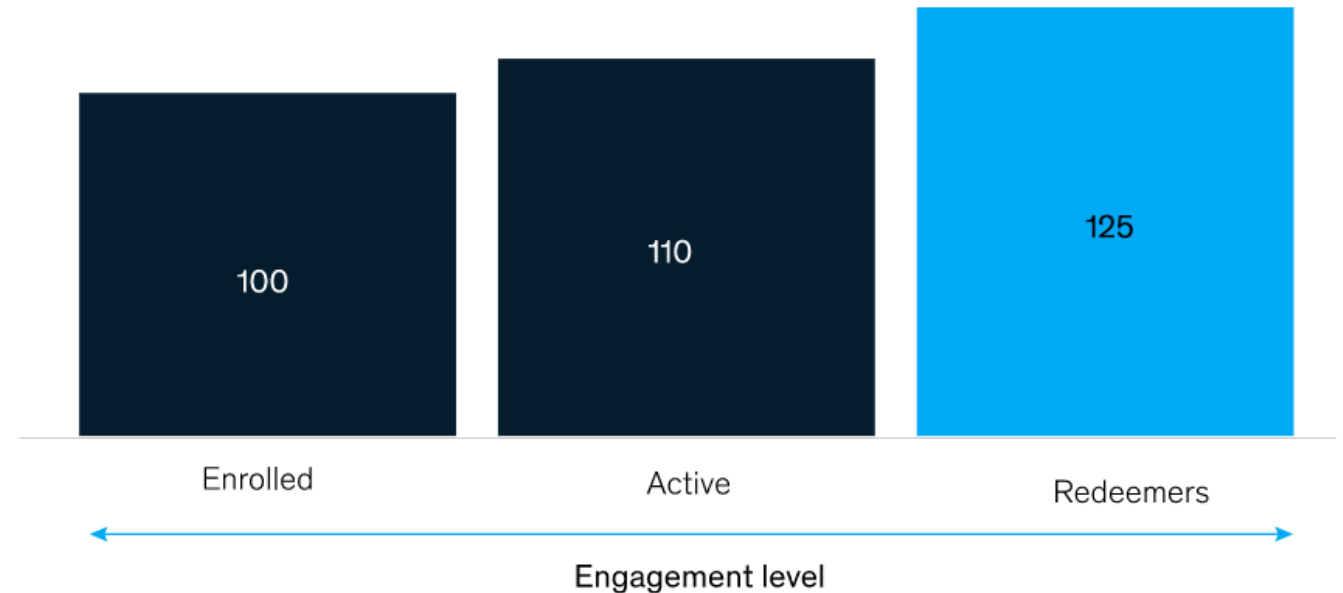
## Membership Rewards Liability (billions)



Consumers Loyalty Reward Balances and membership have grown significantly; but over 1/4<sup>th</sup> don't redeem their rewards. Companies could devalue these balances leading to consumer losses, or encourage redemption, which will increase customer revenue.

**Redeemers can unlock disproportional sales.**

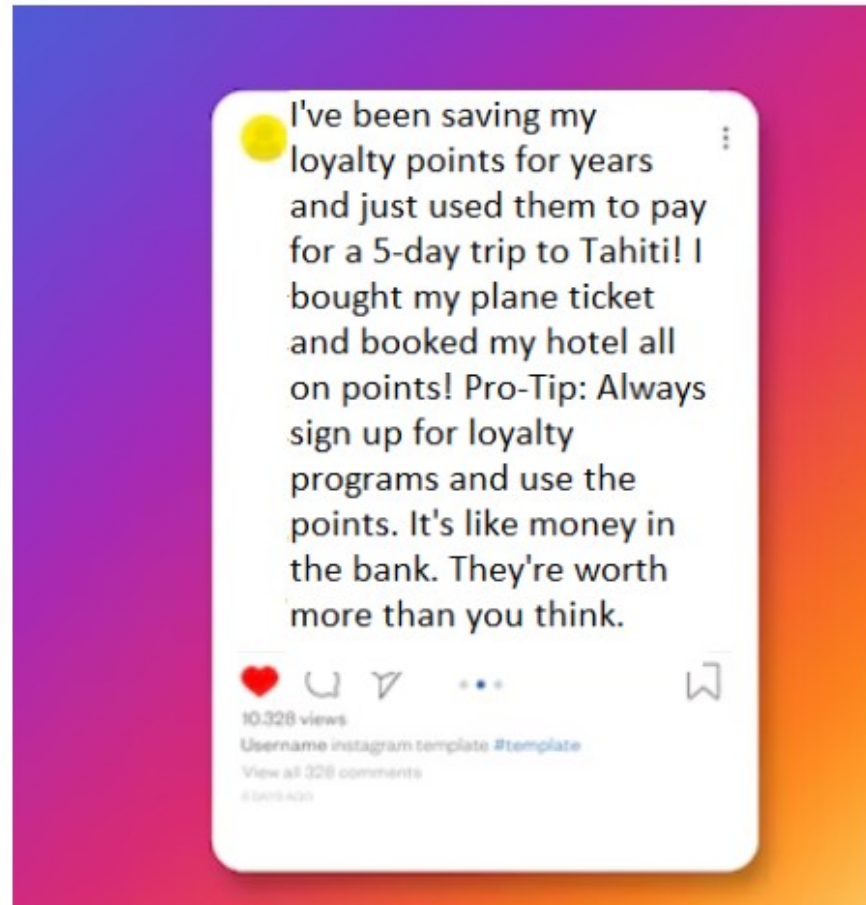
Customer revenue per engagement level, indexed





# Study 4: Tahiti

As you continue to scroll, you come across the following Instagram post:



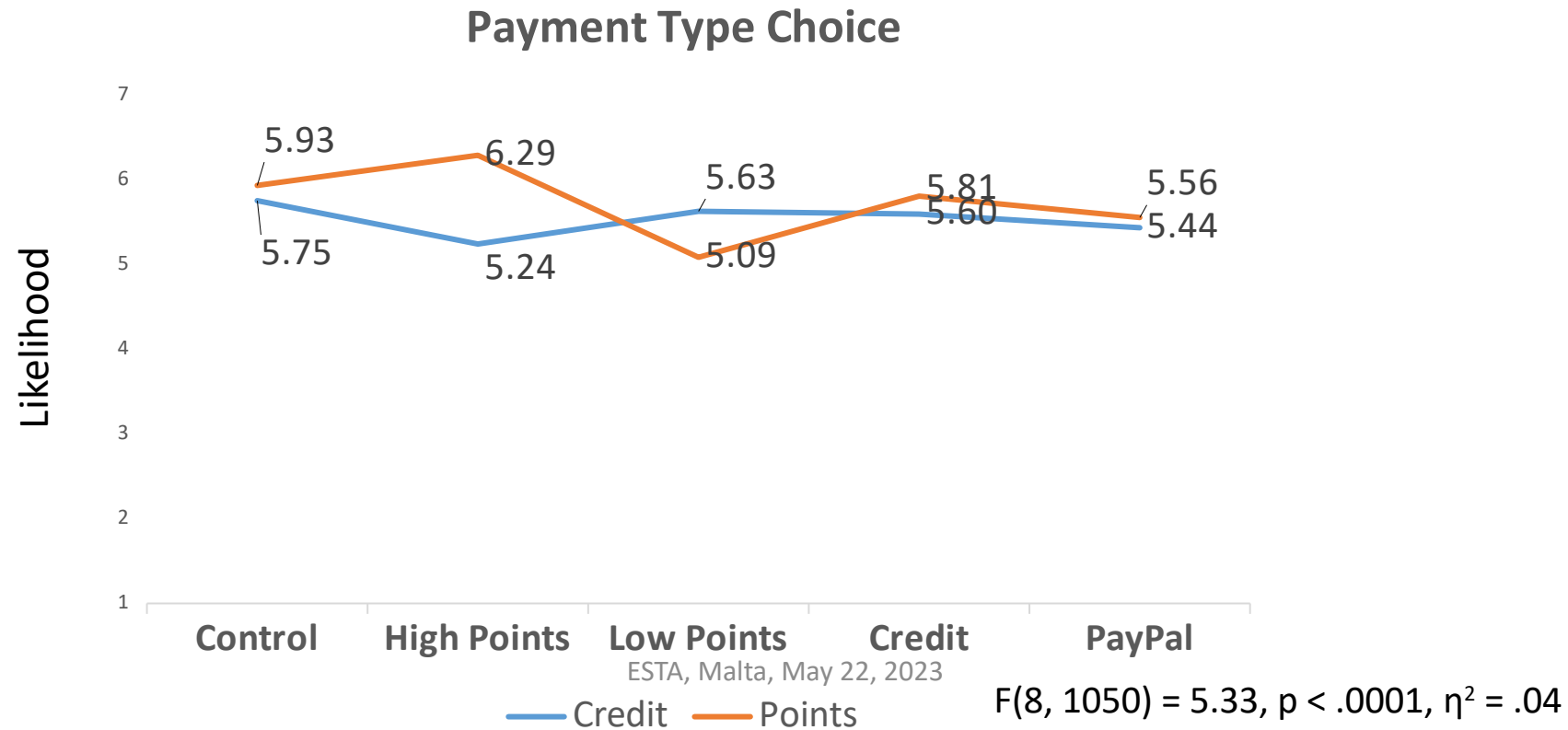
N = 532 Cloud Research Connect participants



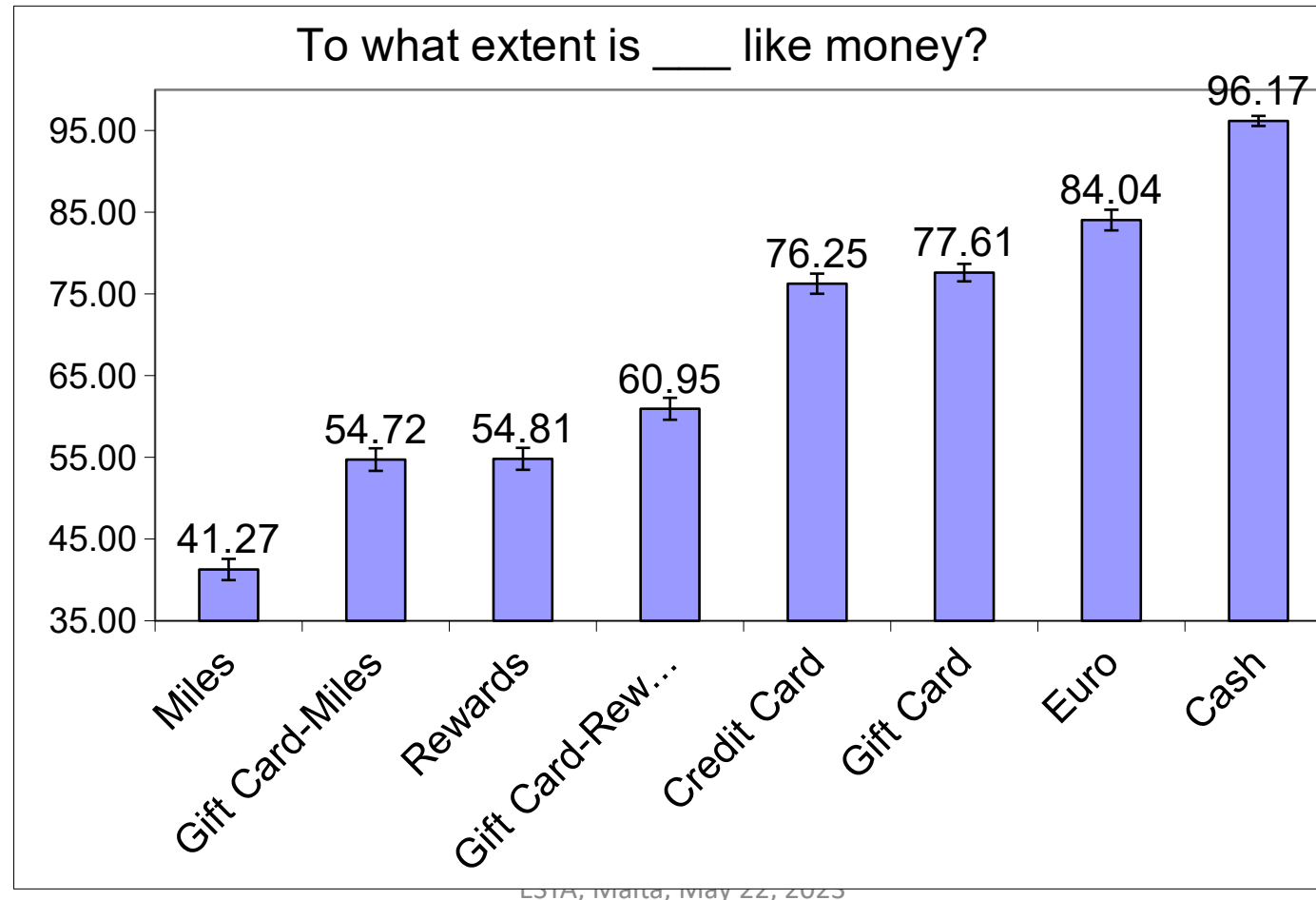
## Engagement by Payment Type

**You decide to book your Tahiti vacation for a few weeks from now.** You pick out a flight and a great hotel on the same website. At the end of the reservation process, you have to decide how you are going to pay.

**Please choose how likely you are to pay using each of the following at check-out,** assuming you have adequate balances/ credit limits in each for the entire vacation:



- a. Miles and Rewards are more valuable when converted to their gift card equivalents
- b. Gift cards are less valuable when purchased with miles or points

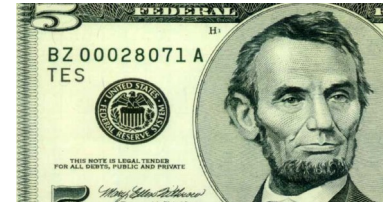


# People are willing to spend more with gift cards purchased with more monopoly forms of money

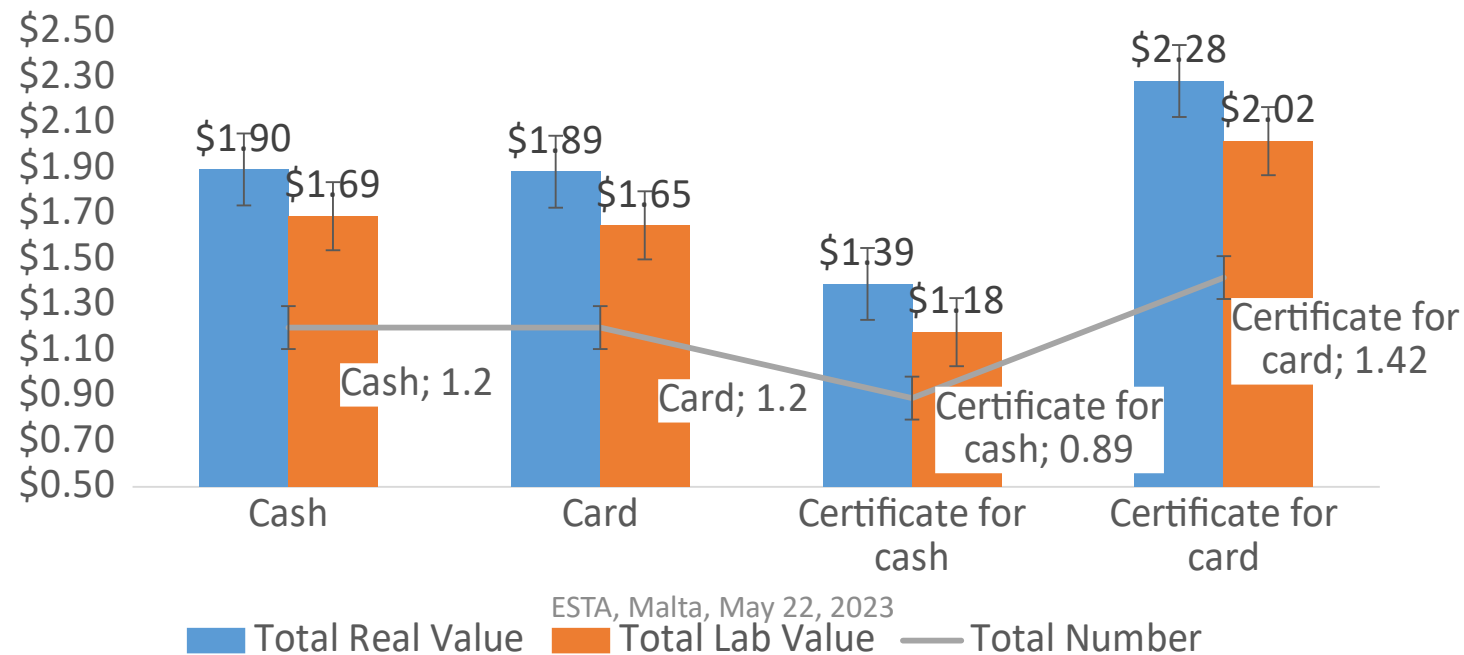


- 68.3% spent < \$50 in the cash condition versus (vs. 41% in the gift card purchased with cash condition, 23.8% in the gift card purchased with credit card points condition and 27.5% in the gift card purchased with airline miles condition.

And (in a follow-on study) affects their purchase behavior in the lab



Amount spent and Number of items Purchased



This is the tip of the iceberg as we  
have so many new currencies such as  
**Virtual Currencies**

Scheidegger, Gianluca and Priya Raghupir (2022),  
“Virtual Currencies: Different Schemes and Research  
Opportunities,” ***Marketing Letters***



## To Conclude: A Simple Summary of Effects

	Inadequate Adjustment	Inappropriate Adjustment
Strong Starting Anchor	Face Value Europoly Effects	Denomination Gift Certificates Loyalty Points Malleable Monopoly Money
Weaker starting anchor	Casino Tokens?	Credit Cards Under-confidence (€ vs. FF)