Where in the World Is the Market?

Real World Meets Math—and Math Wins

The Lund Lecture by Dr. Staffan Canback
May 2024

TELLUSANT
Streamlining Corporate Decision Making

Agenda

1. Introduction
2. Where in the World Is the Market?—The Macro View
3. Where in the World Is the Market?—The Market View
4. Breakout session
5. Q&A

Personal details

WORK

Swedish Army **Soldier 1977–1978**
ABB **Systems Development Engineer 1980–1981**
McKinsey & Co **Partner 1984–1994**
Monitor Company **Partner 1994–2002**
Canback Consulting **Managing Director 2003–2020**
Tellusant **Chairman 2020–**

EDUCATION

KTH-Royal Institute of Technology **Msc EE 1975–1979**
Harvard Business School **MBA 1981–1983**
Henley Business School **DBA 1996–2002**

AWARDS

Fulbright **Scholar 1981**
Wallenberg **Scholar 1996**
First Prize, EDAMBA **European Doctoral Dissertation Competition 2003**

ACADEMIC PUBLICATIONS (found, e.g., at SSRN)

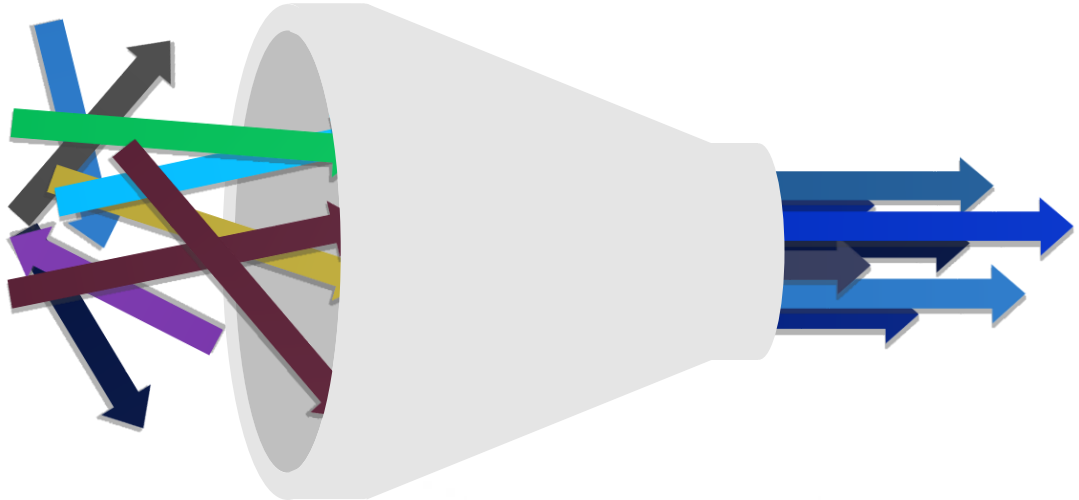
- **Toward an Integrated Strategy Development Framework**
- **The Growth Tesseract**
- **Where in the World Is the Market? *with F D'Agnese***
- **Do Diseconomies of Scale Impact Firm Size and Performance? *with P Samouel & D Price***
- **Does Corporate Size Matter?**
- **A Lightweight Note on Success in Mergers and Acquisitions**
- **Bureaucratic Limits of Firm Size *DBA Dissertation***
- **The Logic of Management Consulting, Parts I & II**
- **The Industrial Company in the Year 2027 (Predictions Made in 1992)**

Find patterns where others see chaos

Today…

Corporate strategic planning is manual and disjointed

This means wasted time and inefficient solutions



With Tellusant…

Quantitative strategic prediction platforms with AI make strategy

- **Faster**
- **More accurate**
- **Consistent**

Founded in Boston in 2020, we represent the next generation of big ideas

Our team

Dr. Staffan Canback

CO-FOUNDER AND EXECUTIVE CHAIRMAN

Co-founder and Managing Director,
Canback Consulting

Partner at McKinsey and Monitor

MBA from Harvard Business School; DBA from Brunel U.; MSc from KTH

Philip Burgin-Young

CO-FOUNDER AND CHIEF EXECUTIVE OFFICER

Senior Engagement Manager,
Canback Consulting

BA from Dartmouth College

Bobo Shen

CHIEF PRODUCT OFFICER

Senior Engagement Manager,
Canback Consulting

BA from Boston University

MA from Boston University in Computer Science

Over 60 years combined experience in management consulting and data products for global corporations, with focus on CPG

Know strategic processes and their flaws through hundreds of projects on the ground in 80 countries

Experts in combining predictive analytics and macroeconomics with strategic advice

Leadership team have long-term working relationship

Francisco Maciel
Region Head, Mexico

Carlos Alzate
Region Head, Andean Zone

Kennet Radne
Advisor

Sharat Mathur
Advisor

TELLUSANT

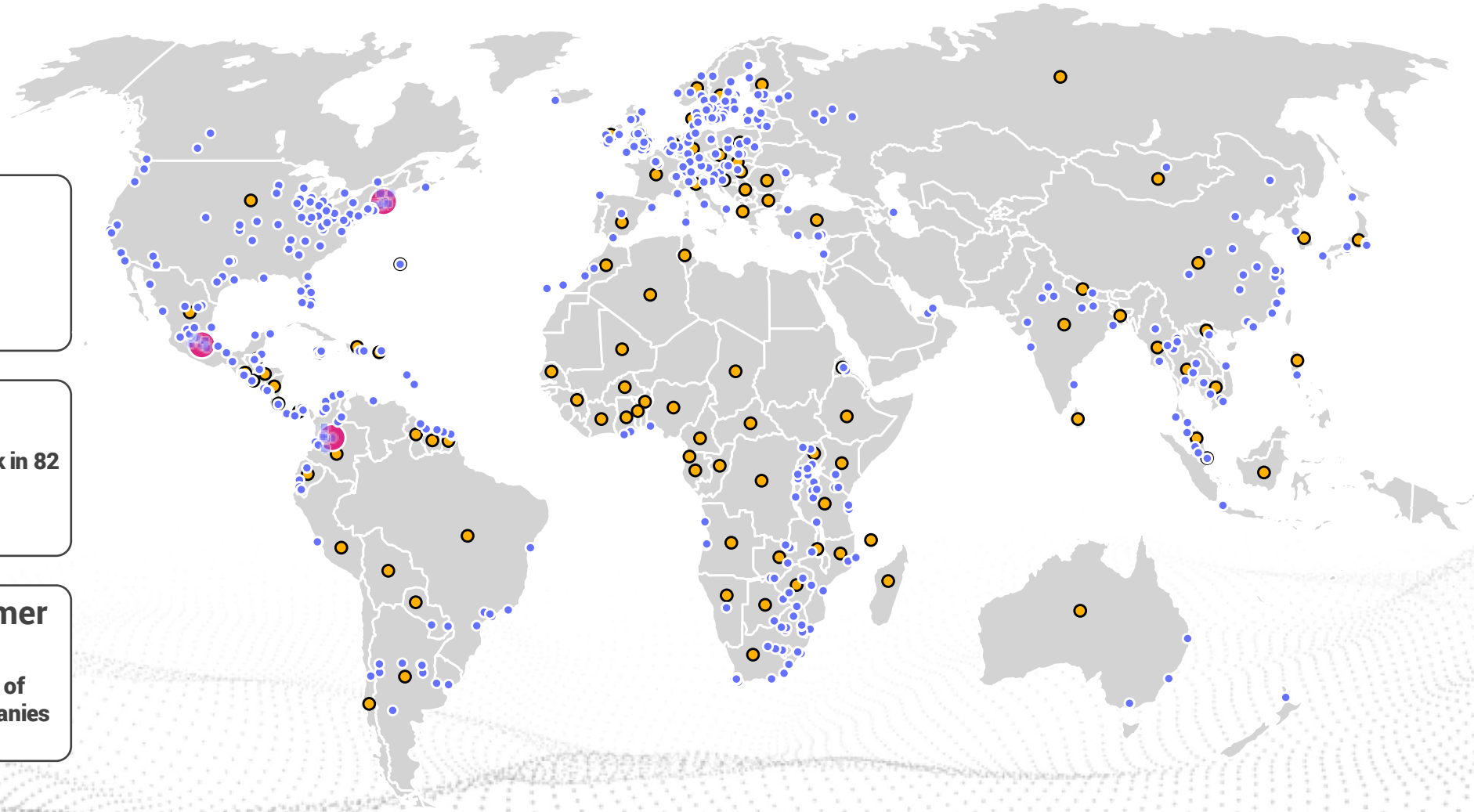
Team meeting in Mexico City

Office on Reforma

Boston & Mexico team (Bogota missing)

Global Experience

- Local work (on the ground)
- Country projects
- Tellusant offices



Over 300 strategic solutions delivered

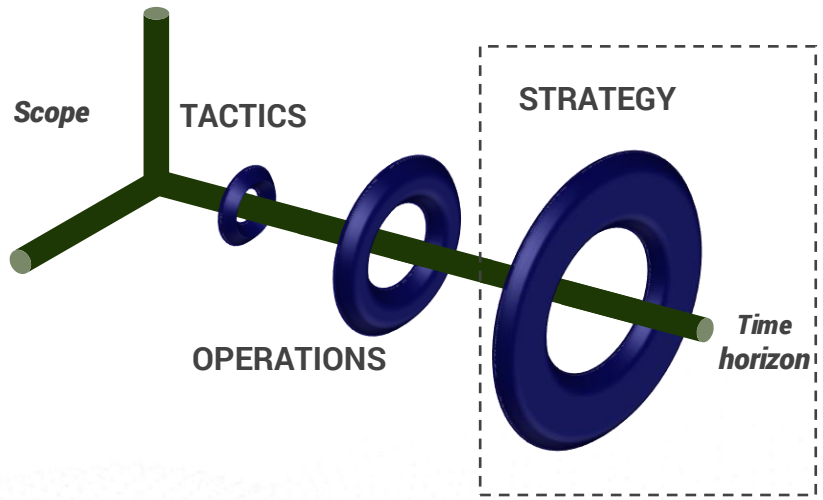
92 countries

On-the-ground expertise from work in 82 countries, with work in over 120 countries

11 of 20 largest consumer goods companies

Worked with and are trusted by 11 of the top 20 consumer goods companies in the world

Focus



STRATEGY

…coordinates and focuses all company assets to reach a set of objectives. It assigns resources and sets boundaries over the long run

OPERATIONS

…link strategy with tactics and answer the ‘when’, ‘where’, and ‘what’ questions over time and across units in the medium term

TACTICS

…deal with the here and now in a creative manner while building on repetitive methods and procedures. They result in short term action

Source: WHO; TelluBase; Tellusant analysis

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Photos from Latam

Buenos Aires, Argentina

Guayaquil, Ecuador

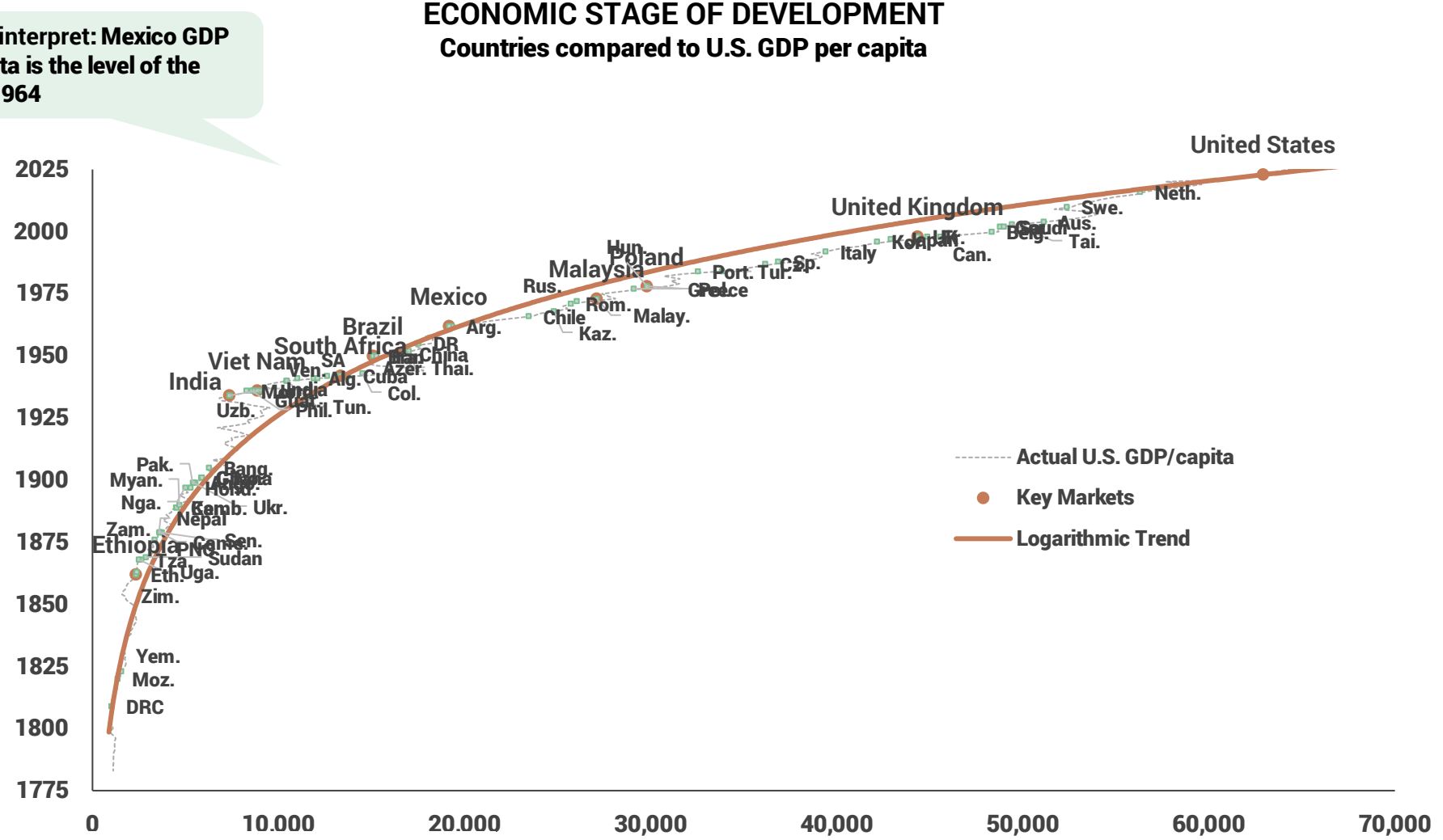
Lima, Peru

Itaipu Dam, Paraguay & Brazil

Iguazu Falls, Argentina

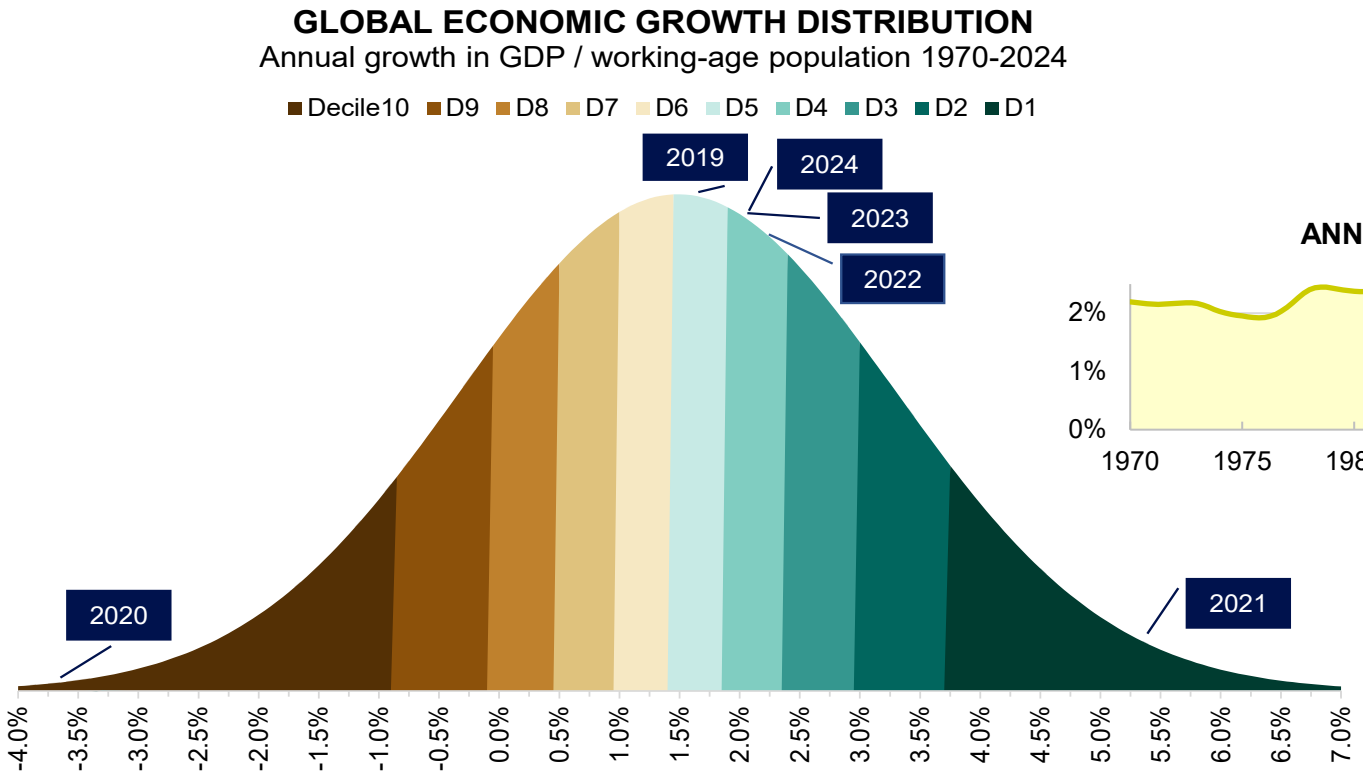
Time / income relationship

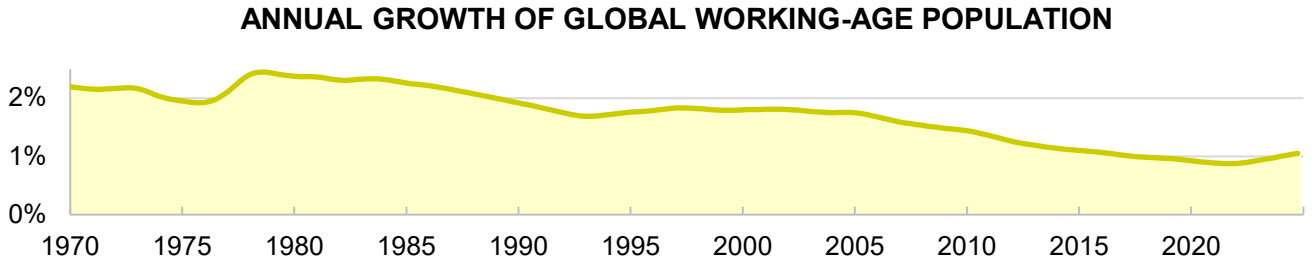
How to interpret: Mexico GDP per capita is the level of the U.S. in 1964



Source: WHO; TelluBase; Tellusant analysis

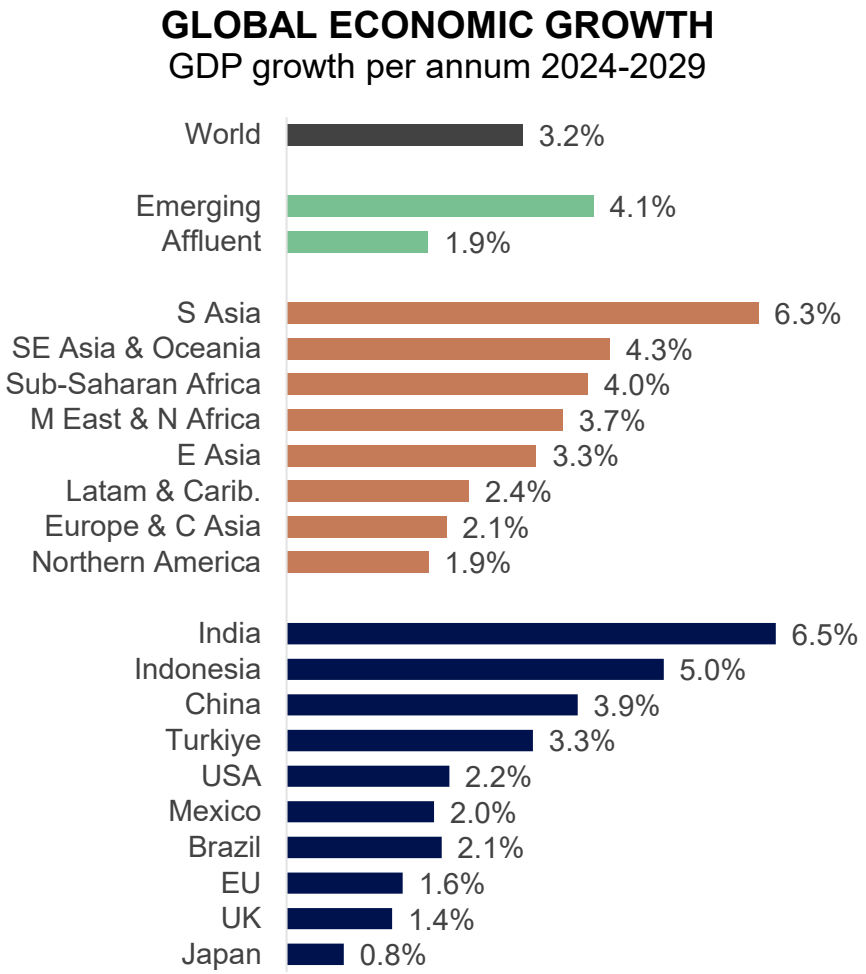
2024 macro performance





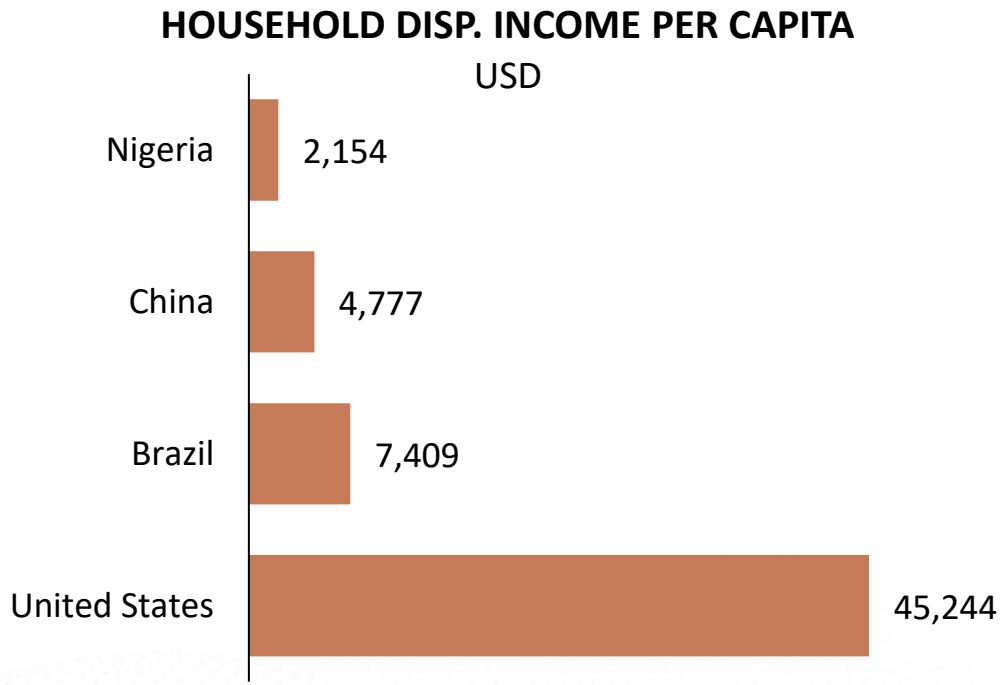
Source: TelluBase; Tellusant analysis

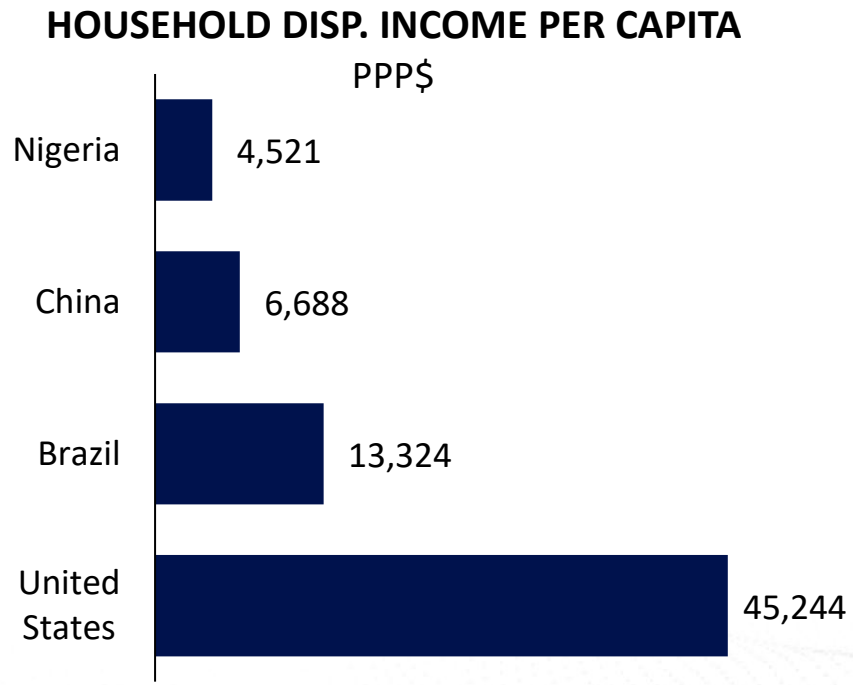
Macro outlook



Source: TelluBase; Tellusant analysis

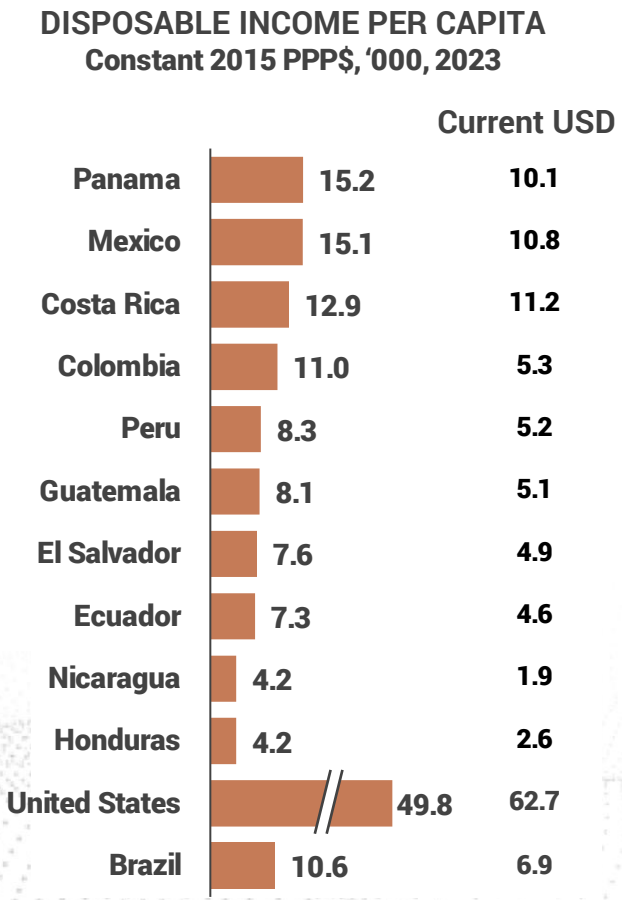
Purchasing Power Parity Examples

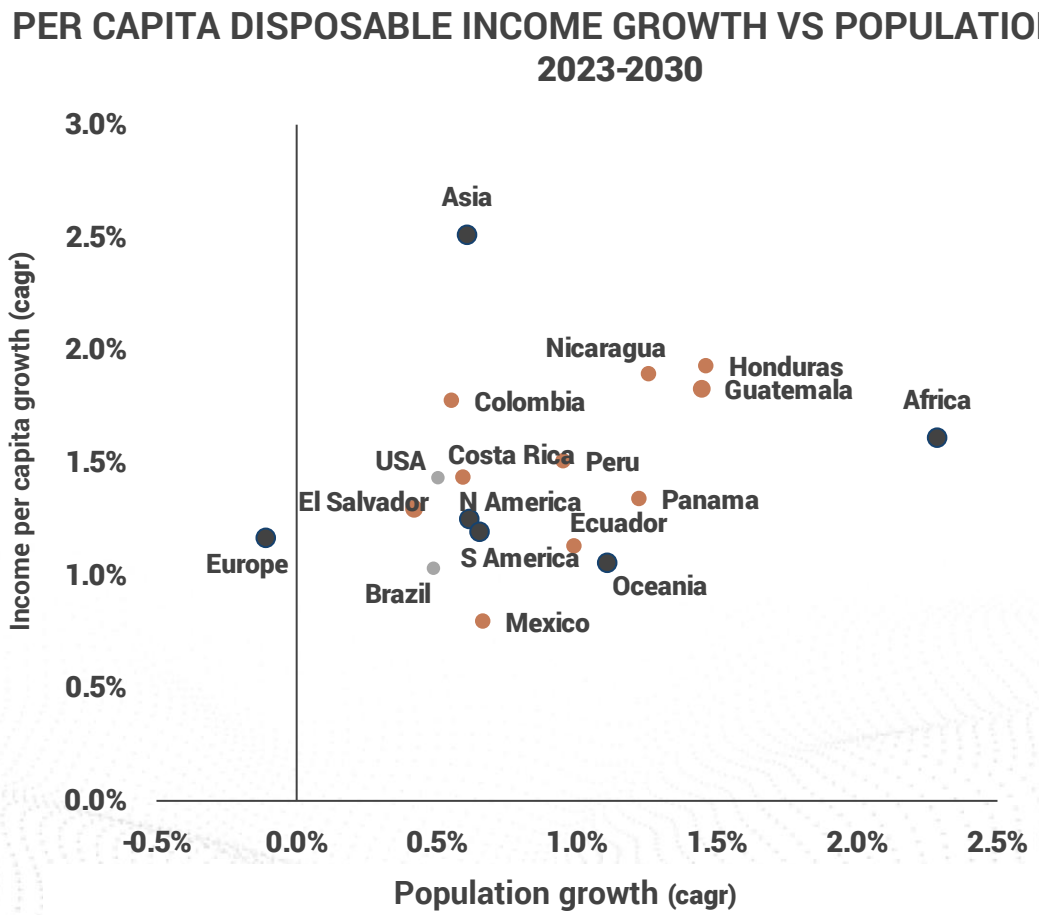




Source: TelluBase; Tellusant analysis

Dimensions of macro growth





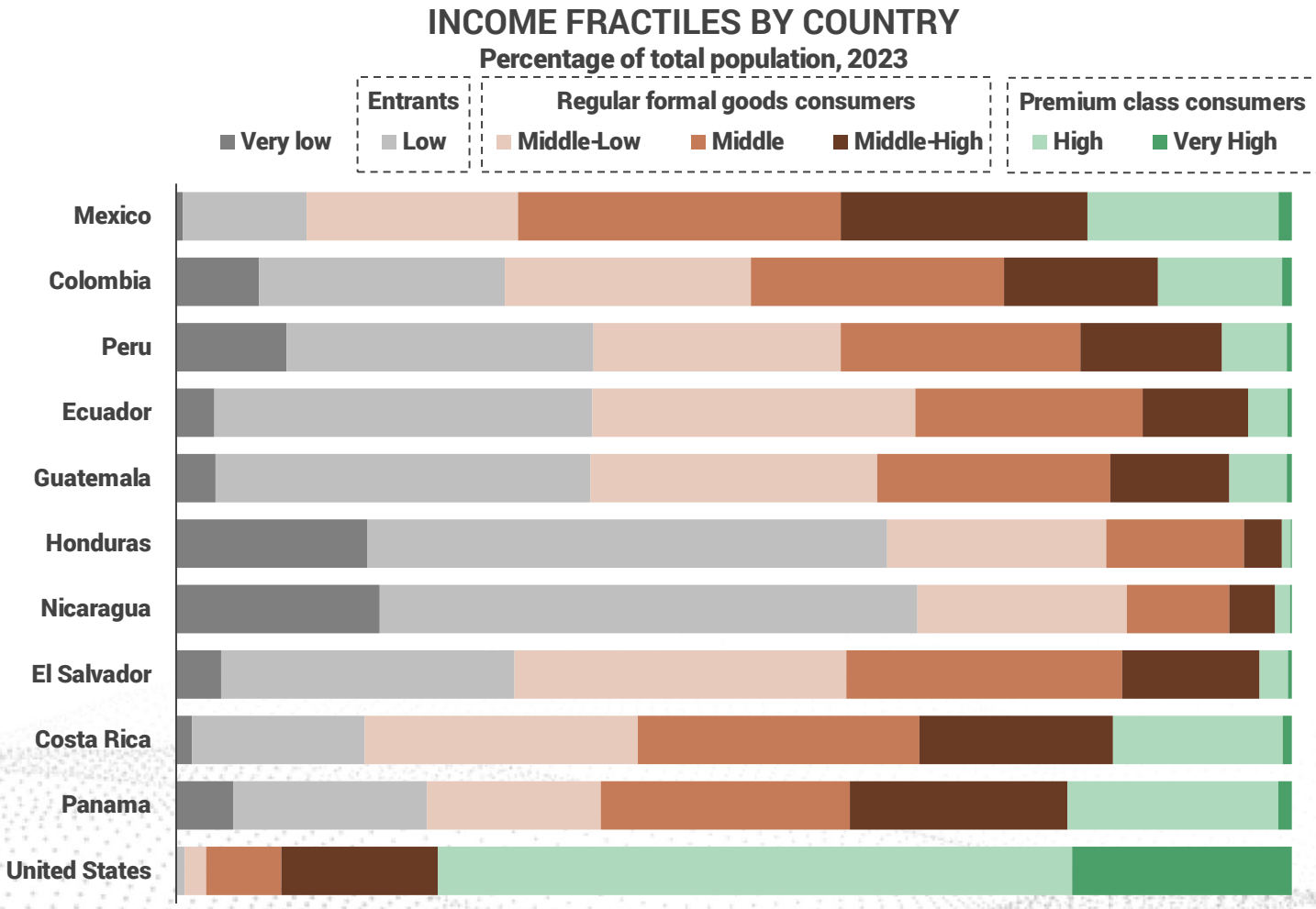
Source: TelluBase; Tellusant analysis

Global Income Level Standard

Income level standard		Description
Very High ***Corresponding to the top 1% of globally-equivalent spending power population***		• Individuals who can save income more regularly • Consume luxury goods
High ***90%-99% of globally-equivalent spending power population***		• Individuals save income • Consume occasional luxury goods
Middle-High ***80%-90% of globally-equivalent spending power population***		• Individuals are able to often save income • May consume premium goods
Middle ***60%-80% of globally-equivalent spending power population***		• Individuals are able to occasionally save income • May consume premium goods
Middle-Low ***40%-60% of globally-equivalent spending power population***		• Able to meet primary needs • Consistently can afford branded consumer goods
Low ***10%-40% of globally-equivalent spending power population***		• Barely have money to meet primary needs • Occasional (not regular) branded goods consumption
Very Low ***0%-10% of globally-equivalent spending power population***		• Barely have money to meet primary needs • Incredibly rare branded goods consumption

Source: Tellusant concept

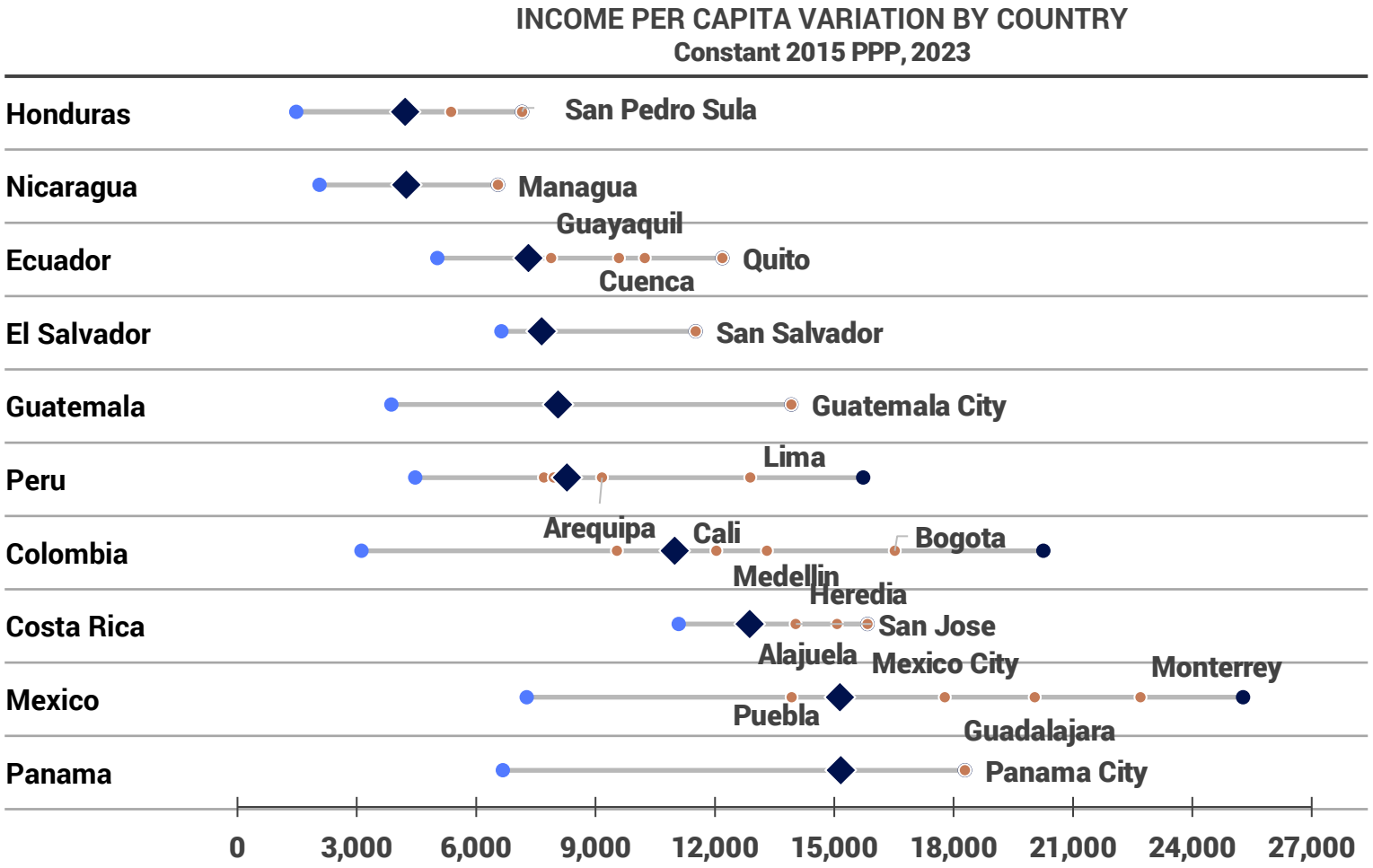
Latam socioeconomic levels



	Formal consumer goods entrants	Regular formal goods consumers	Premium class consumers
Mexico	11%	70%	18%
Colombia	22%	59%	12%
Peru	28%	56%	6%
Ecuador	34%	59%	4%
Guatemala	34%	57%	6%
Honduras	47%	35%	1%
Nicaragua	48%	32%	1%
El Salvador	26%	67%	3%
Costa Rica	15%	67%	16%
Panama	17%	57%	20%
United States	1%	23%	77%

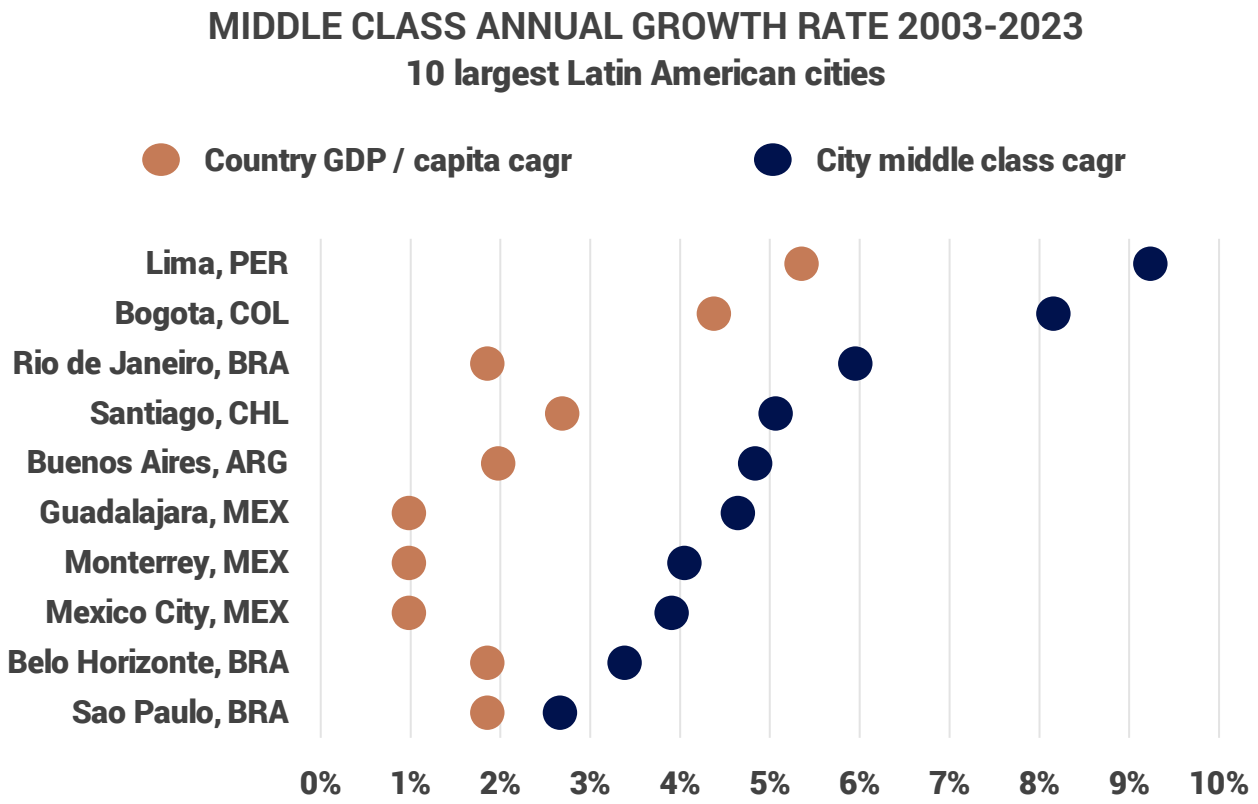
Source: TelluBase; Tellusant analysis

Cities vs countries I



Source: TelluBase; Tellusant analysis

Cities vs countries II

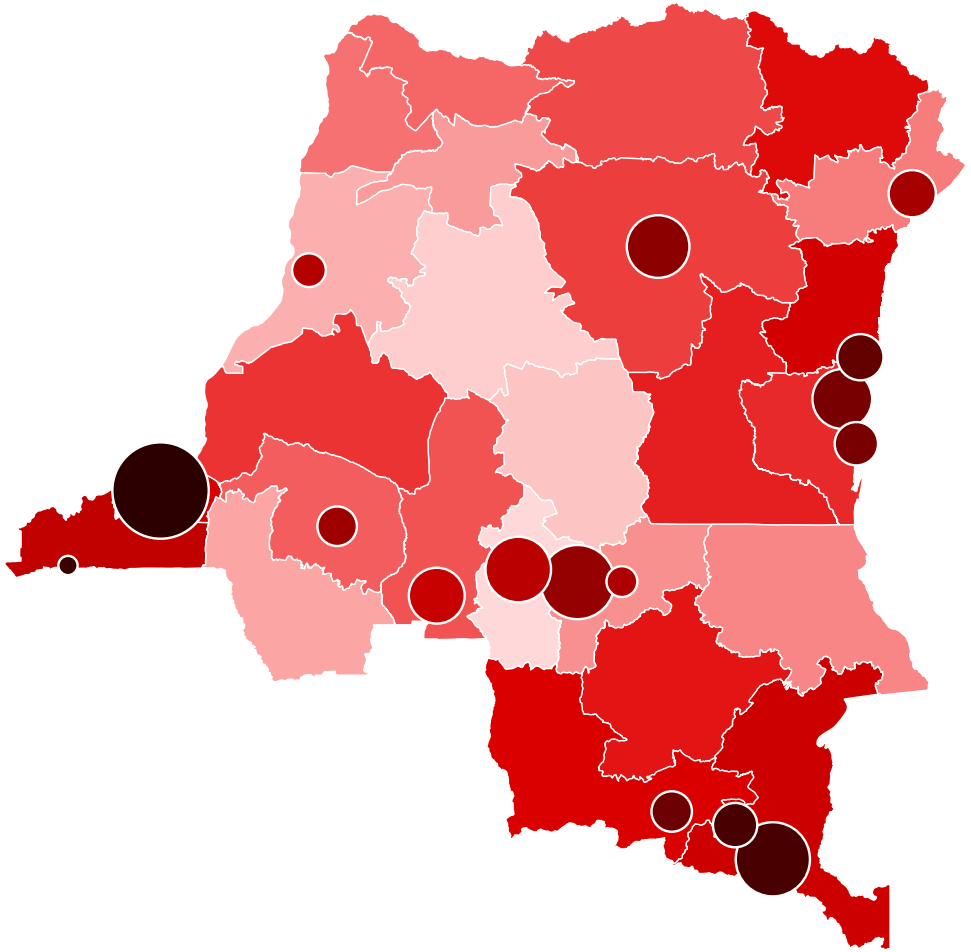


Source: TelluBase; Tellusant analysis

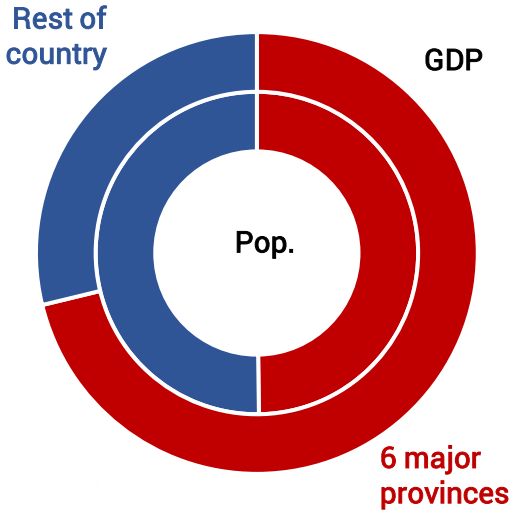
DRC Case

DEMOCRATIC REPUBLIC OF THE CONGO INCOME LEVELS

Cities and rural part of provinces colored by income/capita

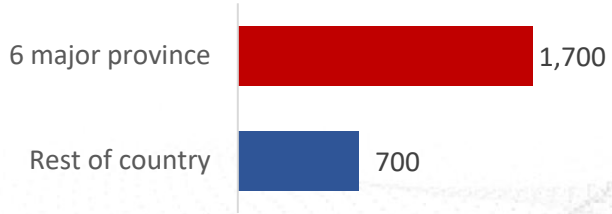


SHARE OF CONGOLESE ECONOMY



DRC ANNUAL GDP GROWTH '10-'22

DRC GDP PER CAPITA



Source: UNHDR, MICS and MPI reports; Tellusant analysis

Notes: Colors represent income/capita rank from highest in dark red (Kinshasa) to lowest in light red (rural Kasai). 16 large cities; 26 provinces. 6 major provinces with black borders

Congolese Market, Luanda, Angola

Congolese truck in Rwanda

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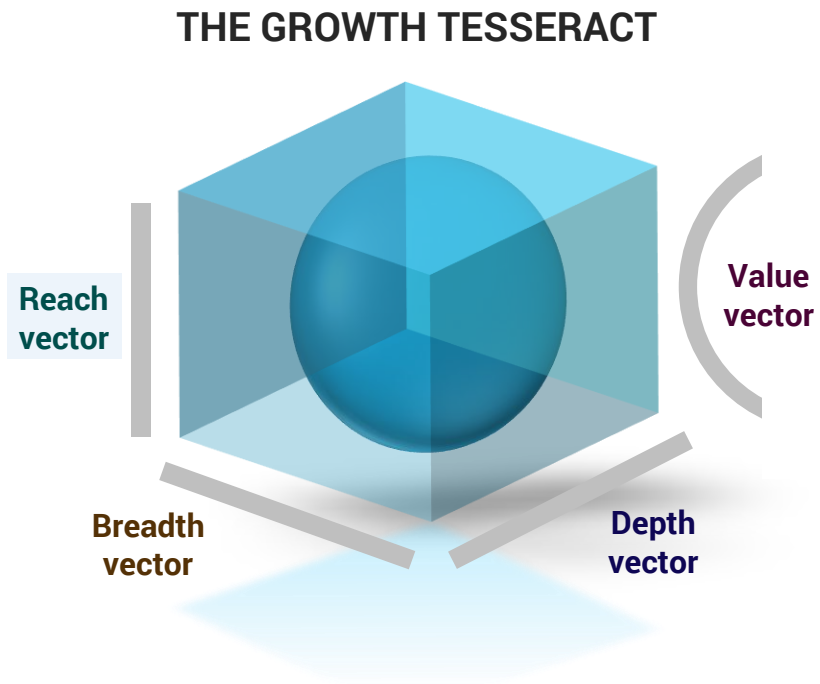
Growth Tesseract



Reach vector

- *Expand geographically*
- *Optimize channels*
- *Increase distribution coverage*
- *Find new demand spaces*

Breadth vector

- *Create line extensions*
- *Expand portfolio*
- *Enter adjacent categories*
- *Diversify*

Depth vector

- *Integrate forward*
- *Integrate backward*

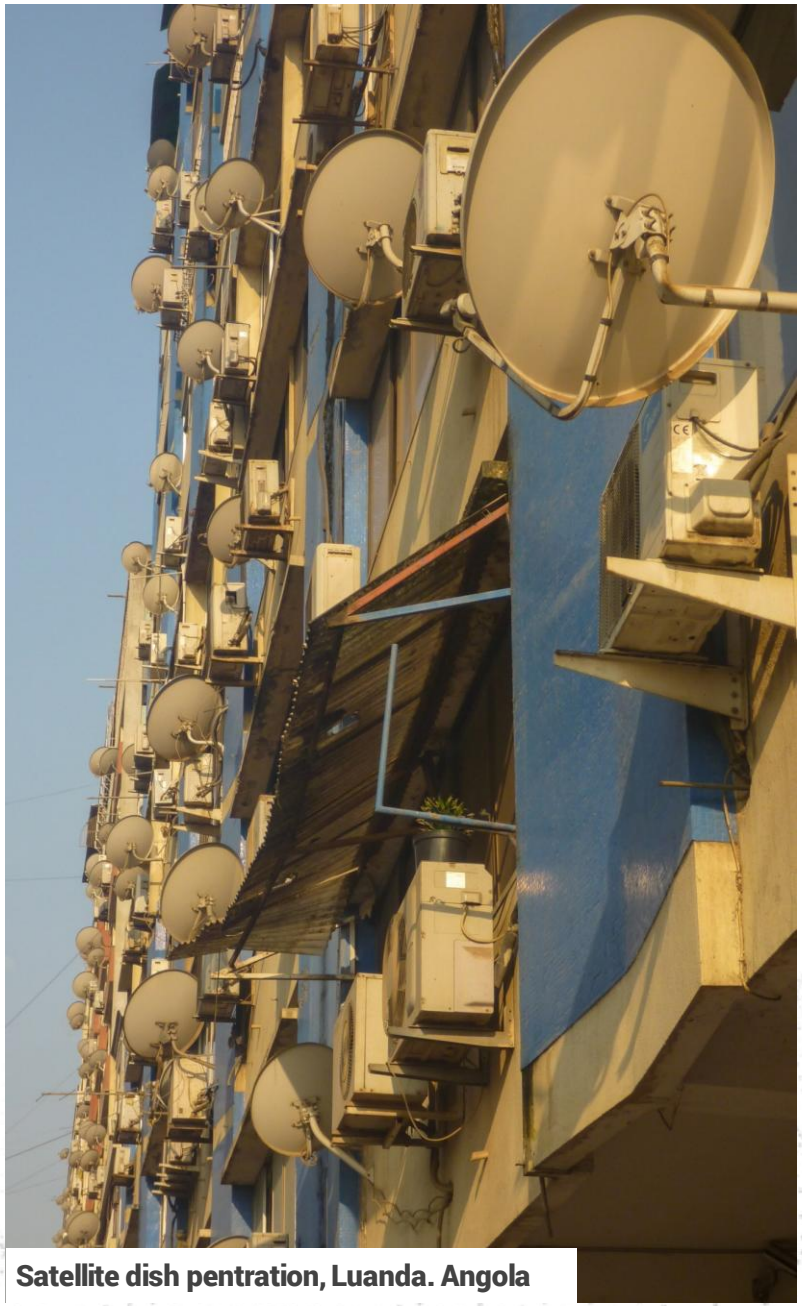
Value vector

- *Premiumize*
- *Optimize prices*
- *Change brand perceptions*

Source: Tellusant thought

Westgate Mall, Harare, Zimbabwe

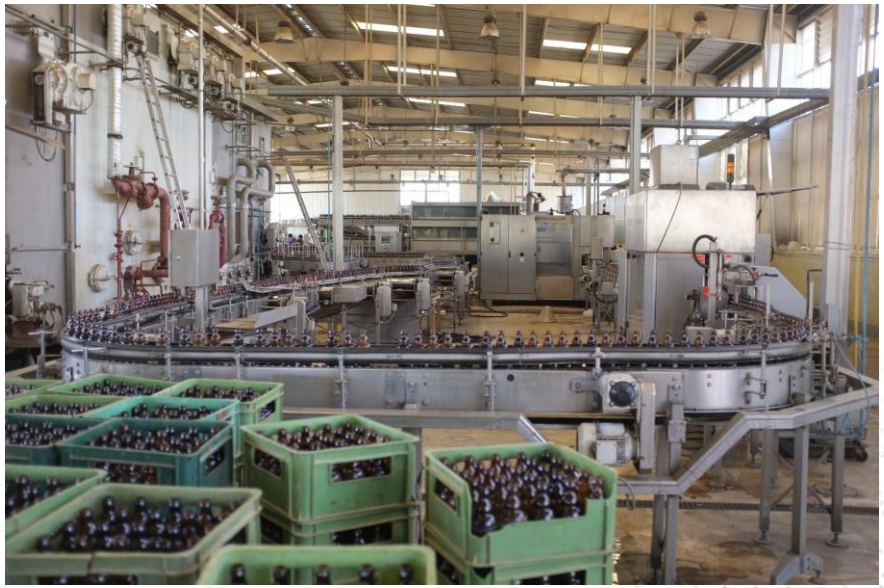
New town, Luanda. Angola



Satellite dish pentration, Luanda. Angola

Keren, Eritrea

FIAT Tagliero petrol station, Asmara, Eritrea



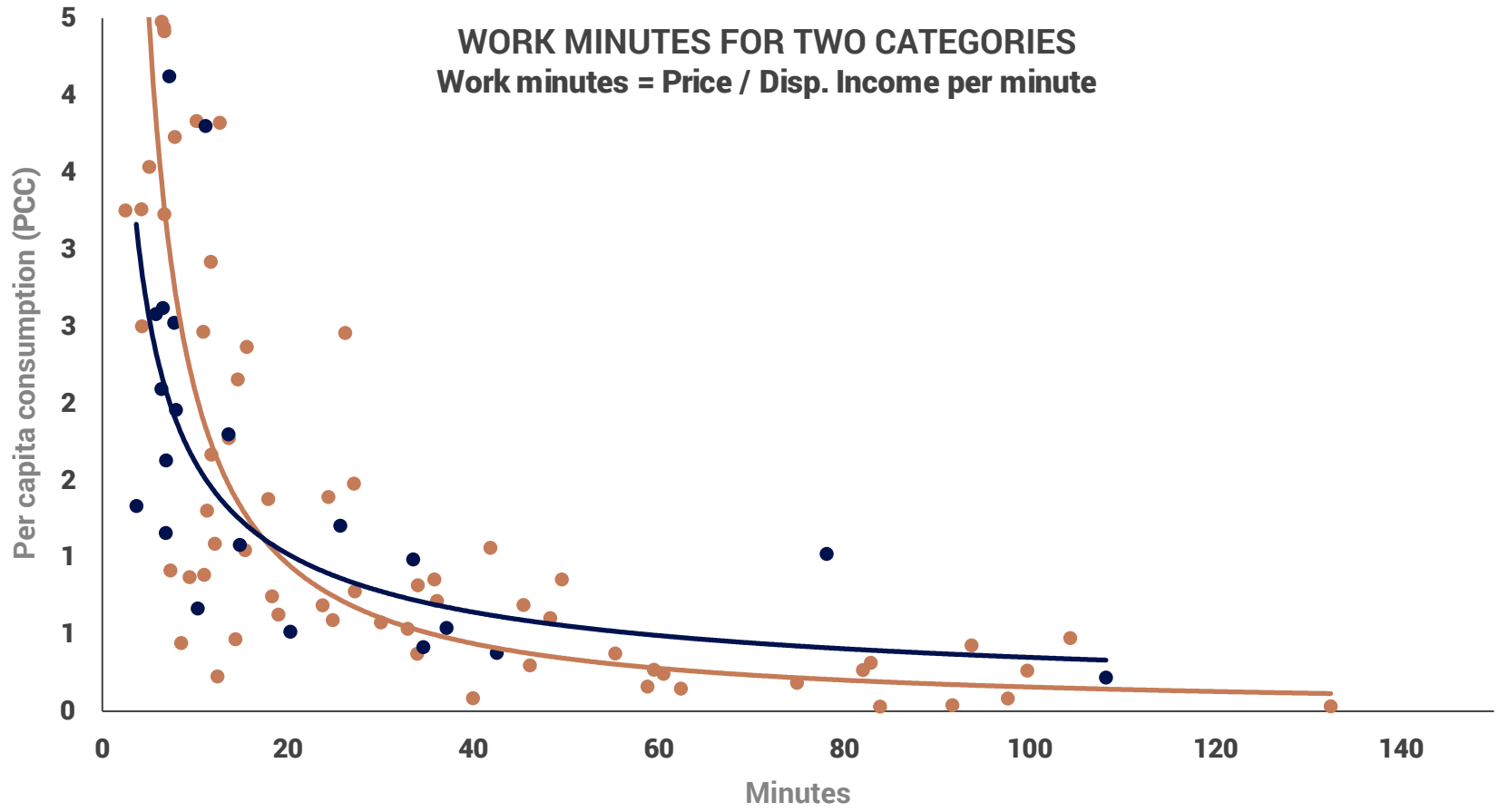
Melotti Brewery, Asmara, Eritrea

Traditional trade, Victoria Island, Lagos, Nigeria

Modern trade, Mainland, Lagos, Nigeria

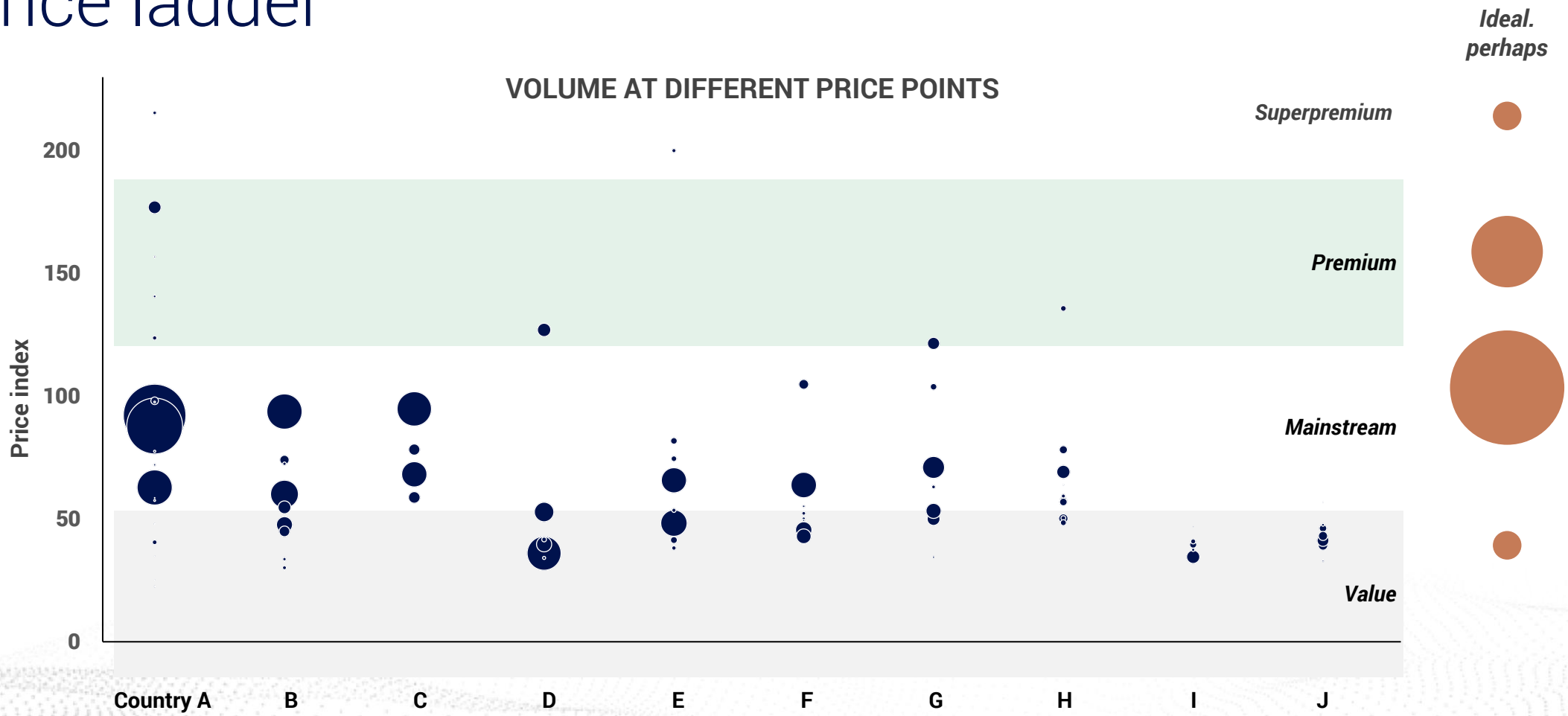
Old Lagos, Nigeria

Work minutes



Source: Client data; TelluBase; Tellusant analysis

Price ladder

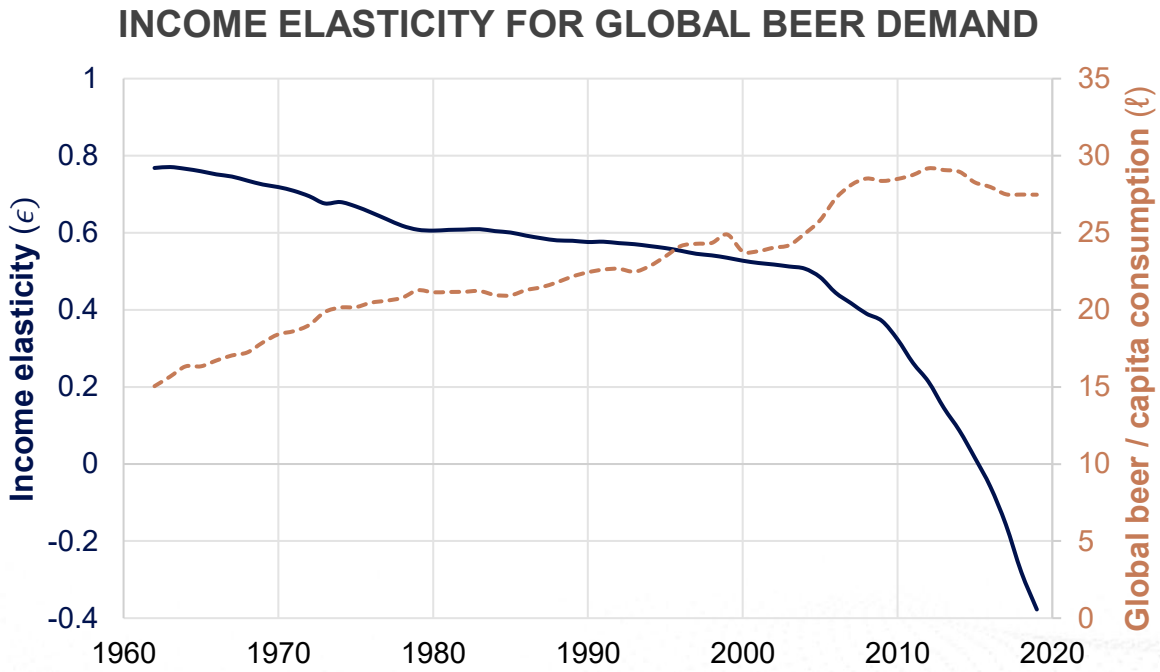


Source: Client data; TelluBase; Tellusant analysis

Income elasticity

$$\textit{Income elasticity} = \frac{\%\ \textit{change in demand}}{\%\ \textit{change in income}}$$

$$\epsilon_I = \frac{\Delta D/D}{\Delta I/I} = \frac{dD}{dI} \cdot \frac{I}{D}$$



Source: WHO alcoholic beverages database; TelluBase; Tellusant analysis

Differential equations

UNDAMPED INCOME ELASTICITY

$$dy = \epsilon \frac{y}{x} dx$$

Solution to diff eq

$$y = Cx^{\epsilon}$$

DAMPED INCOME ELASTICITY

If PCC is high, the propensity to consume declines

$$dy = \eta \frac{y}{x} dx - \delta y$$

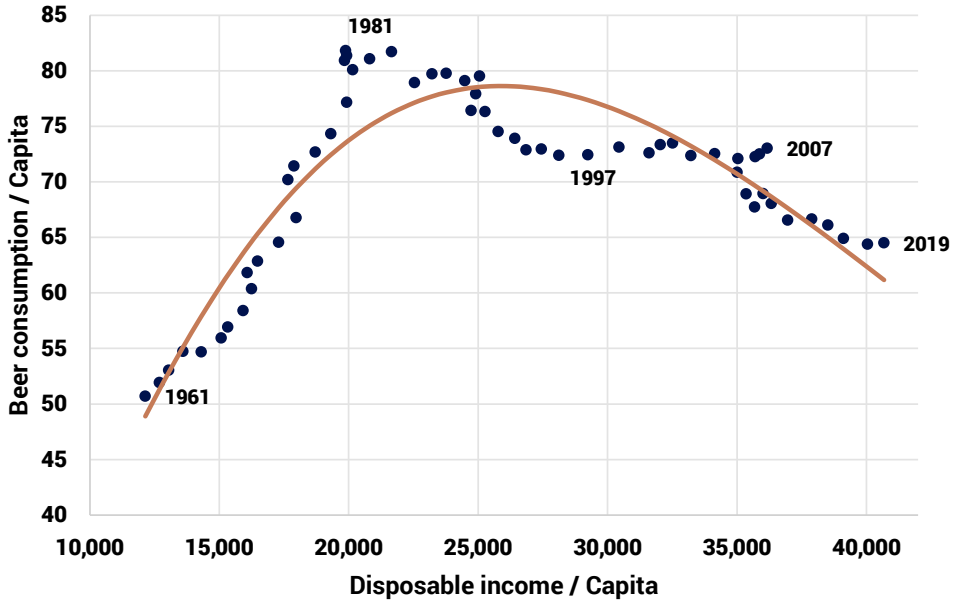
Solution to diff eq

$$y(x) = Ce^{-\delta x} x^{\eta}$$

$$\epsilon = \eta - \delta \mathbf{x}$$

x = **Beer PCC**
y = **Disposable income / capita**

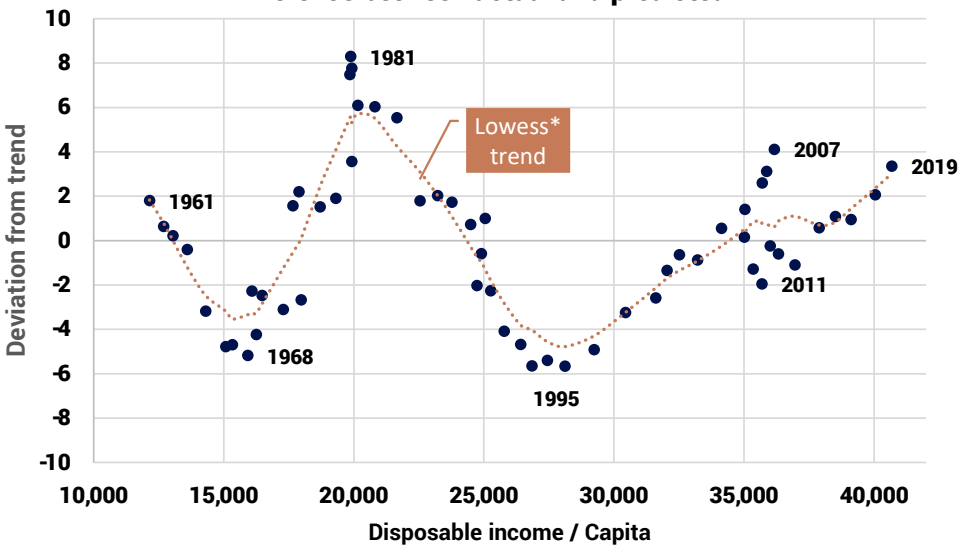
UNITED STATES BEER CONSUMPTION VS INCOME
Actual vs diff. eq. model with damping for high consumption; 1961-2019



Income drives demand as people can afford beer

Income leads to new consumer preferences that drive demand down

U.S. LONG-CYCLE ERAS
Difference between actual and predicted



*** Lowess = locally estimated scatterplot smoothing**

Source: WHO; TelluBase; Tellusant analysis

Forecasting I

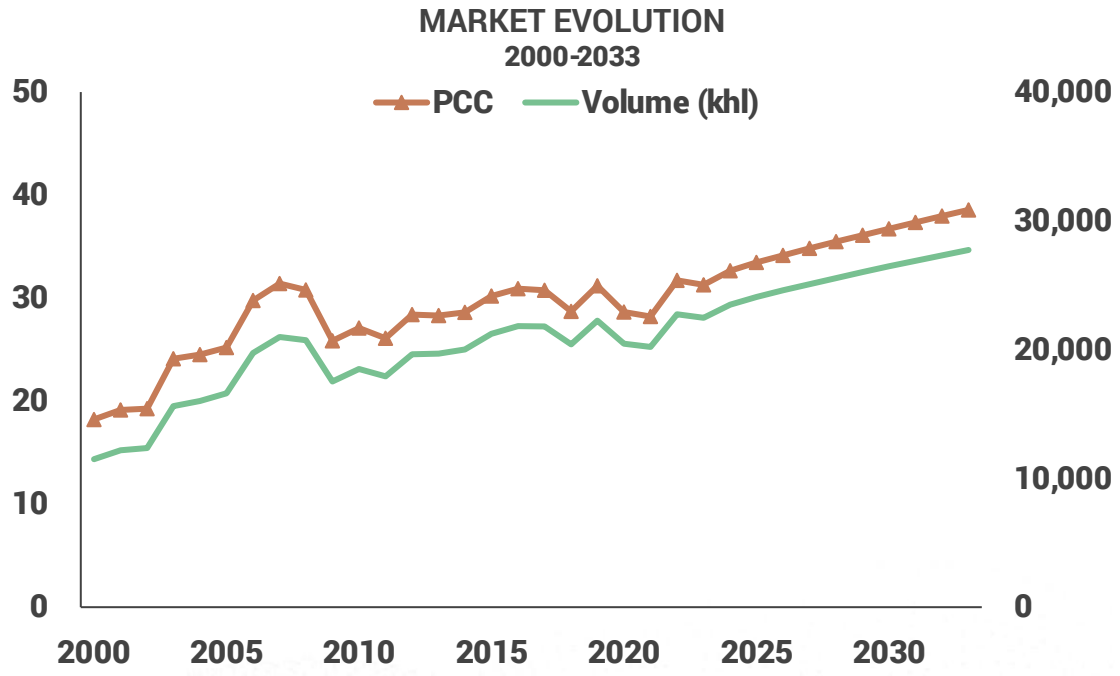
GOLDER TELLIS PREDICTIVE MODEL

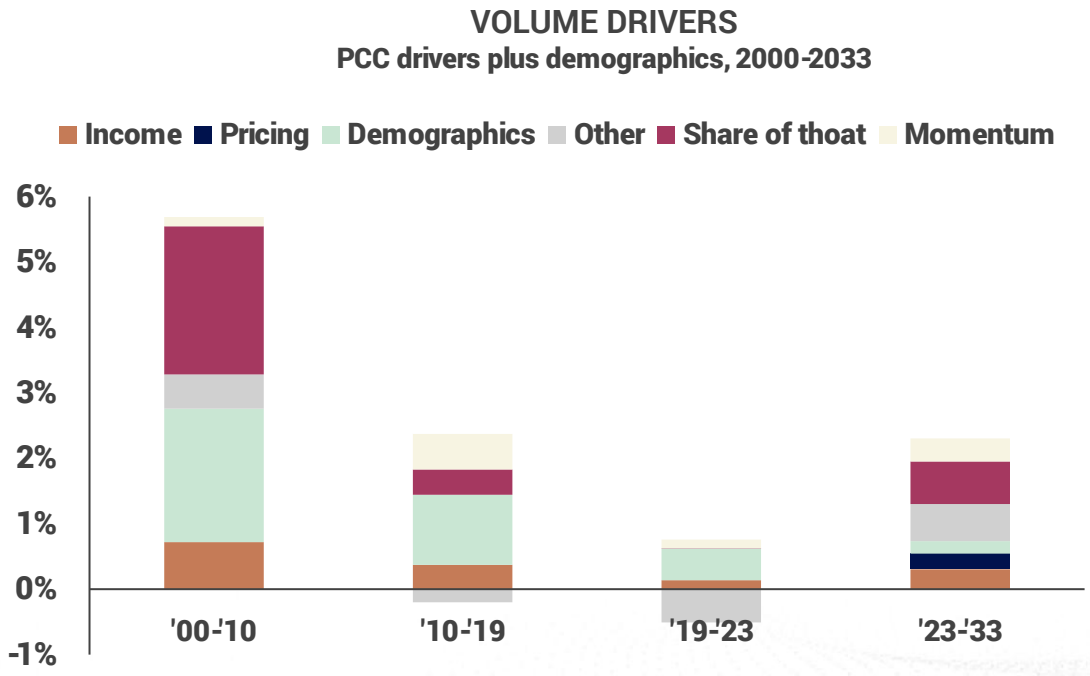
Golder Tellis Forecasting Model

$$demand = k \cdot (di)^{\beta_1} \cdot (cs)^{\beta_2} \cdot (p)^{\beta_3} \cdot (ms)^{\beta_4} \cdot (mp)^{\beta_5} \cdot e^{\varepsilon}$$

Volume	Disposable income	Consumer sentiment	Price	Marketing spend	Market presence (distribution)
	External			Internal	

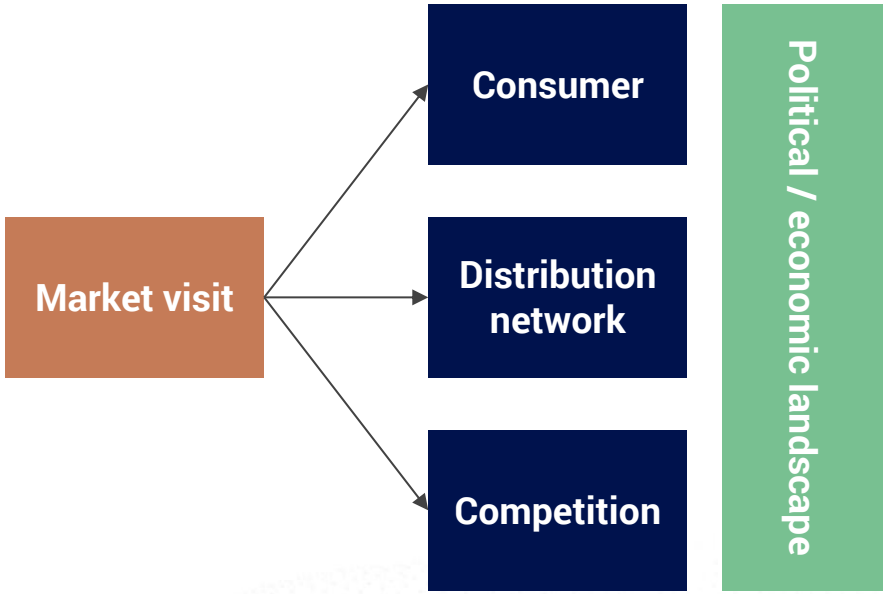
Forecasting II





Source: 3rd party data sources, TelluBase; Tellusant analysis

Market visits



APPROACH

- 4-6 people. Typically, 1 week
- *Prior to visit*: Conduct preliminary analyses
- *Day 1*: Arrive in major city. Have a a "first look"
- *Day 2*: Visit modern trade outlets in the morning and traditional trade outlets in the evening
- *Days 3-4*: Split into teams and visit secondary cities, villages and rural areas
- *Day 5*: Re-convene in the major city, compare findings *Day 6*: Meet with client and discuss

The days are long. Start in the trade around 11, and continue till past midnight (with an afternoon nap)

WhatsApp is invaluable

Plan for contingencies: Robbery, violence, engine failure

Running out of gas in Mexican countryside, close to Izamal

Source: Tellusant method

Vung Tau –Resort town, Viet Nam

Low chairs, HCMC, Viet Nam

Street vending, Ha Noi, Vie Nam

Old American Hangars, Da Nang, Viet Nam

Railway station Ulaan Baatar, Mongolia

Trade visit, Ulaan Baatar, Mongolia

Enjoying *airag in* Ulaan Baatar, Mongolia

Department store, Ulaan Baatar, Mongolia

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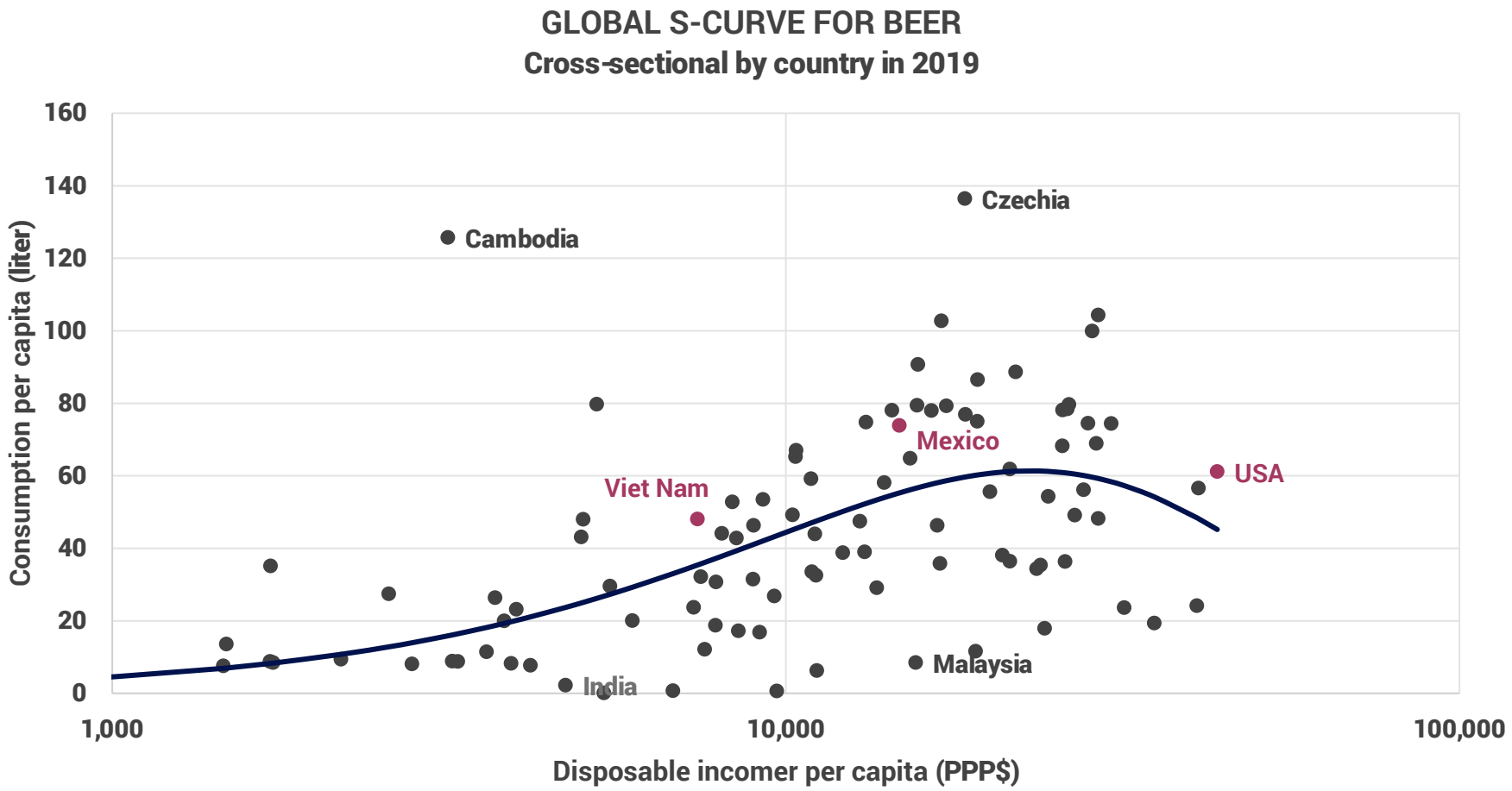
BREAKOUT

Instructions

- **You get 3 slides with historical data for the global beer market and your assigned country: Mexico, the United States or Mexico**
- **Your task is to predict the future market growth drawing on these data, and to argue your case**
- **There is no correct answer**

There are 3 questions on the last page

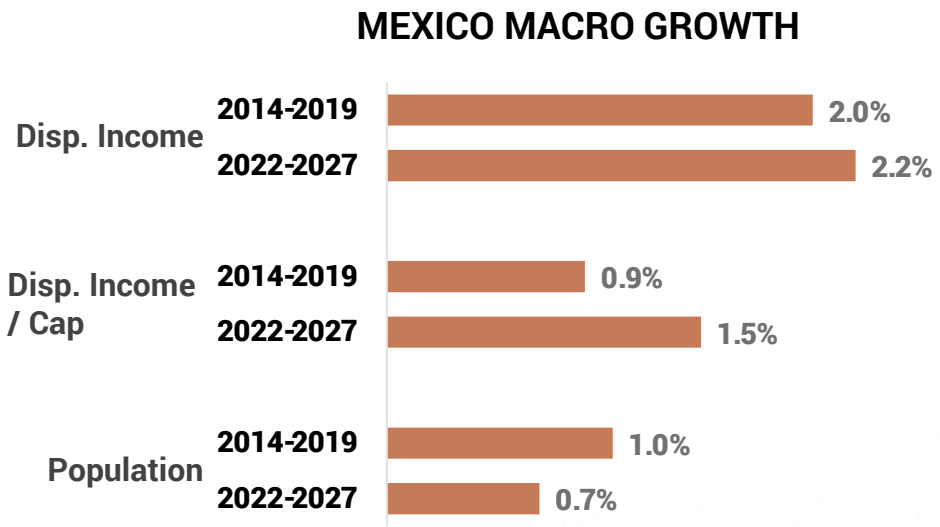
Mexico: Beer Global S-Curve

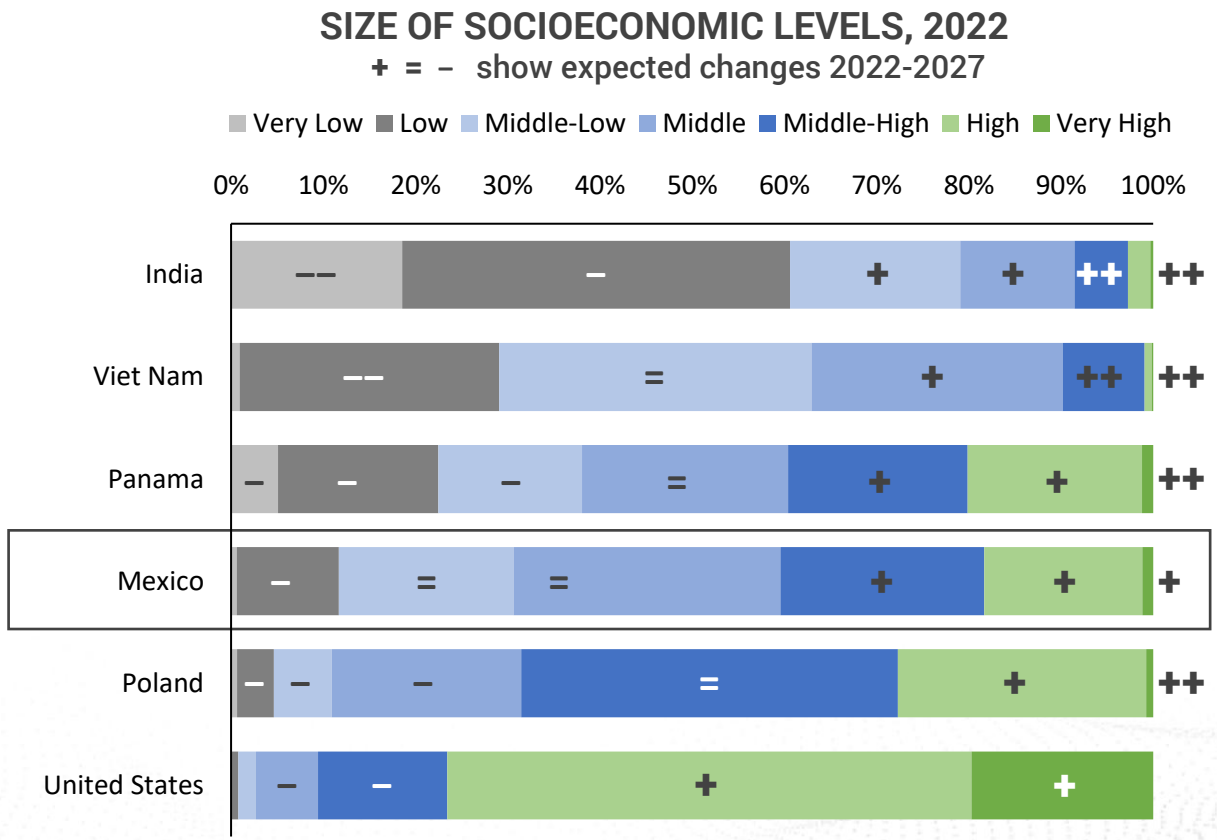


Source: WHO; TelluBase; Tellusant analysis

BREAKOUT

Mexico: Macro Context

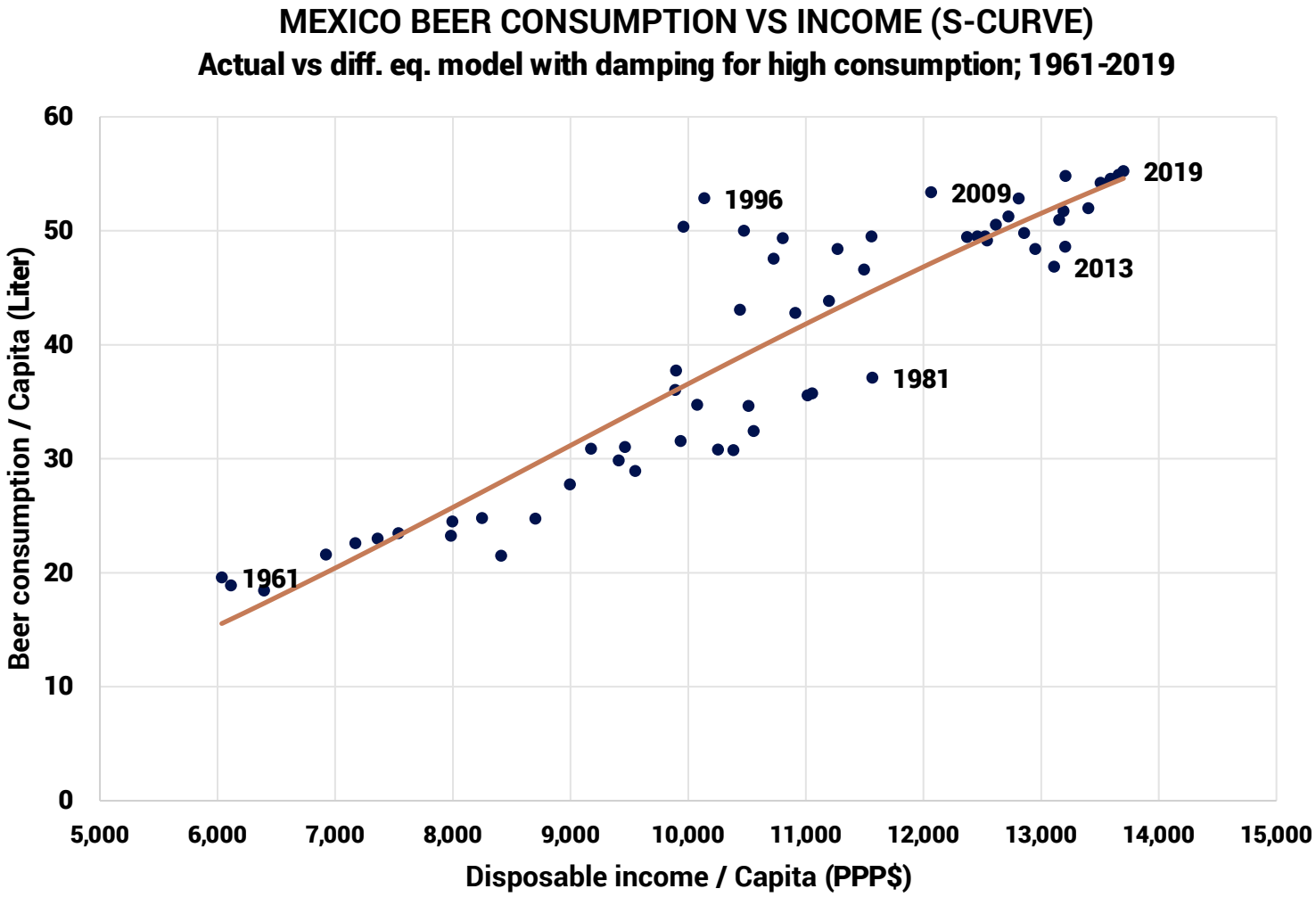




Source: TelluBase; Tellusant analysis

BREAKOUT

Mexico: Beer Market



Source: WHO; TelluBase; Tellusant analysis

BREAKOUT

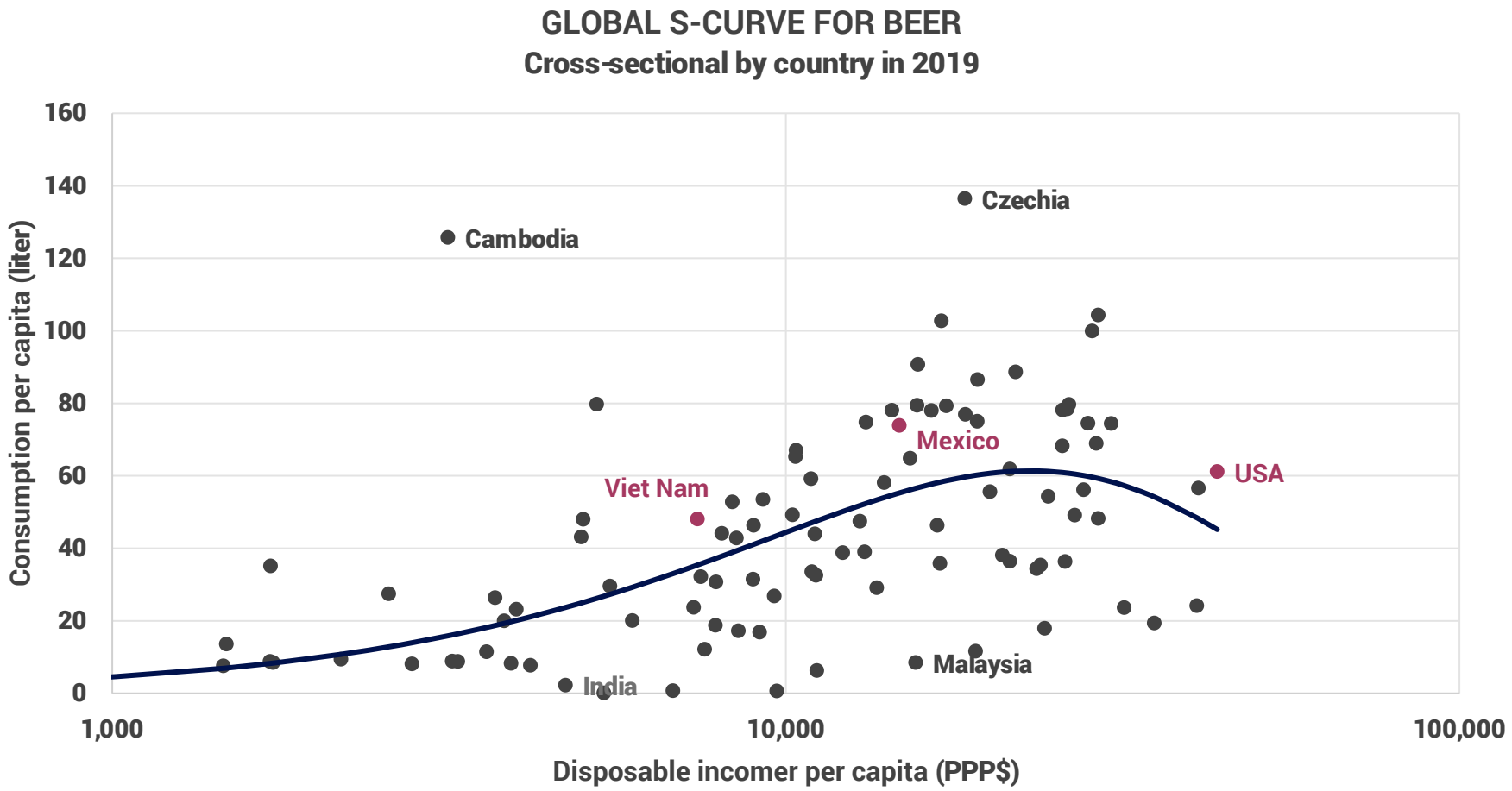
Mexico: Questions

- **Assume the pandemic was neutral on demand 2029-2021. Down 2020 and up by the same amount in 2021**

- **How much will the Mexican market grow / decline 2022-2027?**
- **How do you argue for this growth / decline?**
- **What else would like to know to make your analysis more robust?** ***Name up to 3 items***

BREAKOUT

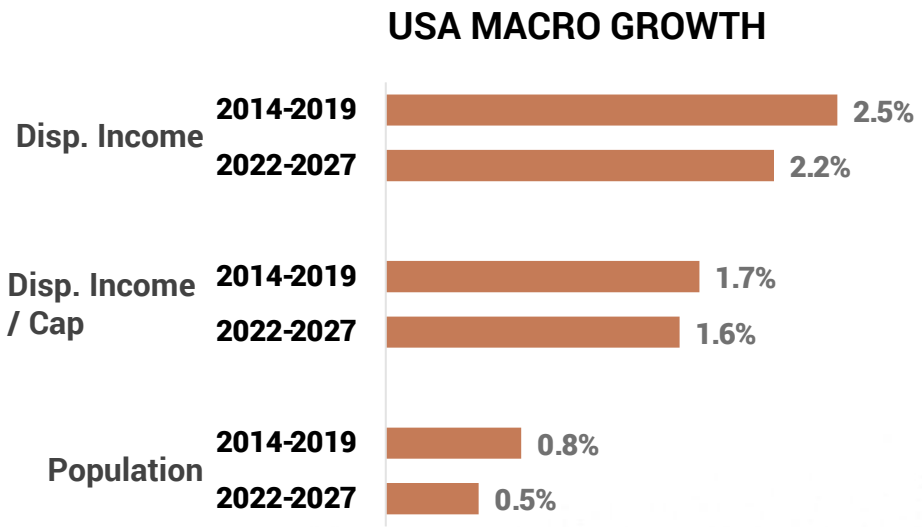
USA: Beer Global S-Curve

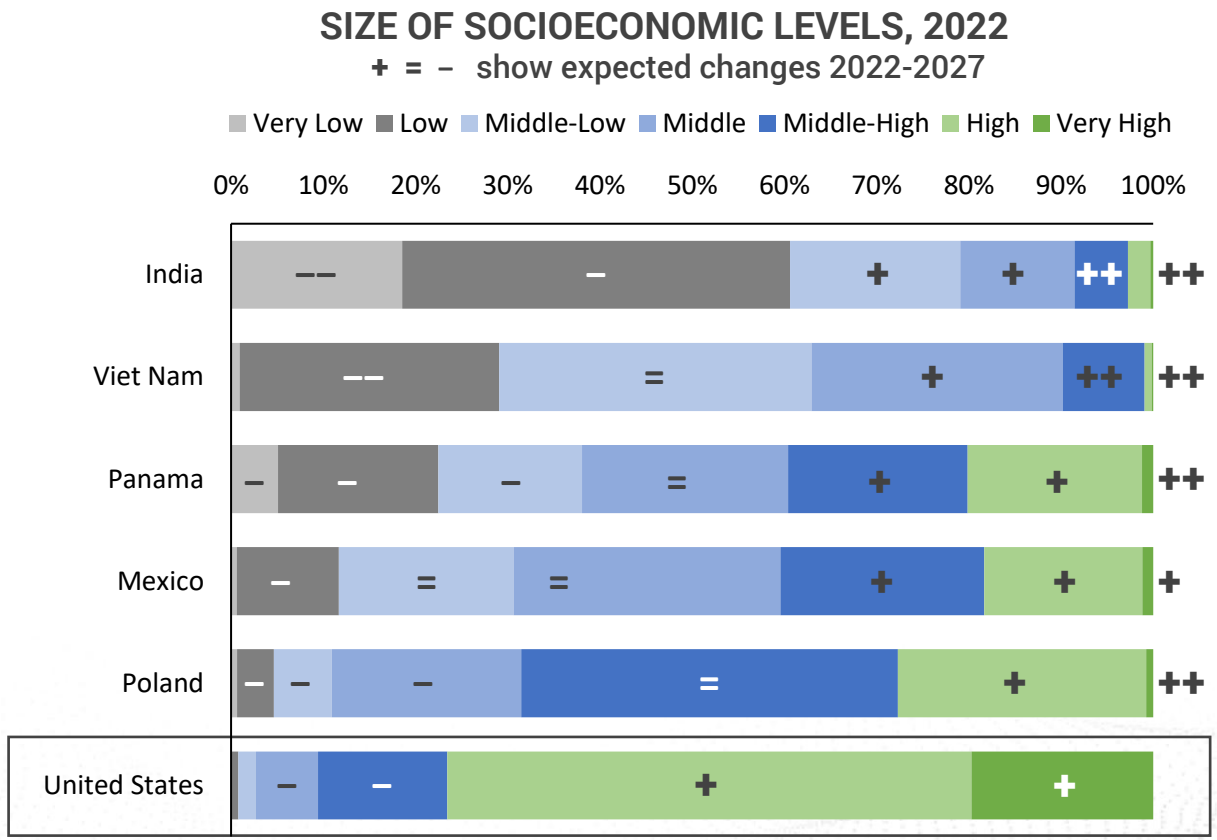


Source: WHO; TelluBase; Tellusant analysis

BREAKOUT

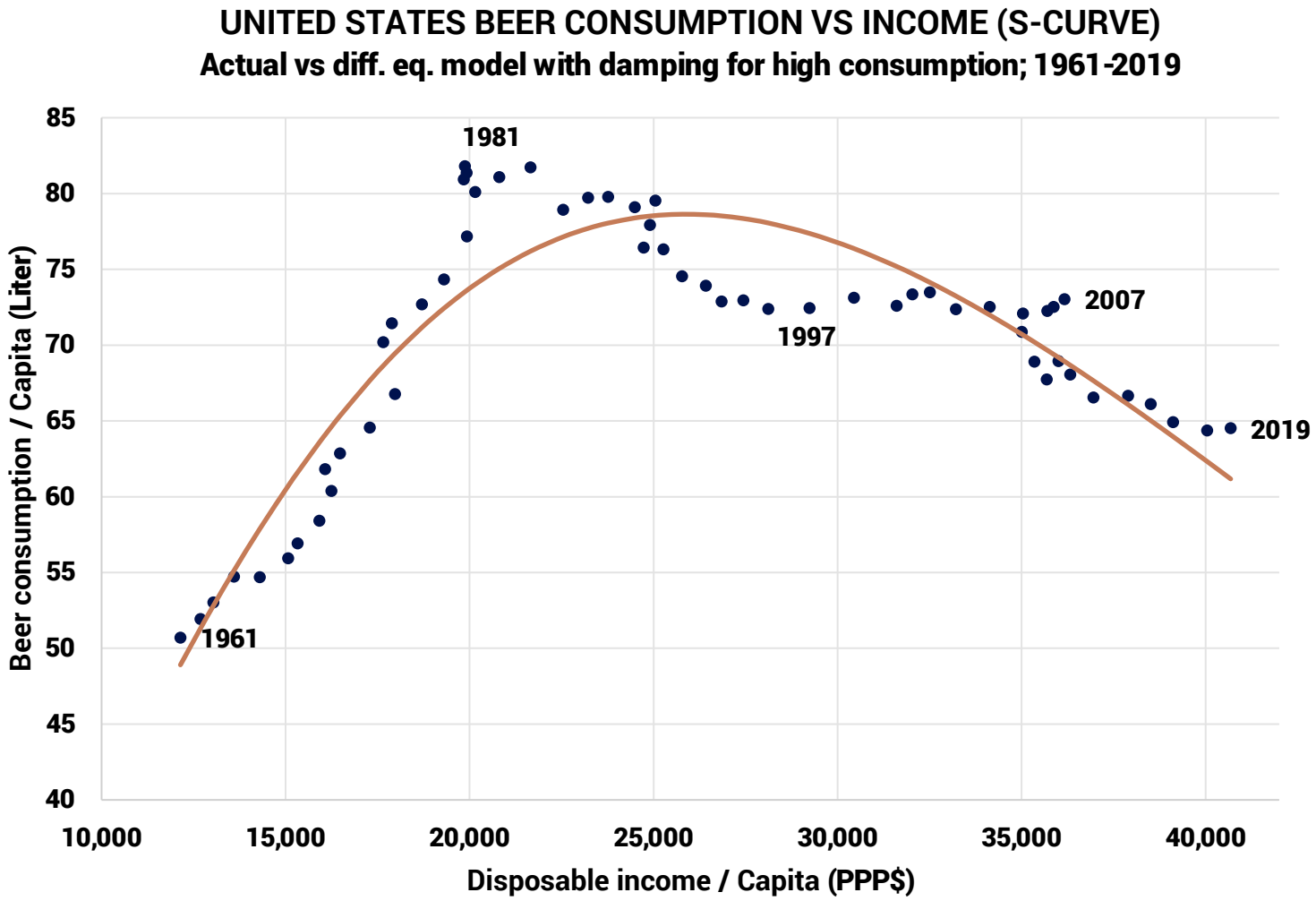
USA: Macro Context





Source: TelluBase; Tellusant analysis

USA: Beer Market



Source: WHO; TelluBase; Tellusant analysis

BREAKOUT

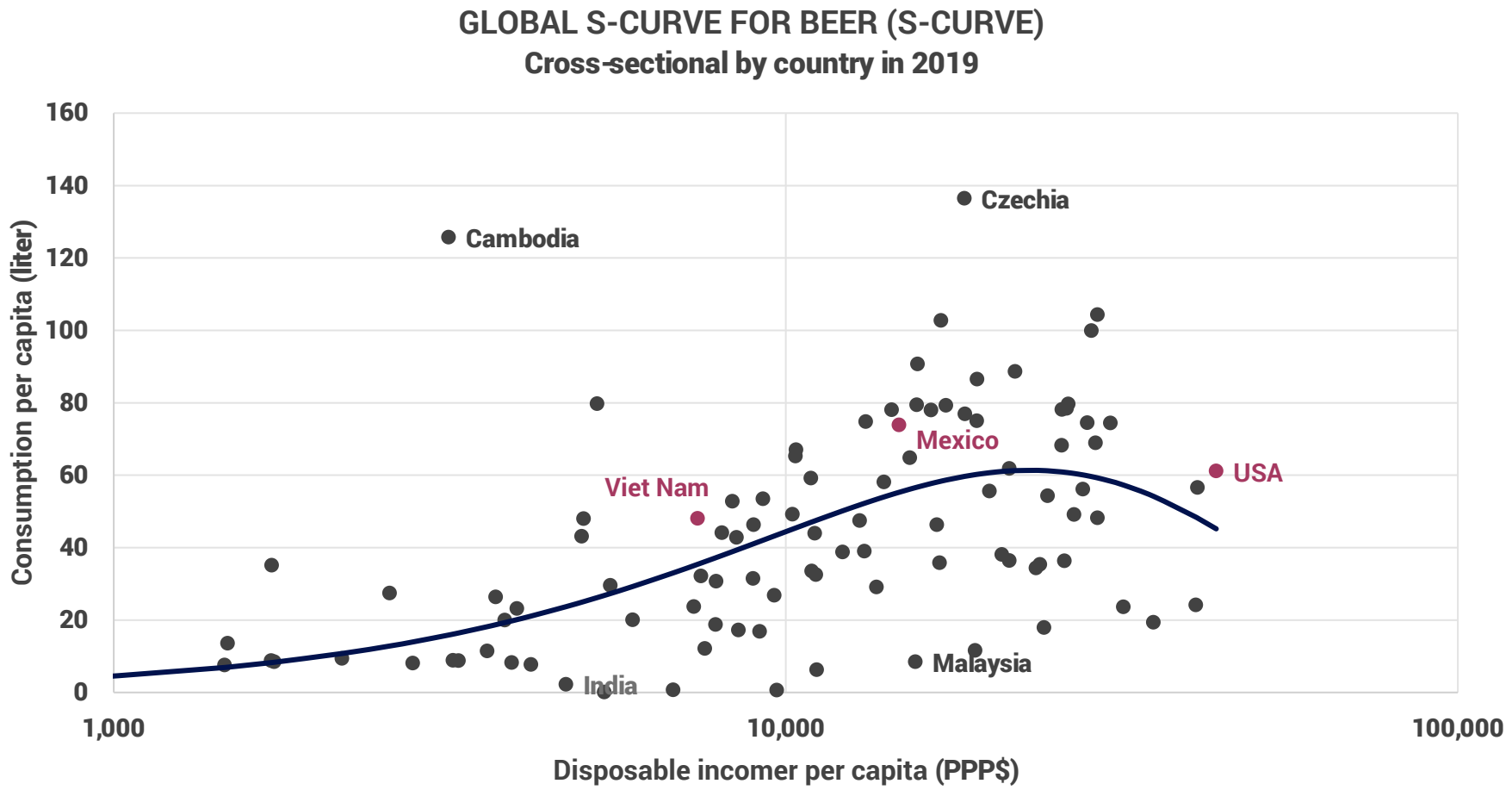
USA: Questions

- **Assume the pandemic was neutral on demand 2029-2021. Down 2020 and up by the same amount in 2021**

- **How much will the American market grow / decline 2022-2027?**
- **How do you argue for this growth / decline?**
- **What else would like to know to make your analysis more robust?** ***Name up to 3 items***

BREAKOUT

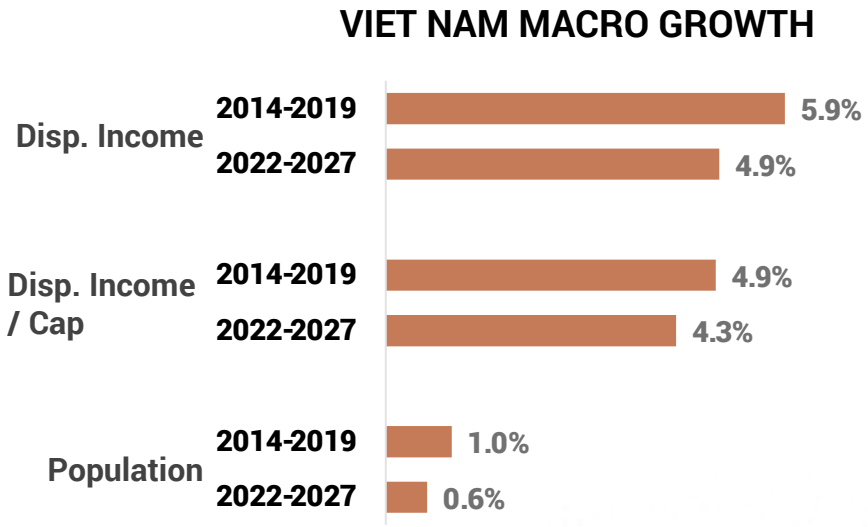
Viet Nam: Beer Global S-Curve

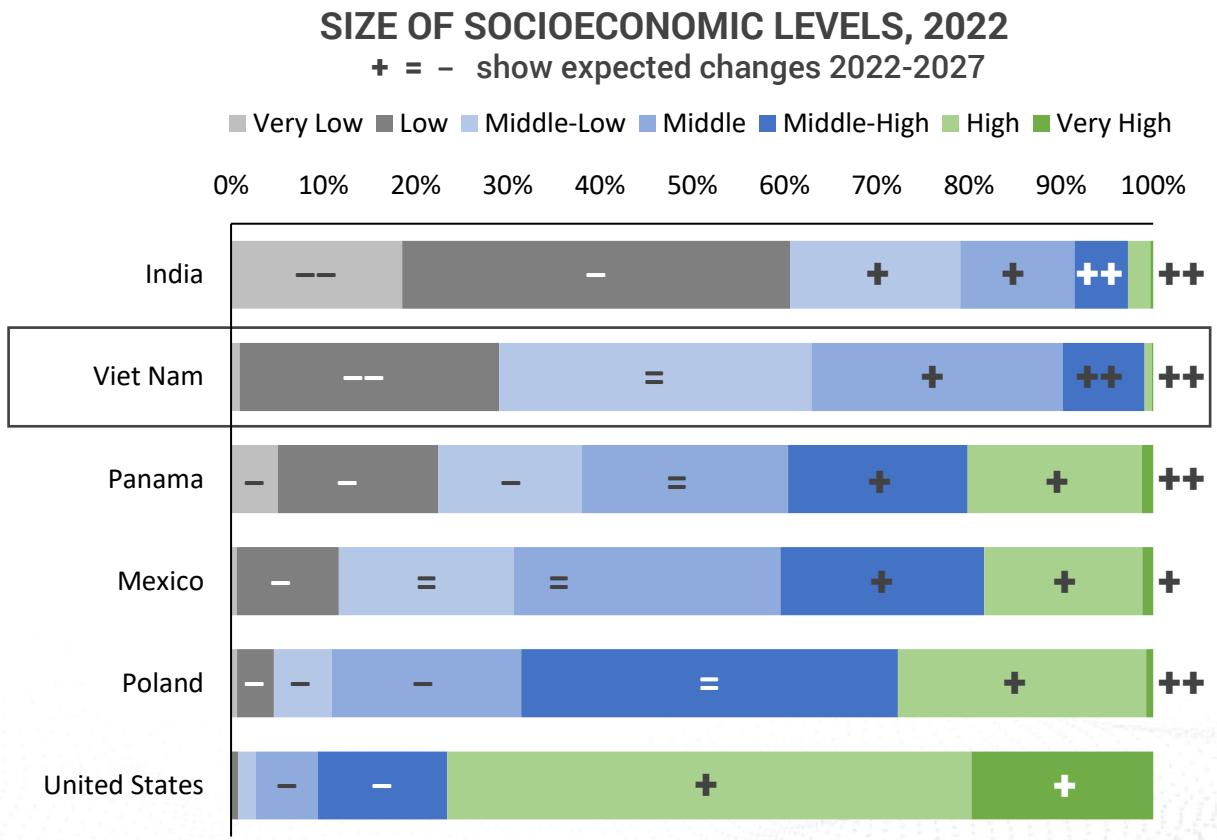


Source: WHO; TelluBase; Tellusant analysis

BREAKOUT

Viet Nam: Macro Context

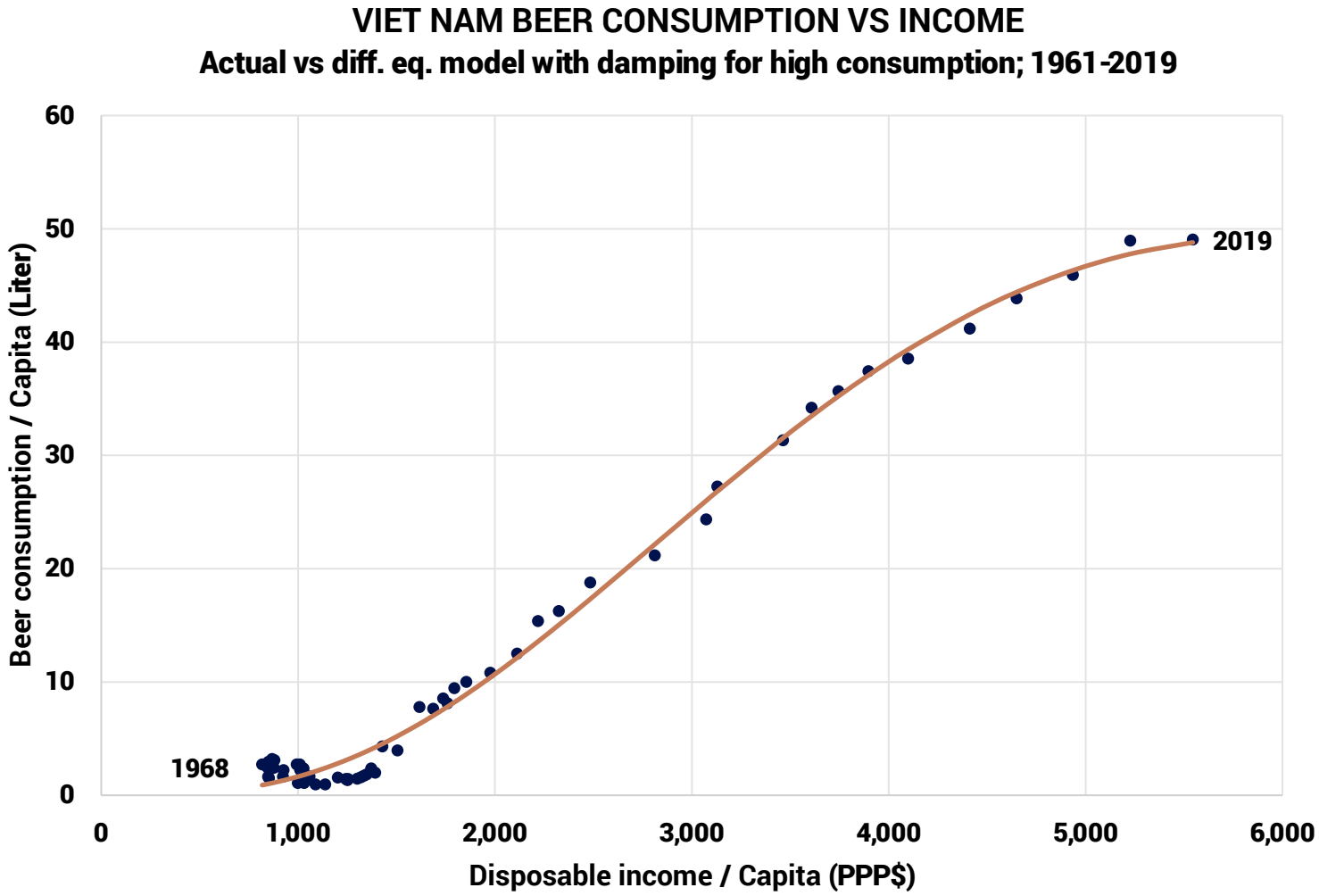




Source: TelluBase; Tellusant analysis

BREAKOUT

Viet Nam: Beer Market



Source: WHO; TelluBase; Tellusant analysis

BREAKOUT

Viet Nam: Questions

- **Assume the pandemic was neutral on demand 2029-2021. Down 2020 and up by the same amount in 2021**

- **How much will the Vietnamese market grow / decline 2022-2027?**
- **How do you argue for this growth / decline?**
- **What else would like to know to make your analysis more robust?** ***Name up to 3 items***

Agenda

1. Introduction
2. Where in the World Is the Market?—The Macro View
3. Where in the World Is the Market?—The Market View
4. Breakout session
5. Q&A

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