

# Global Patterns in Panel Research

*By*

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*Harvesting Quality Data...since 1979*


# Objectives

- **Compare Global and American panel patterns.**
- **Demonstrate trends in panel evolution.**
- **Illuminate how various problem respondents, through their impact on purchasing data, drive evolutionary changes.**
- **Clarify the issues that now confront the American Panels.**
- **Arrive at workable solutions---blending methodologies.**

# I can see clearly now!

- Compared survey results from 12 US Consumer Panels, 1 panel in each of twenty-five global markets. 400 completes per source. June 2008 - February 2009.

*We are grateful to our research partners for providing sample for the following global (non US) markets.*

-  17- global panels-Argentina, Brazil, Czech Republic, Denmark, Finland, France, Germany, Italy, Norway, Poland, Portugal, Russia, Spain, Sweden, Switzerland, UK, Ukraine

- *Clear Voice Research*-Australia, Canada

-  -China, Japan, South Korea, Singapore, Hong Kong, Taiwan

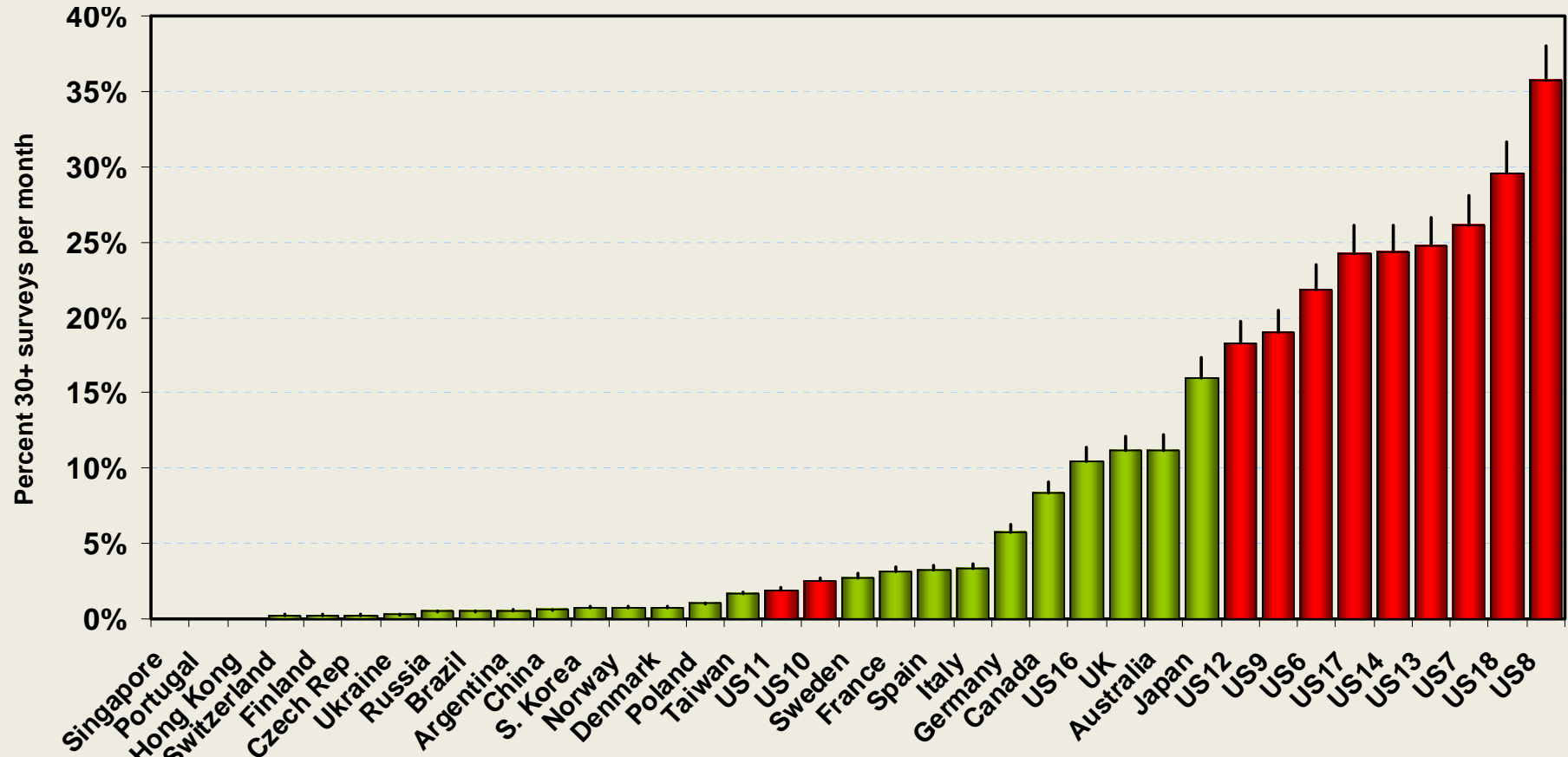
# Methods

- **Selected demographic quotas (age, income, gender, ethnicity) were used to simulate census.**
- **Median length was 15 minutes.**
- **Questions covered: Technology and the media, Participation in market research, Buyer Behavior, Values and lifestyle, Demographics, Questionnaire Satisfaction.**

# Respondent Types

- **Professional Respondents** fall into four categories:
  - (1) Self report taking on-line Surveys “practically every day”.
  - (2) Self report (open ended) taking over 30 online surveys “in the past month”.
  - (3) Multiple panel membership  $\geq 5$  panels.
  - (4) Respondent panel tenure.
- **Inconsistency:** Brand vs. Price, Price vs. Brand, Happy with standard of living vs. unhappy with standard of living.
- **Failure to follow instructions:** Instructed to enter a predetermined answer.
- **Speeders:** Lowest 10% of survey lengths.

# Percent Respondents Doing More than 30 Surveys/Month



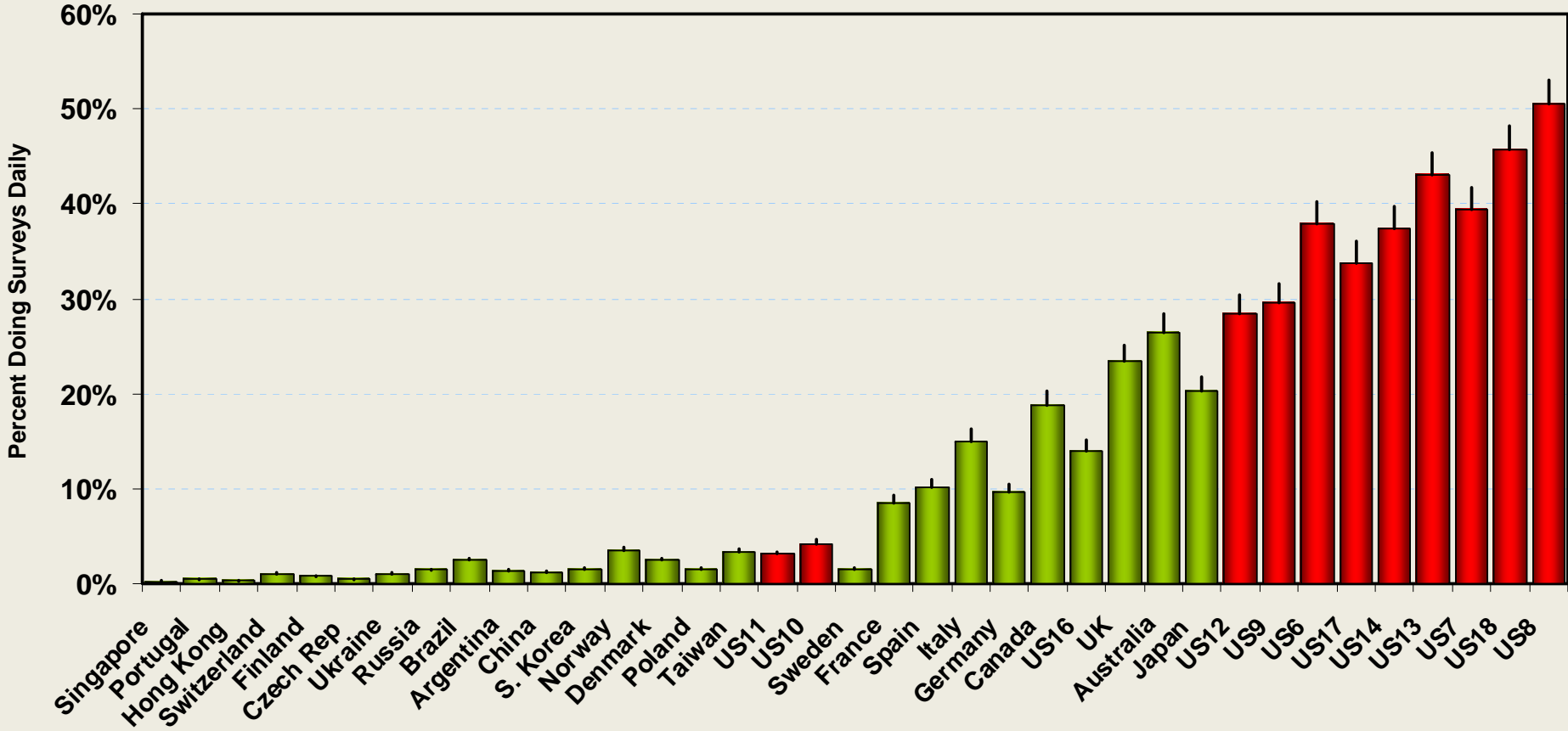
US11=River

US10= Social Network

Red = US Panels

Green = International Panels

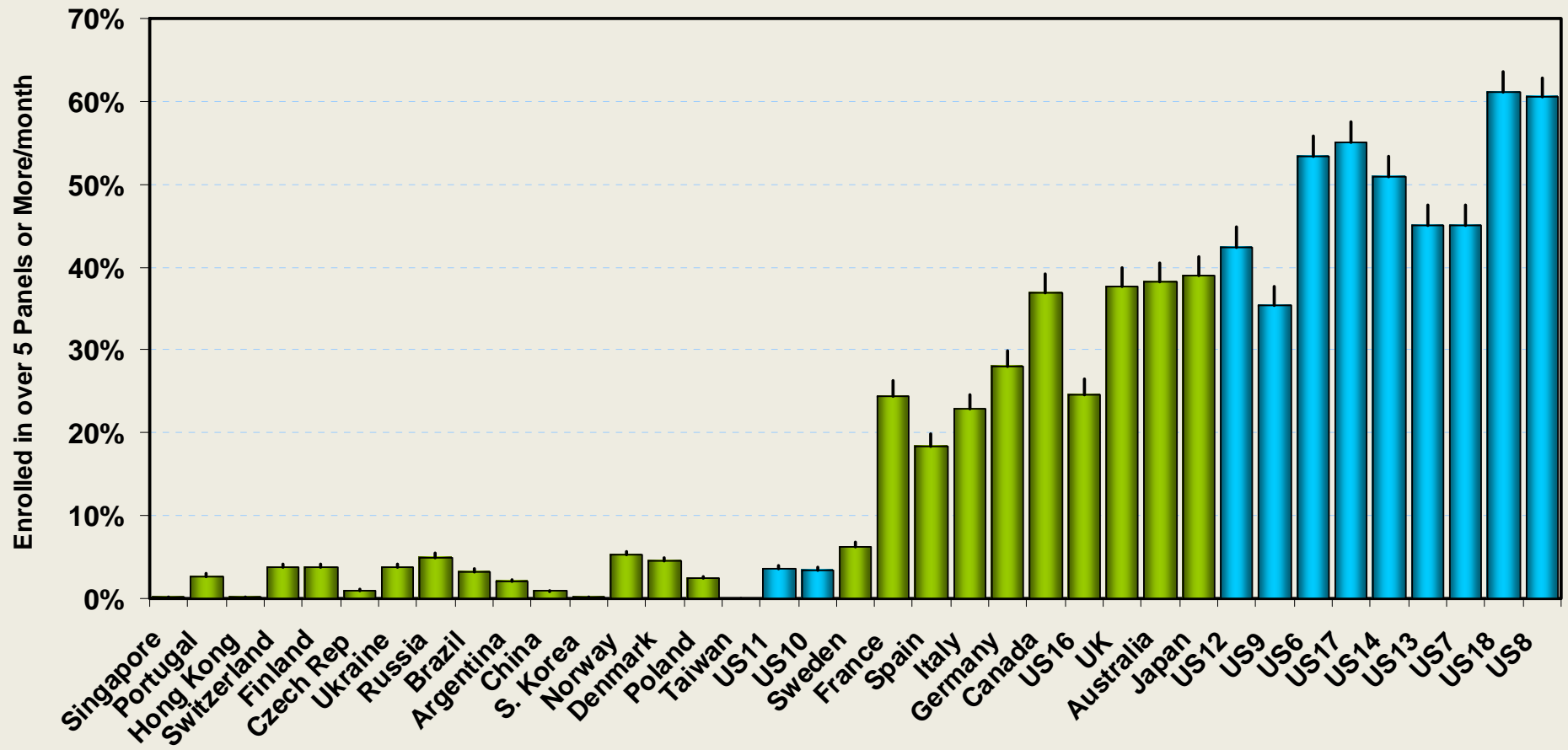
# Percent Respondents Doing Surveys Every Day



RED = US Panels

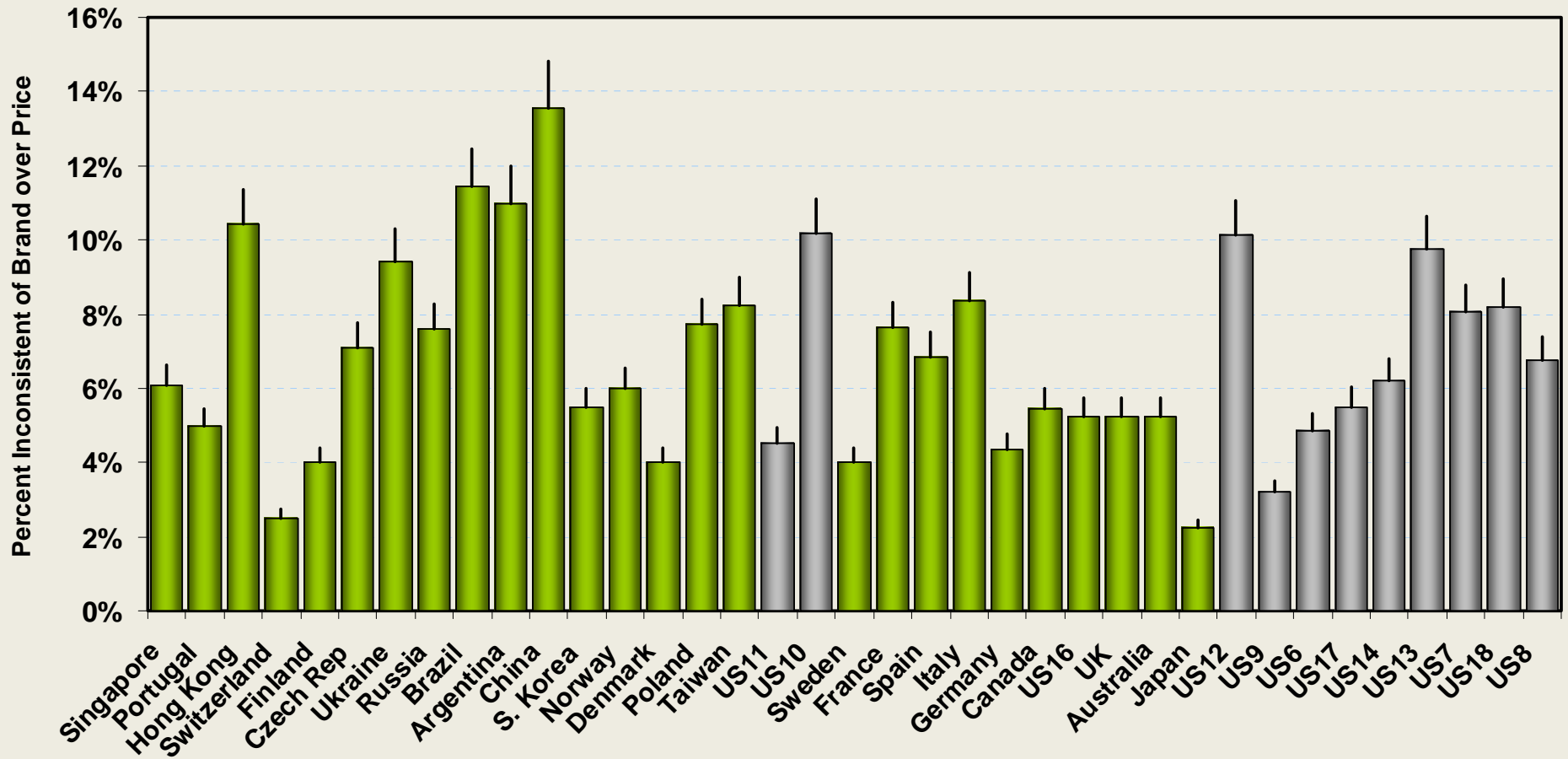
Green = International Panels

# Percent Respondents Enrolled in > 4 Panels

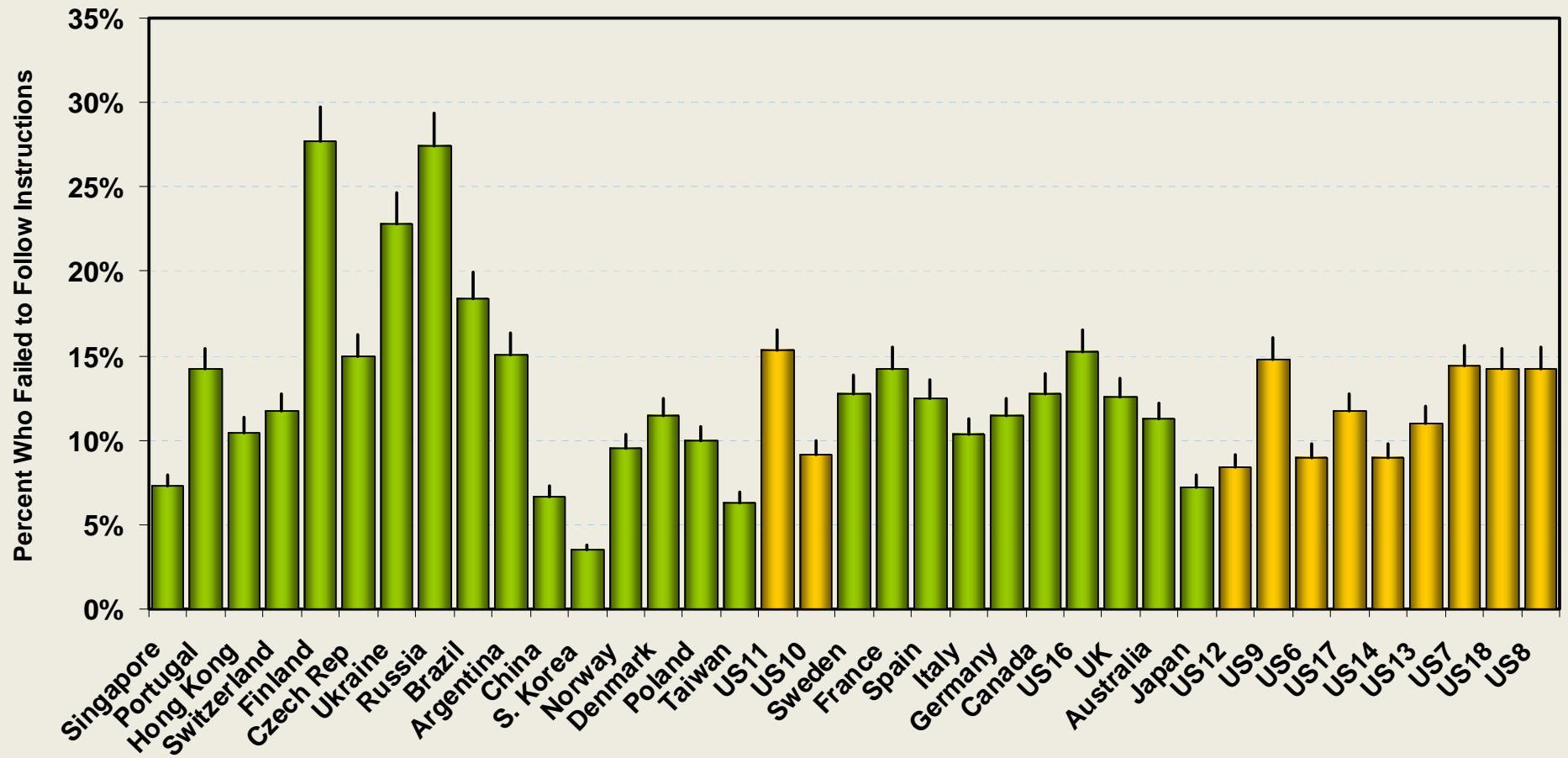




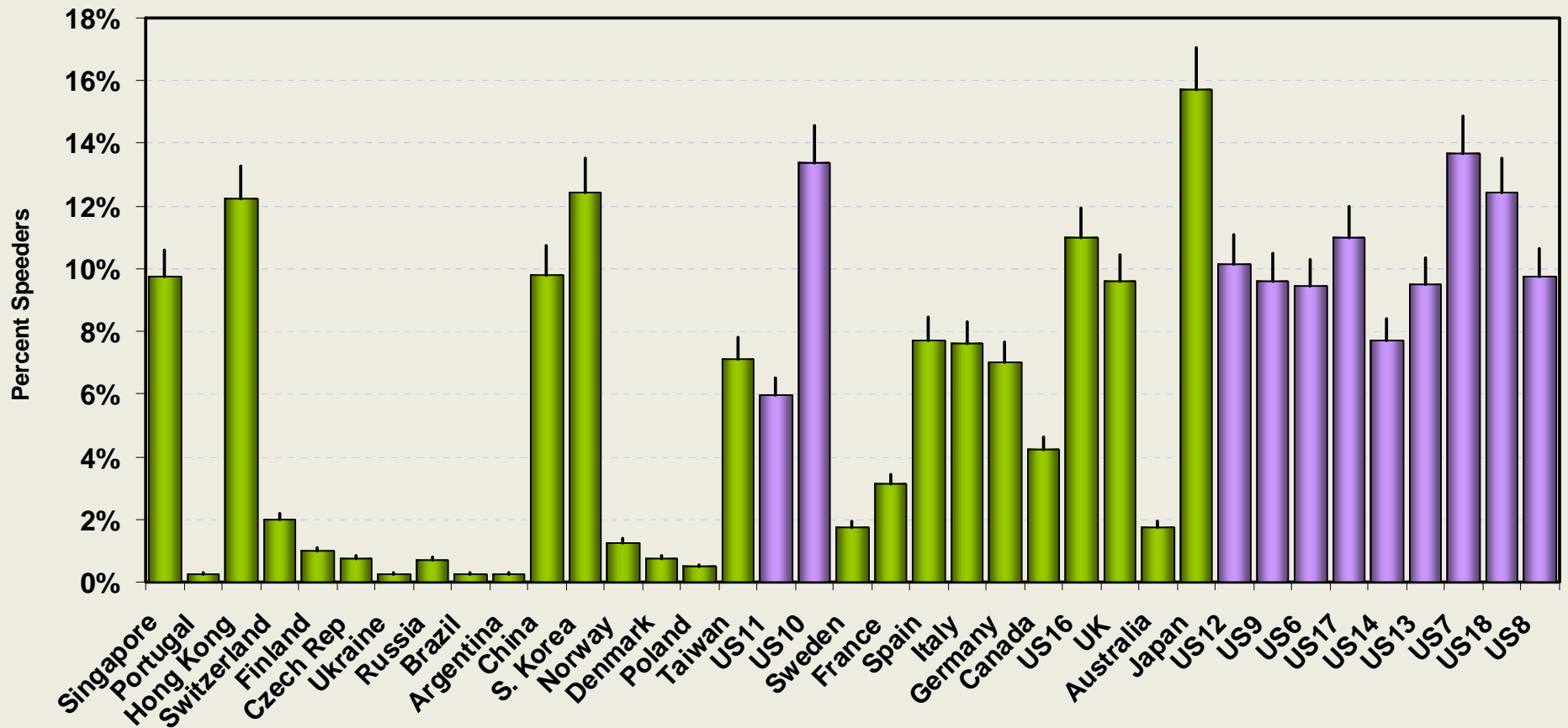
# Percent Respondents Who had an Inconsistent Brand Over Price Response



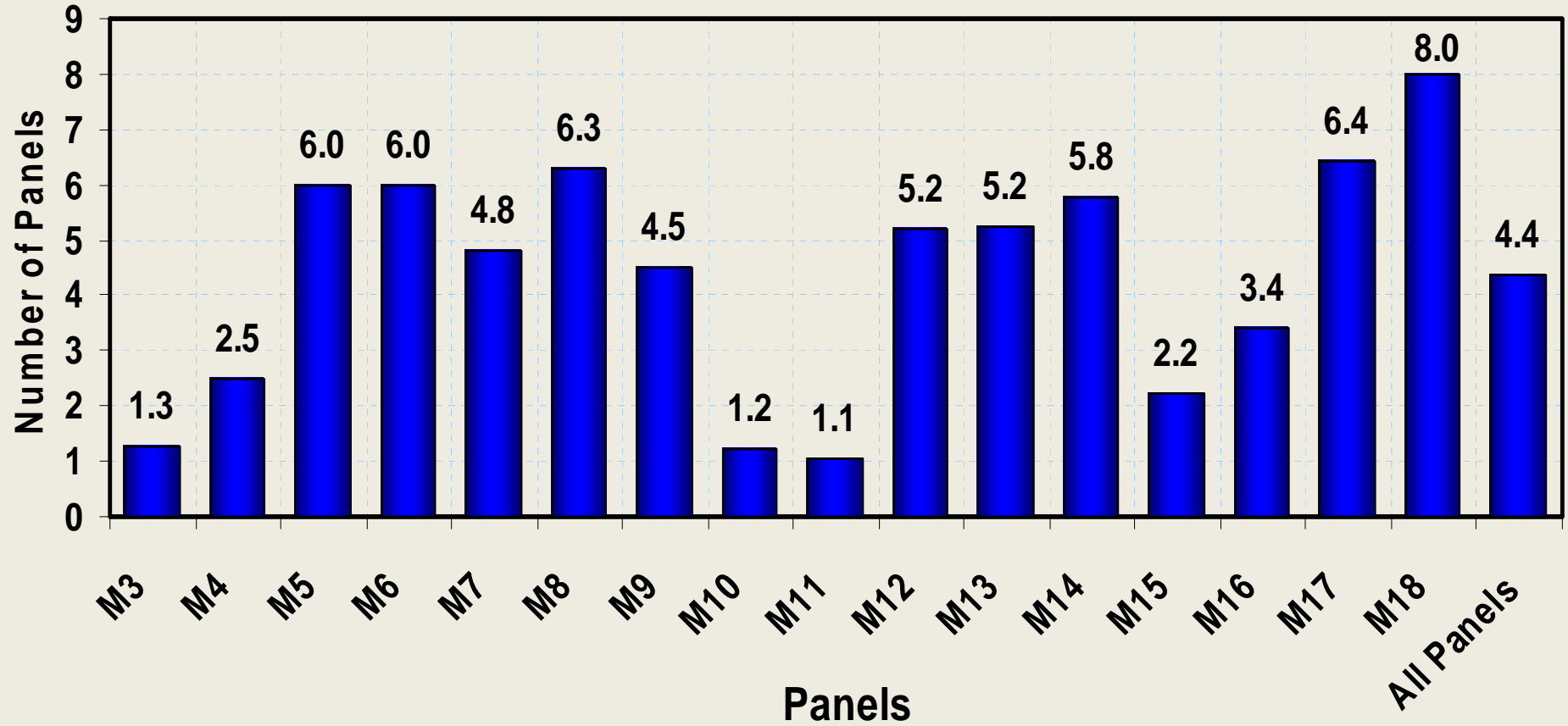
# Percent Respondents Who Failed to Follow Instructions by Panel



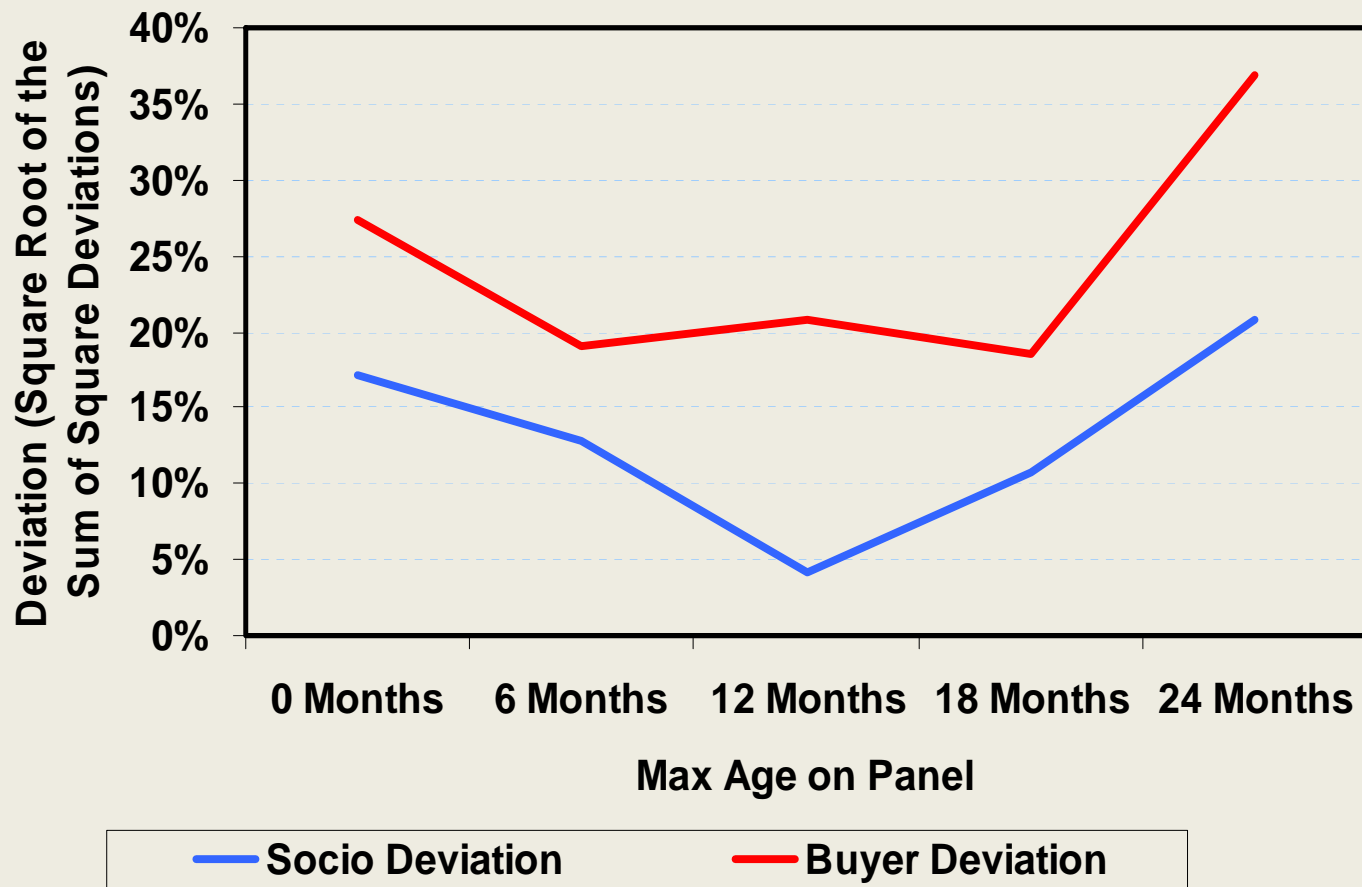
# Percent Respondents Who are Speeders by Panel



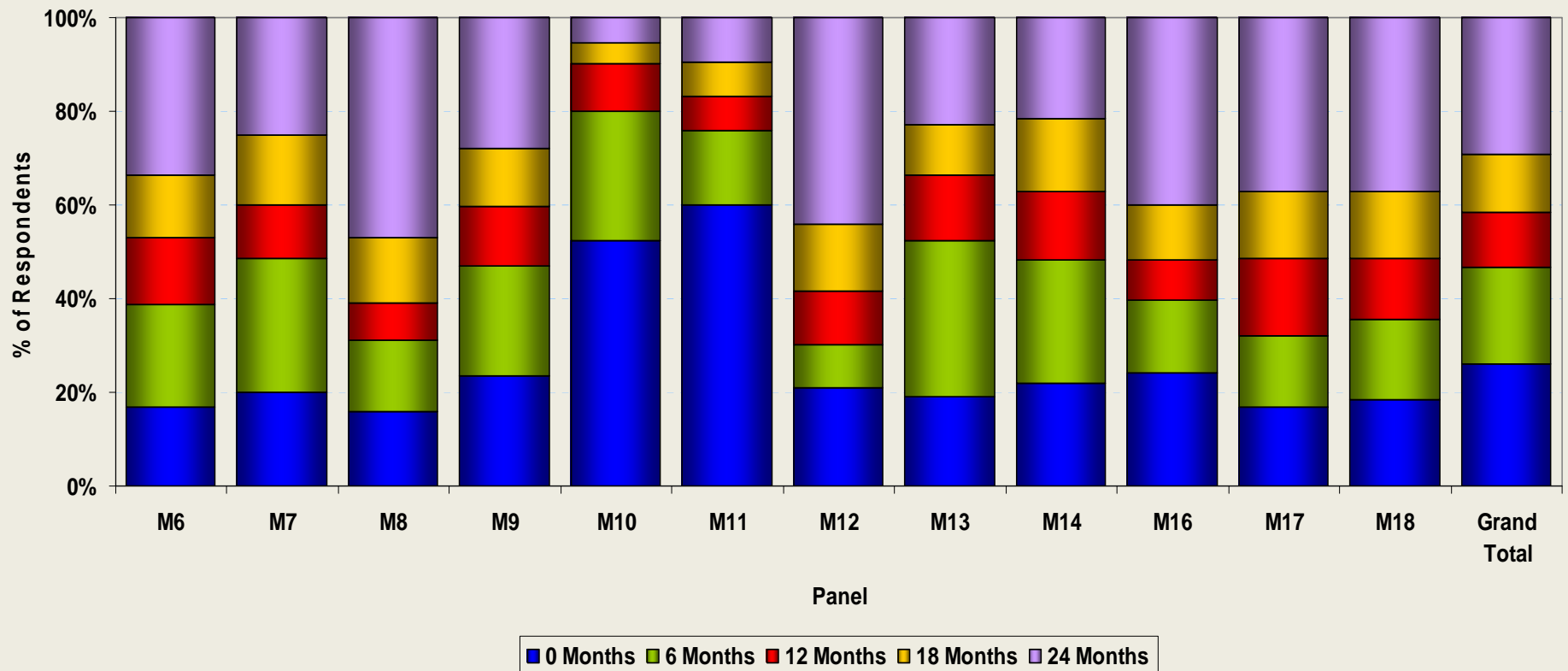
# Average Panel Membership by Panel in the U.S.



# Impact of Max Panel Age in the U.S. on Sociologic and Buyer Segmentations



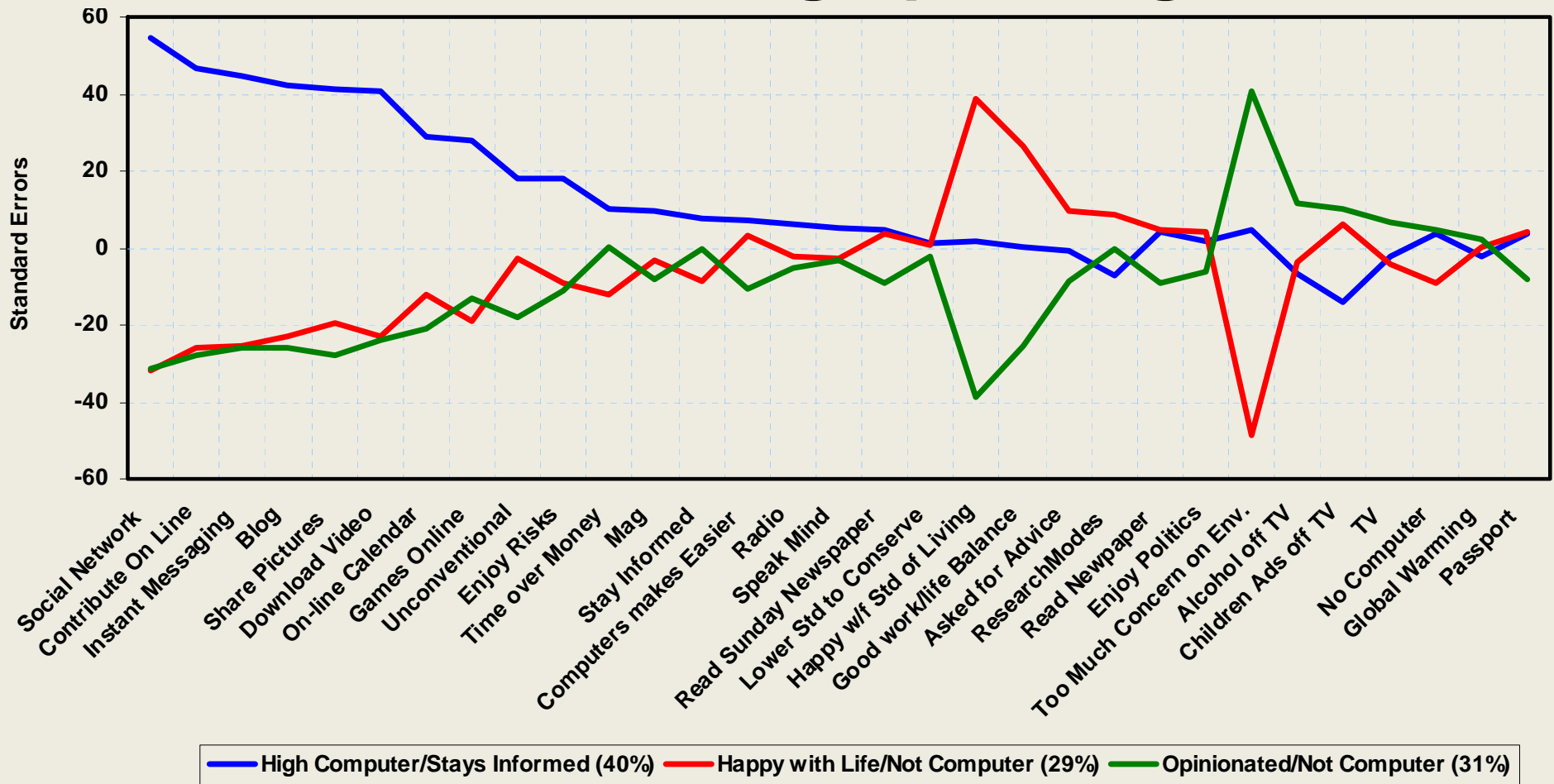
# Max Age on Panel by Panel in the U.S.



# **Social/Psychographic Variation**

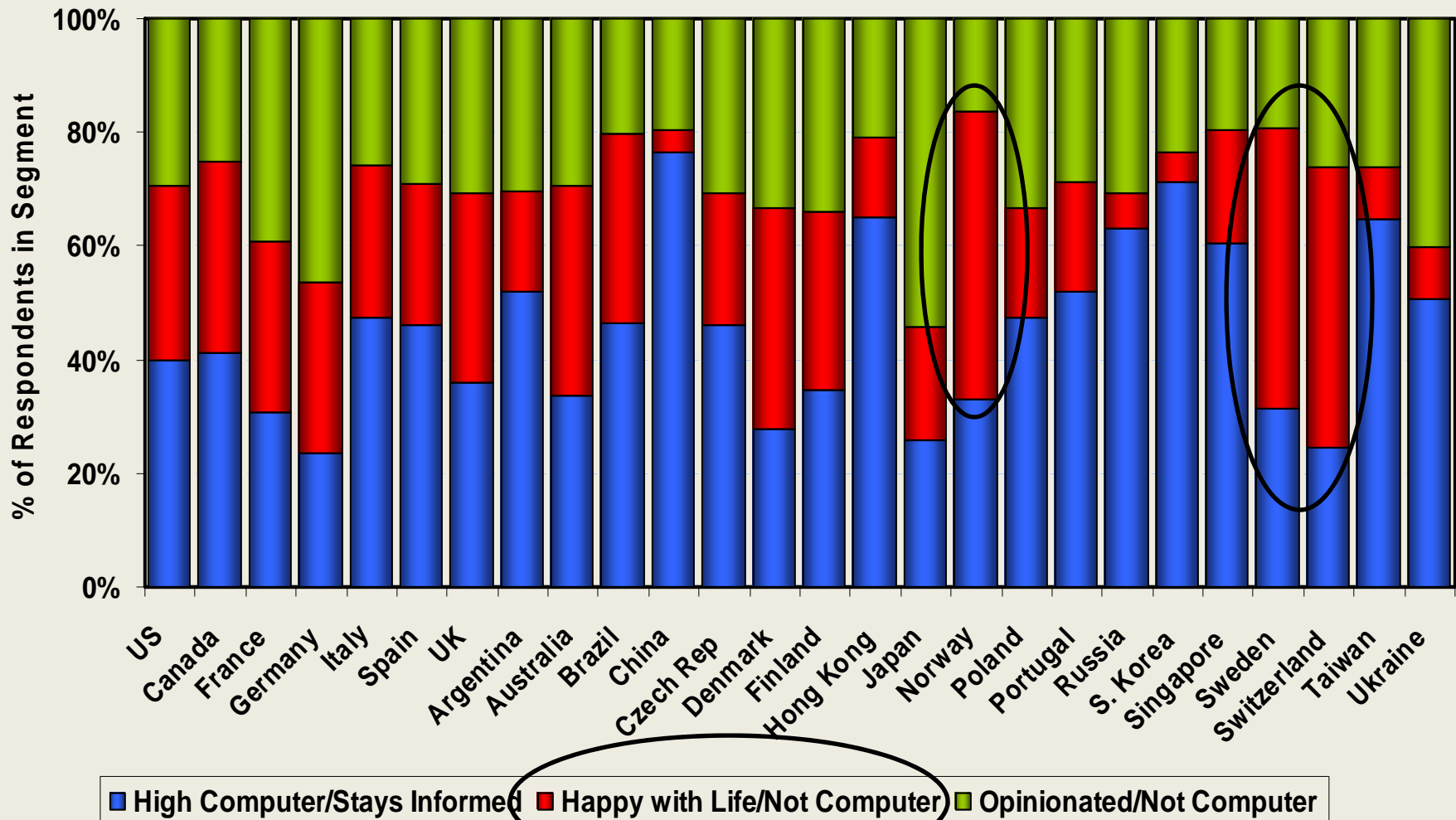
- **Social opinions and behavior can be expected to drive purchasing behavior or at least provide a basis for segmenting the market. Consistency of these measurement may likewise be critical.**
- **Variables Groups**
  - Internet Use
  - Taking Surveys
  - Having a Passport
  - Social Characteristics
- **Measures:**
  - Driving Variables

# Global variation from grand mean of standardized sociographic segments.

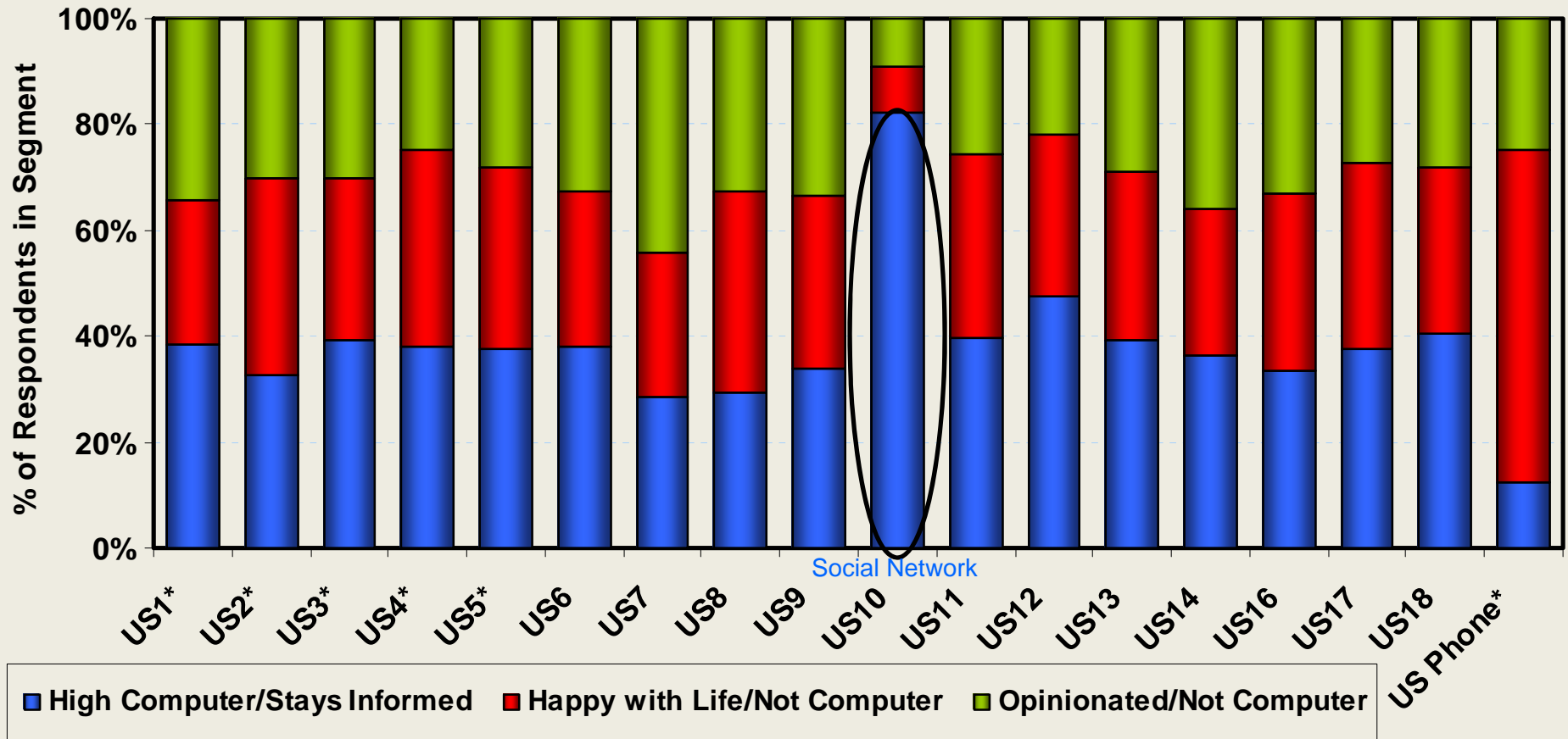




# Global Average Sociographic Segmentation Distribution



# US Sociographic segment distribution by panel and phone.

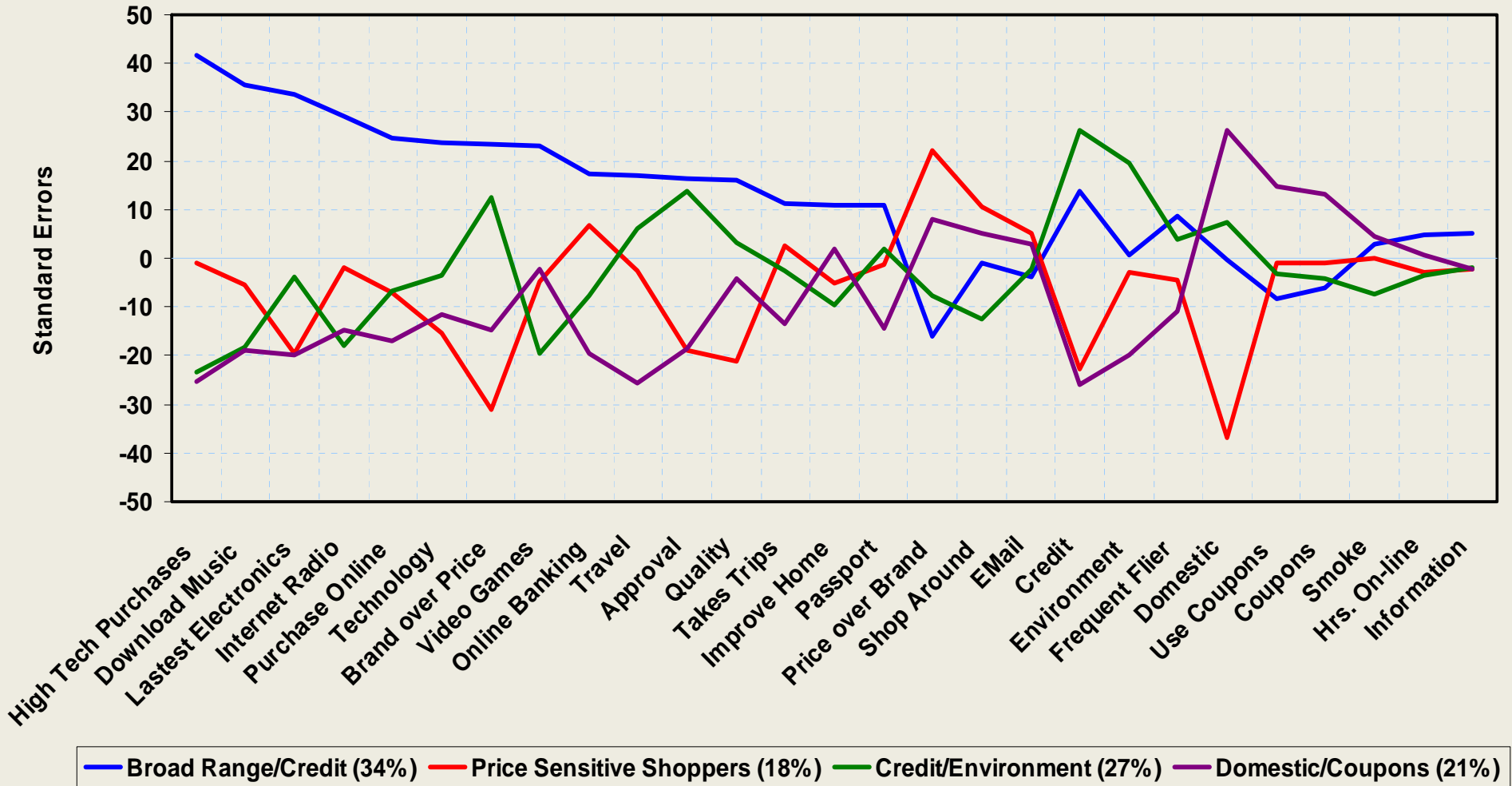


\* EM Algorithm for Missing Data & Logit Model for Segmentation

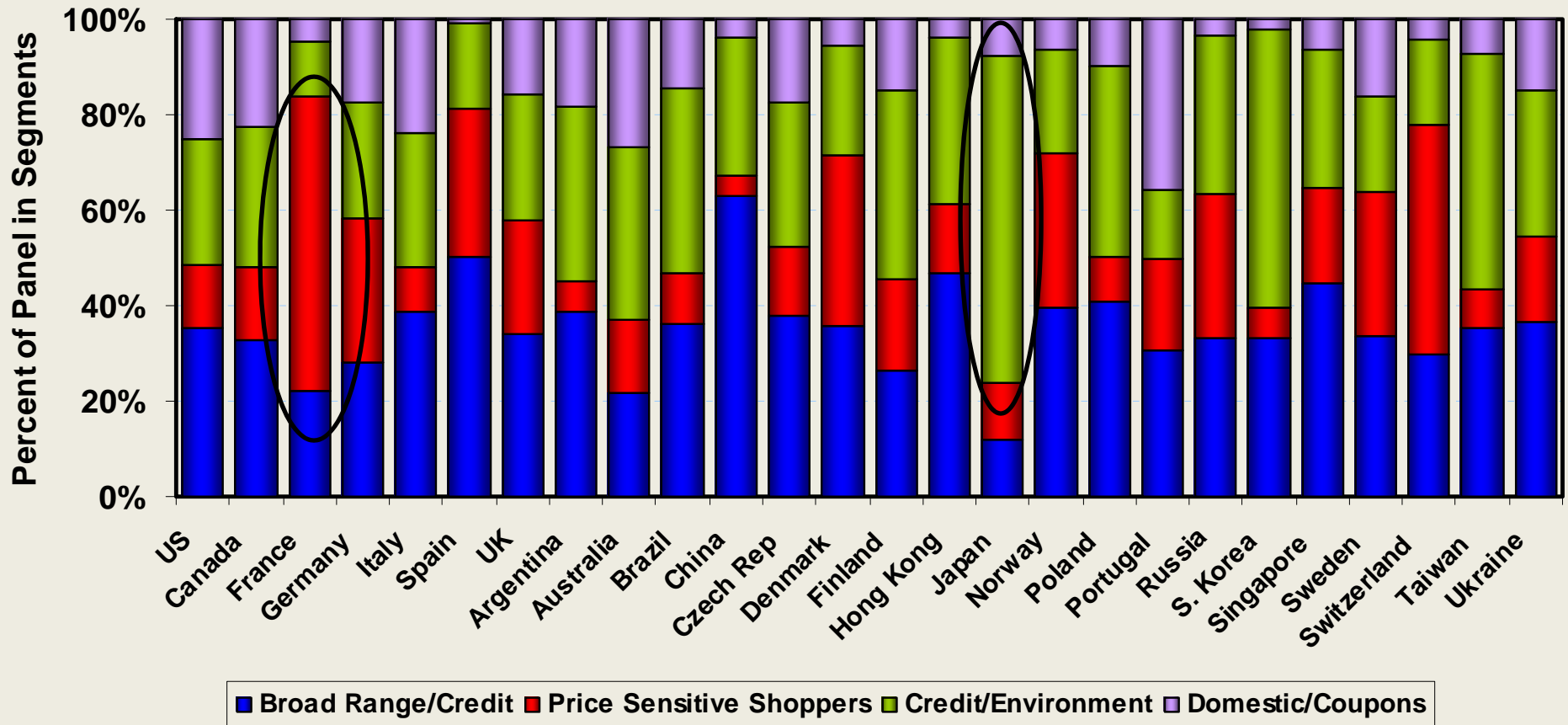
# Variation in Buyer Behavior

- **Measuring buyer behavior is the objective of most marketing research. And therefore, consistency of those measurement are critical.**
- **Variables**
  - **Number of High Tech Items Purchased.**
  - **Internet Purchase behavior**
  - **Purchasing Opinions**
- **Measures:**
  - **Clusters (Segments)**
  - **Driving Variables**

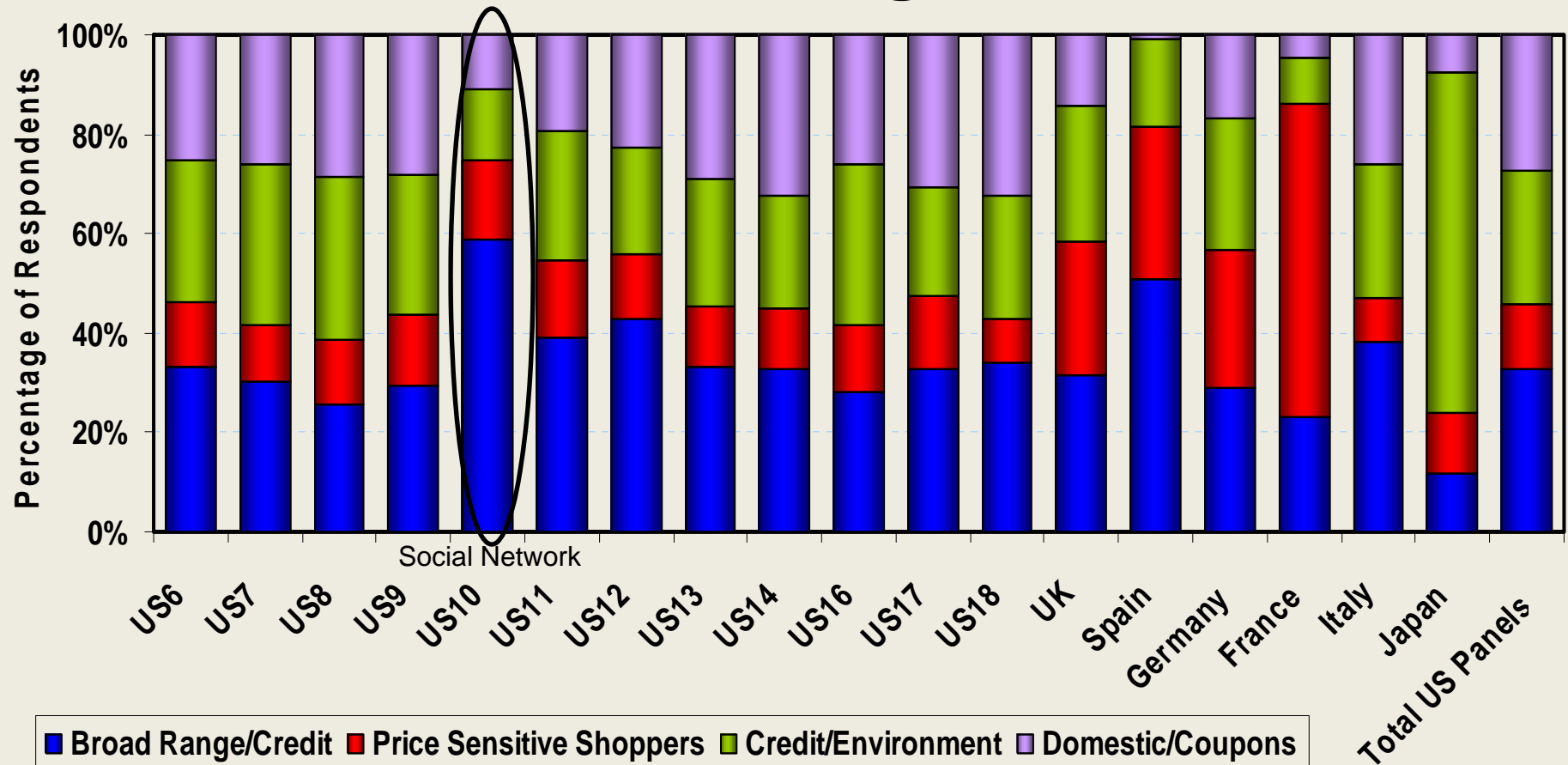
# Buyer Behavior Segment Profiles



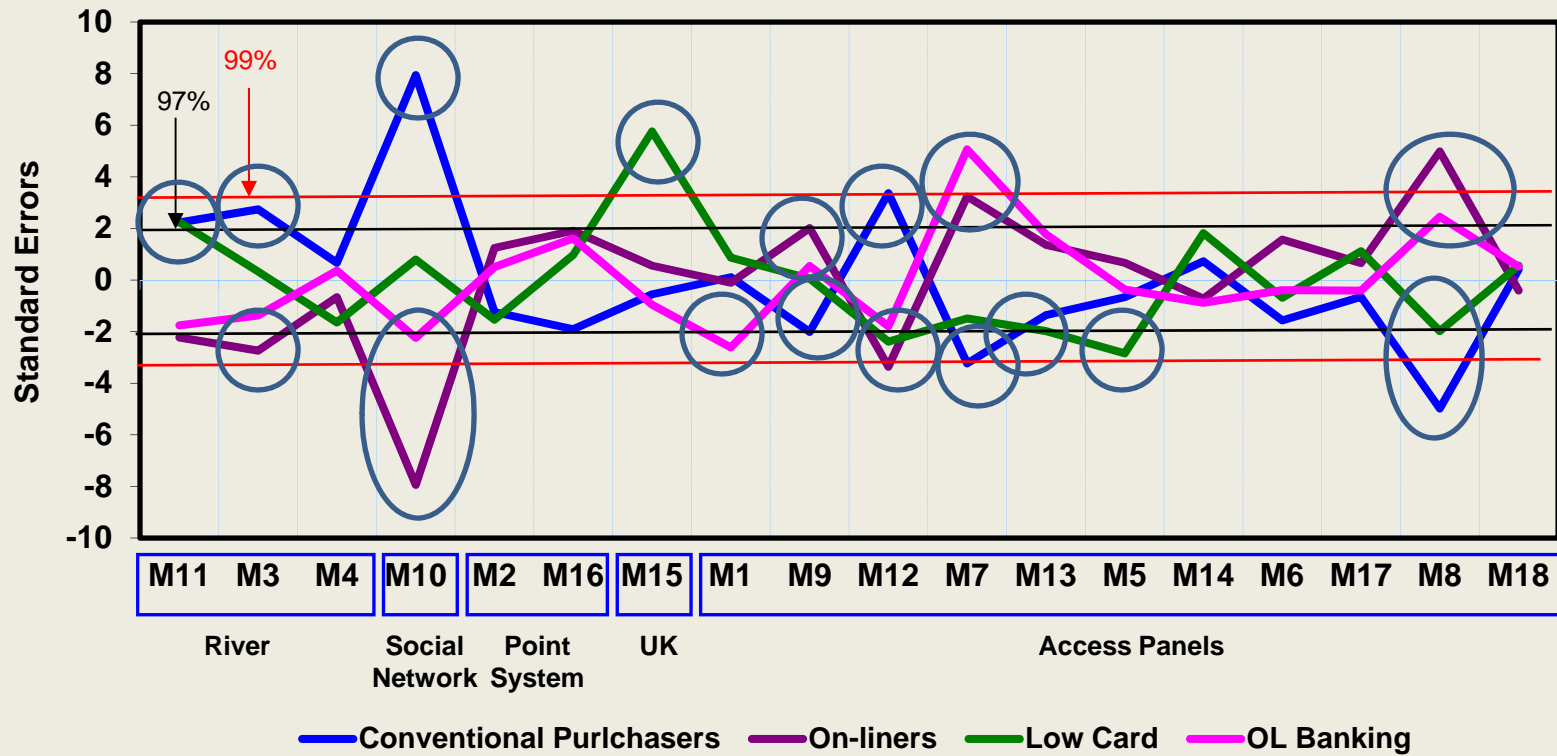
# Distribution of Buyer Behavior Segments by Countries.



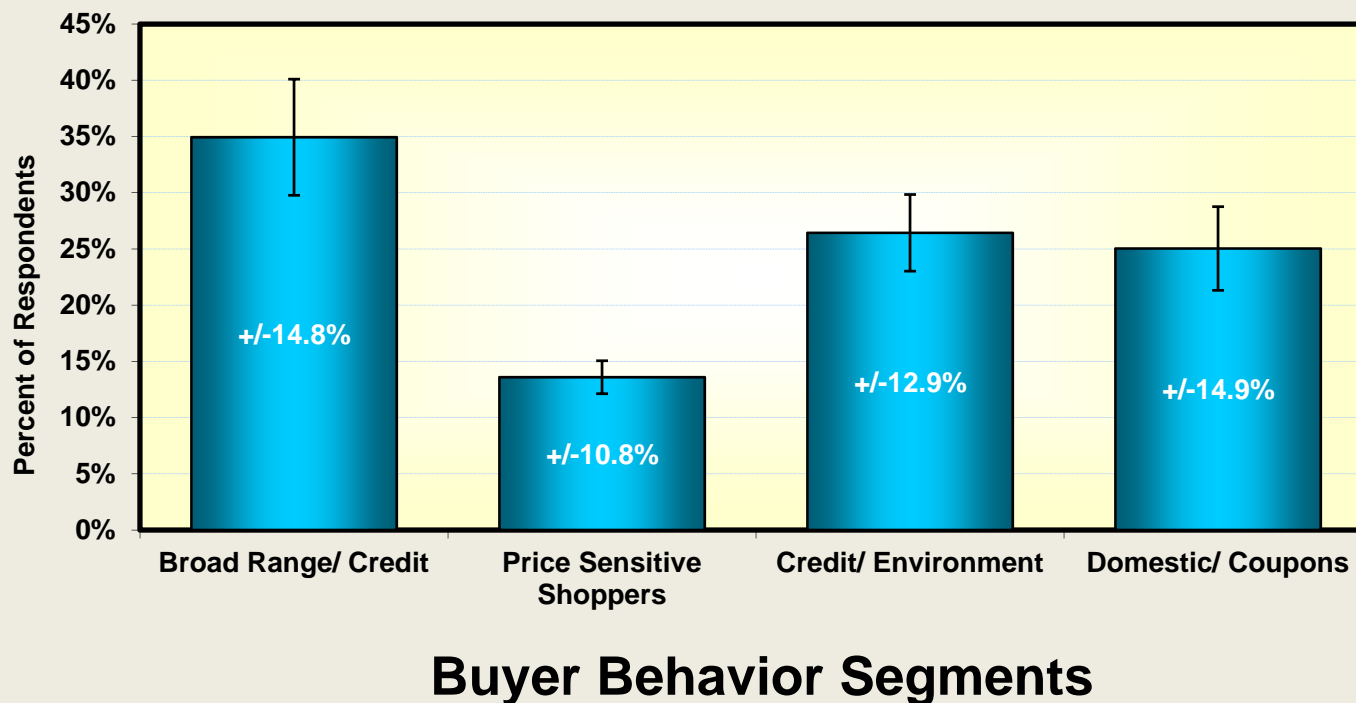
# US and Global Distribution of Buyer Behavior among Panels



# Statistical Panel Profiles Against Buyer Segments



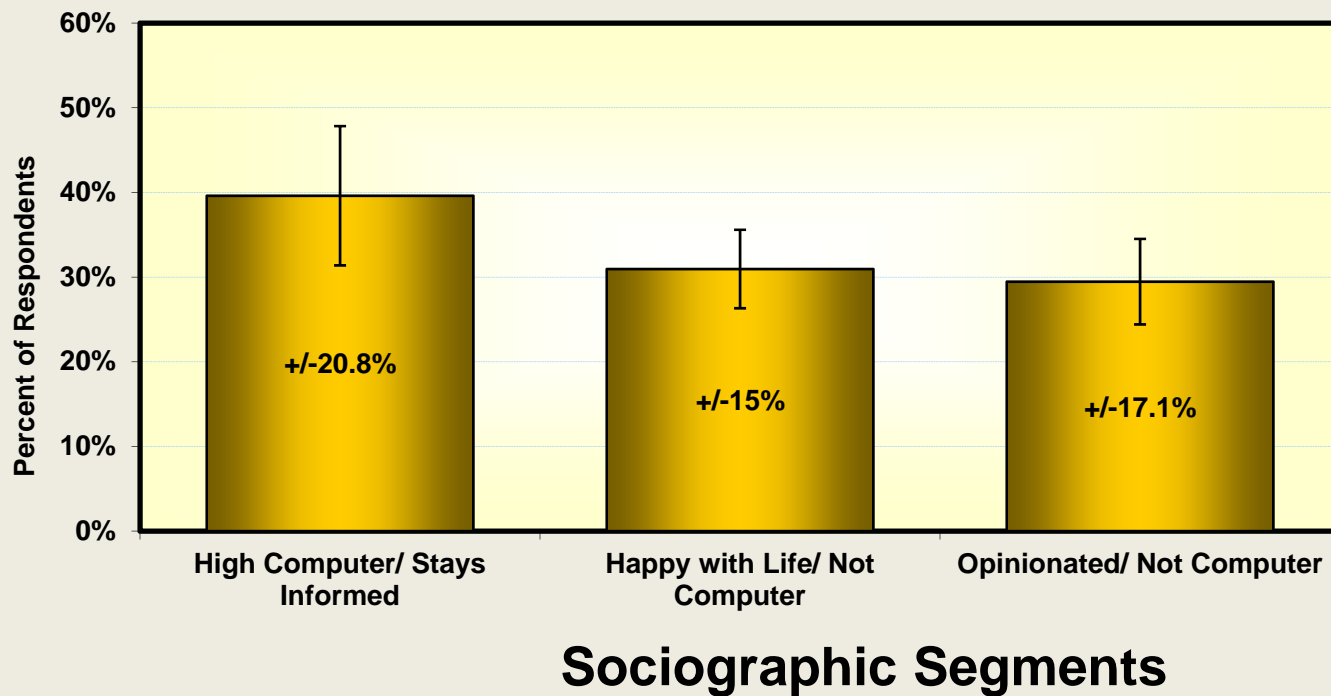
Expected Range of Values for a Random 3 Panel Sample Showing 1.281 Standard Errors (20% of being beyond this range) in the U.S.



+/- Coefficient of variation

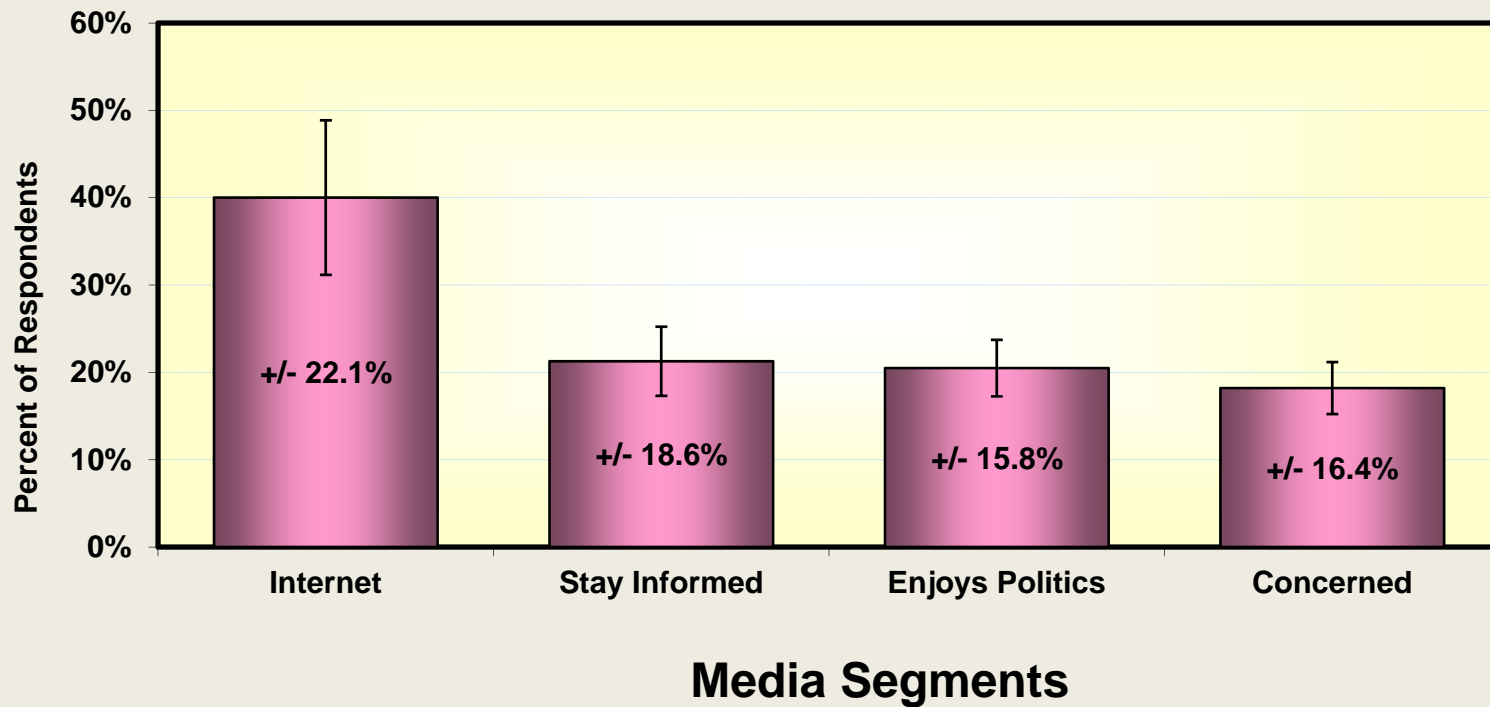


Expected Range of Values for a Random 3 Panel Sample Showing 1.281 Standard Errors (20% of being beyond this range) in the U.S.



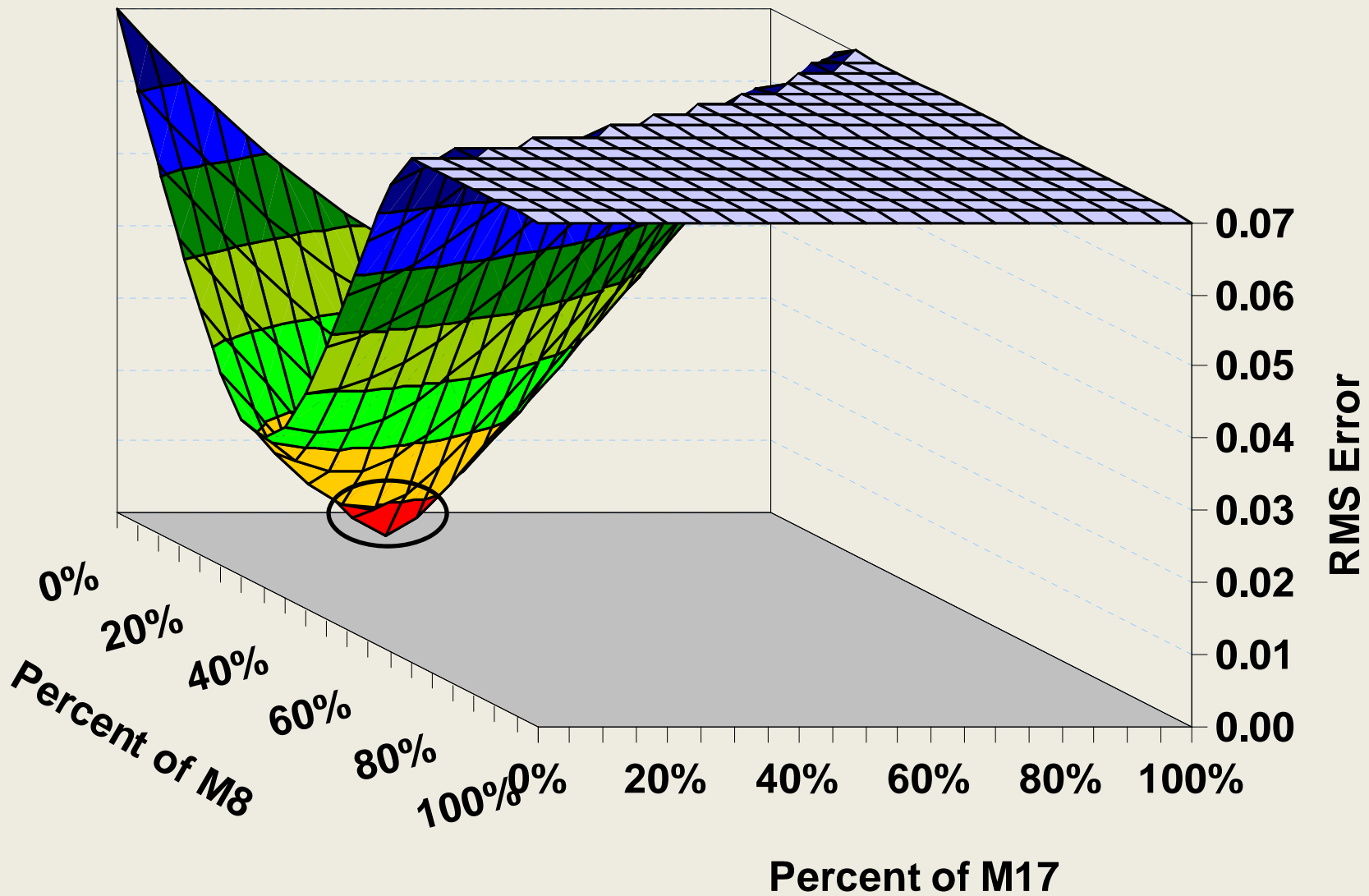
+/- Coefficient of Variation

# Expected Range of Values for a Random 3 Panel Sample Showing 1.281 Standard Errors (20% of being beyond this range) in the U.S.



+/- Coefficient of Variation

# Optimization Profile



# Optimizations

Panels	Optimum	Average	Expected (1 SE)	Inherent (1 SE)
<b>M8</b>	24%		33%	
<b>M17</b>	26%		33%	
<b>M12</b>	50%		34%	
<b>Root Mean Square Error</b>	<b>0.40%</b>	<b>2.36%</b>	<b>8.31%</b>	<b>2.45%</b>

Panels	Optimum	Average	Expected (1 SE)	Inherent (1 SE)
<b>M8</b>	0%		33%	
<b>M13</b>	91%		33%	
<b>M16</b>	9%		34%	
<b>Root Mean Square Error</b>	<b>3.6%</b>	<b>7.8%</b>	<b>8.3%</b>	<b>2.4%</b>

Panels	Optimum	Average	Expected (1 SE)	Inherent (1 SE)
<b>M10</b>	8%		33%	
<b>M13</b>	66%		33%	
<b>M16</b>	27%		34%	
<b>Root Mean Square Error</b>	<b>1.6%</b>	<b>12.3%</b>	<b>8.3%</b>	<b>2.4%</b>

## Summary

- Panel ageing in the U.S. has led to degradation.
- Professional Respondents and other problem respondent types appear to greatly affect the reliability of panel research results.
- Sample sources around the world are beginning an ageing cycle. There is still time to document and stabilize the situation.
- Reliability and consistency of samples can be improved by combinations of panels (Blending Methodologies).
- *Optimization models improve blending methods, data is needed within each market to create the baselines so that these models can be employed.*

# Thank you

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