From value investing to modern value

Tano Santos
David L. and Elsie M. Dodd Professor of Finance
Columbia Business School
Heilbrunn Center for Graham & Dodd Investment

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VALUE INVESTING … FOR PEOPLE IN A HURRY
The Value Investing Process

Risk Management
- Margin of safety
- Some diversification
- Patience – Default strategy

Review
- Key issues
- Collateral evidence
- Personal biases

Valuation
- Assets
- Earning Power
- Franchise

Search
- Cheap
- Ugly
- Obscure and otherwise ignored
Value and growth

**Growth creates value**

- Asset Values (AV)
- Earnings Power Values (EPV)
- Barriers to entry?

- Franchise Values (FV > 0) if yes
- Franchise Values (FV ≤ 0) if no

**Growth destroys value**

Risk Management

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Value and growth

Growth creates value

- Asset Values (AV)
- Earnings Power Values (EPV)
- Franchise Values (FV)

Growth destroys value

Risk Management

A bit about this today
OF SHOCKS AND TRENDS ...
### Nature of risks

<table>
<thead>
<tr>
<th>Nature of Risks</th>
<th>Temporary</th>
<th>Permanent</th>
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**What are the effects of a drop in oil prices?**
- Example: Energy and value traps

**How to think about technology and value?**
- Disruption and value creation
- Example: The payments industry and Adyen

**What triggers regulation?**
- Regulation and value creation
- Example: Should we regulate AMZN, FB, …?

**What are the effects of import penetration on local industries?**
- Import substitution and value creation
- Example: The bankruptcy of FBI
### Nature of risks

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**Managing the stock: The many taxonomies of risk**

**Temporary**
- Management
- Operational

**Permanent**
- Input prices
- Technology
- Regulation
- Import penetration
- Recession
- Depression
- Inflation/deflation
- Political
- COVID-19
On shocks: What do disruptions (permanent shocks) do?

1. They **kill** a particular economic activity

   Example: Technology – Horse carriage and the car

   Example: Regulation – The jitney craze of 1914 – 1918

2. They **transform** how a particular economic activity either supplied or consumed

   Example: e-retailing,

   Example: The payments industry

3. They **unbundle** how particular economic activities are either supplied or consumed

   Example: advertising and news
On trends: What do trends do?

- Trends refer to the widespread adoption of practices, behaviors and institutions that are already operational in another:
  - Country
  - Sector
  - Demographic groups

- It is the process of diffusion rather than of disruption
  - It is predictable and dominated by the trend rather than by the fluctuations around the trend

- It is irreversible, though it can be overtaken by another trend

- Companies benefit from that trend if, and only if, their business operations are protected by barriers to entry.
The evolution of the payments system

Customer

Product

Product

Merchant
The evolution of the payments system
The evolution of the payments system

Customer

Cash

Royal Mint

The King

Merchant

Royal Mint

Cash coin

Product
The evolution of the payments system

Customer

Merchant

Product

Cash

Coin

Gold

Services

Coin (taxes)

Royal Mint

The King

Capital

Revenue?

Services
The evolution of the payments system

Customer → Merchant

Cash coin:

Merchant → Royal Mint

Product + seignorage

Royal Mint → The King

Gold → Coin

The King → Customer

Revenue!

Coin (taxes)

Customer → Royal Mint

Services

Royal Mint → The King

Capital

Customer → Royal Mint

Coin

Cash coin

Royal Mint → Customer

Coin (taxes)

Merchant → Royal Mint

Services

Royal Mint → The King

Capital

The King → Royal Mint

Revenue!

Coin (taxes)
The evolution of the payments system
The evolution of the payments system

Credit card: An open system
Step 1: Authorization

Customer

Merchant/issuing bank

Authorization request

Authorization request

Authorization request

Customer

Merchant

Credit card

Product

Presents Card

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The evolution of the payments system

Credit card: An open system
Step 2: Authentication
The evolution of the payments system

Credit card: An open system
Step 3.a: Clearing & settlement: 24 – 48 hrs

Customer

Presents Card

Customer/issuing bank

Debit

Payment – Interchange fee

Credit card

Payment – Interchange fee –
– Assessment & processing fee

Merchant

Payment – Interchange fee –
– Assessment & processing fee –
– Merchant Discount Rate

Merchant bank
The evolution of the payments system

Credit card: An open system
Step 3.b: Clearing & settlement: end of the month

Customer → Credit card → Customer/issuing bank

Payment (+ interest)

Customer
Merchant
Credit card
Merchant bank
The evolution of the payments system

Credit card: An open system
Where is the risk?

Credit card

Credit risk

Fraud, CNP risk

Customer

Customer/issuing bank

Merchant

Merchant bank

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The evolution of the payments system

Credit card: An open system
Industrial Organization – 1

Customer

Customer/issuing bank

Citi
Chase
Bank of America …

Merchant

Citi Merchant Serv.
Chase Paymentech
BofA Merchant Serv.
Wells Fargo Merchant Serv.

Credit card

Mastercard
Visa

Presents Card

Product

Merchant bank
The evolution of the payments system

Credit card: An open system
Industrial Organization – 2

Customer

Present Card

Customer/issuing bank

Non-merchant bank acquirers
Independent Sales Org. (ISOs)

Merchant

Merchant bank

Industrial Organization

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The evolution of the payments system

Credit card: An open system
Industrial Organization – 3

Customer/issuing bank
Citi
Chase
Bank of America …

Customer

Merchant

Credit card

Mastercard
Visa

Fiserv (First Data)
FIS (Worldpay)

Global Payments (TSYS, Heartland)
Wells Fargo Merchant Serv.

Non-merchant bank acquirers
Independent Sales Org. (ISOs)

Merchant bank

Citi Merchant Serv.
Chase Paymentech
BofA Merchant Serv.
The evolution of the payments system

Customer/issuing bank

Credit card: An open system
Industrial Organization – 4

Customers

Credit card

POS Infrastr. Payment Aggregators

Non-merchant bank acquirers
Independent Sales Org. (ISOs)

Merchant bank

M₁ M₂ ... Mₙ
The evolution of the payments system

Credit card: An open system

Industrial Organization – 5

Customers

Customer/issuing bank

Customer/issuing bank

POS Infrastr.
Payment Aggregators

M1 M2 ... Mn

Merchant bank

Square
Stripe
Paypal
Adyen

Fiserv (First Data)
FIS (Worldpay)
Global Payments (TSYS, Heartland)

Citi
Chase
Bank of America ...

Citi Merchant Serv.
Chase Paymentech
BofA Merchant Serv.

Wells Fargo Merchant Serv.

Non-merchant bank acquirers
Independent Sales Org. (ISOs)

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The evolution of the payments system

Credit card: An open system

Industrial Organization – 5

Customers

POS Infrstr. Payment Aggregators

M₁ M₂ \ldots Mₙ

Merchant bank

Customer/issuing bank

Citi
Chase
Bank of America …

Credit card

Mastercard
Visa

Non-merchant bank acquirers

Square
Stripe
Paypal
Adyen

Fiserv (First Data)
FIS (Worldpay)
Global Payments (TSYS, Heartland)

Independent Sales Org. (ISOs)

Merchant bank

Citi Merchant Serv.
Chase Paymentech
BofA Merchant Serv.
Wells Fargo Merchant Serv.
The evolution of the payments system

Credit card: An open system
Industrial Organization – 6

Customers

Customer/issuing bank

POS Infrstr.
Payment Aggregators

M1, M2, ..., Mn

Mastercard

Visa

Credit card

Square

Chase Paymentech

Non-merchant bank acquirers
Independent Sales Org. (ISOs)

Merchant bank

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Where is Adyen in the payment process

Merchant → Gateway → Risk management → Processing

Authorization ← Issuing bank ← Credit card ← Acquiring bank

Citi, Chase, Mastercard, American Express, Visa

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TRENDS
Trends: Taxonomy

Trends

The consumer
- Wealth accumulation
- Demographic changes
- Behavioral changes
- Technology adoption

The firm
- Business process adoption
- Automatization
- Direct to consumer
- Standardization
- HR practices
- Compliance

Governance & Institutions
- Regulation
- Market adoption
- Political trends
Trends: The death of the movie theater

US: Tickets sold (in millions) and Box office receipts (in billions). 1995 – 2019
Source: The Numbers
Trends: The death of the movie theater


Source: The numbers

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Travel agencies: Stock Prices: This year

TUI AG: Stock price (€)

Bookings: Stock price ($)
TUI AG
Revenues and operating income (mns. of £) 2000 – 2019

TUI EV/EBIT 2006 – 2019

EBIT: Guidance (€622) divided by 5

EBIT: FY2019 EBIT

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Is it growing?

Rate of growth of international arrivals. Source: UNWTO

1.5bn visitors
The “Travel” business: A bird’s eye view

The “Travel” Business

Tourism
- Mass
- Adventure
- Wildlife
- Cultural
- Religious

Corporate travel
- Households
- Firms

Households

Firms

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The “Travel” Business: Exposure to Coronavirus

The “Travel” Business

Tourism
- Mass
- Adventure
- Wildlife
- Cultural
- Religious

Corporate travel
- Households
- Firms

Households
- High
- High
- High
- High

Firms
- High
- Short

- High
- Low
- Low
- Low

High
Low
Short
Long
The “Travel” business: Main economic determinant

The “Travel” Business

Market Economies
- Mass
- Adventure
- Wildlife
- Cultural
- Religious

Limited supply

Corporate travel
- Industry
- Retreats
- Conferences

Firms’ balance sheet

World Mobile Congress

You know …

AEA/AFA

Economies of scale
Tourism: Is this a good country for tourism?
Tourism: Is this a good country for tourism?
Tourism: Is this a good country for tourism?
Tourism: The value chain

Tourist

Travel Agencies
- Expedia (Travelocity, Worldwide Travel, Orbitz, …)
- Bookings (priceline, agoda, …), BCD, Amex, CWT
- TUI Group, Trip.com, Google Travel, …

Transportation
- American, Delta, United, Air France/KLM, Ryanair,
- Tui Airlines, IAG, China Eastern, China Southern, …

Hotels & Accommodations
- Wyndham, Marriott, Hilton, Best Western,
- Accor, JinJiang, Hyatt, InterContinental, Airbnb, …

Transportation
- Local airlines (Vueling, Wow, Ryanair, Norwegian, …)
- Car rental (Hertz, Avis, …)
- Trains, public transportation, …

Amenities & services

Insurance, advertising, …

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Tourism: The value chain

Tourist

Travel Agencies

High: Network externalities

Transportation

Low: Rewards programs

Hotels & Accommodations

Traditional: Low: Rewards programs
Airbnb: High: Network externalities

Transportation

Low: Rewards programs

Amenities & services

High: inelastic supply

Barriers to entry: Sources of customer captivity

Insurance, advertising, ...
Tourism: OTAs

- How do you book a hotel in Rome?

1. OTA
   - Bookings, Expedia

2. Metasearch/aggregator
   - Trivago, TripAdvisor

3. Alternative
   - Airbnb

4. Direct booking
   - Le Meridien Visconti

5. Search engine
   - Google
• OTAs: Business models

1) Merchant model
   • OTA buys blocks of rooms at a discount and resells them for a profit
   • Customers pay the OTA in time of booking and the OTA pays the hotel at checkout.
   • 20-30% fee
   • Example: Expedia

2) Agency model
   • Middleman and no payment upfront
   • 10-15% fee at checkout from hotel
   • Small versus large hotels (think Europe)
   • Example: Bookings
Tourism: OTA

- OTAs match customers with hotels
  - The logic of platform economics
  - Example: Mastercard or Visa

- Problem
  - Most travelers start their trip by searching locations, amenities and hotels in … Google.
  - Would Google steal the business away?
    - How much does the travel industry pay Google in marketing expenses? $14bn
    - Value of travel industry payments to Google (annuity) at 10% with 5% growth: $280bn
  - Cost of reproducing the network?
    - Operating margins of a network at work next
OTAs: Bookings: Operating margins

Bookings: Operating margins. 2000 – 2019
Source: Annual Reports

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OTAs: Bookings: Revenue and operating income growth

Source: Annual Reports
### OTAs: Bookings: EPV

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<th>Item</th>
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<td>Revenues</td>
<td>15,066.0</td>
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<tr>
<td>Operating Margin</td>
<td>35.5</td>
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<td>Op. Income</td>
<td>5,345.0</td>
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<td>Performance marketing</td>
<td>4,419.0</td>
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<td>Adj. Op. Income</td>
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<td>Tax Rate (%)</td>
<td>22.8</td>
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<td>Discount rate (%)</td>
<td>10.0</td>
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<td>EPV Op. Buss.</td>
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<td>Cash</td>
<td>7,330.0</td>
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<td>Debt</td>
<td>9,251.0</td>
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<td>EPV Equity</td>
<td>43,549.8</td>
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<td>Market cap (05-11-2020)</td>
<td>56,730.0</td>
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<tr>
<td>Market cap (03-23-2020)</td>
<td>47,303.2</td>
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![Bar chart showing Bookings: EV/ebit from 2002 to 2019](image)