



**BARRY HEADLEY**

**SENIOR ECONOMIST**

**CARICOM COMPETITION COMMISSION**

**Commissioners Workshop**

**13-15 March 2019**

**Bridgetown, Barbados**





*Recent developments in competition law.  
Two sided markets*



# TWO-SIDED MARKETS

---



**A market where firms act as platforms and sell two different products to two different groups of buyers**

- **taking into account that demand from one group of buyers depends on demand from the other group of buyers (so that these are not externalities for the firm)**
- **while buyers of the two groups do not take this indirect network effects into account (so that these are in fact externalities for buyers)**
- **(see Armstrong, 2006)**

**So that a two-sided platform**

- **- is a particular two-product firm**
- **- is different from a firm selling complement products**

# TWO-SIDED MARKETS

---



- An additional condition is that customers on one side should not be able to pass through completely to customers on the other side an increase in the price they are asked by the platform.
- In a two-sided market one can distinguish
  - a) the price level (roughly the sum of the two prices)
  - b) the price structure (roughly the ratio of the two prices)
- The non-neutrality of the price structure (for firms profits and for welfare) is a sufficient condition for the existence of a two-sided market
- (see Rochet and Tirole(2006))

# TWO-SIDED MARKETS

---



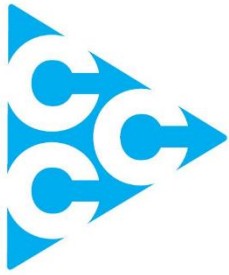
## Two-Sided markets: a clarification

- Not all firms are two-sided platforms
- All firms buy inputs and sell their output to generate a profit
- This implies:
  - they do not offer a service to input producers
  - the input producers do not care about demand for their product by consumers once they are paid by the firm (note: it depends on the contract!)

FOR example e.g. Is a supermarket a two-sided platform?

Yes, but only to the extent it is able to make a producer pay ( a discounted price or stocking fees) to have its product on the right shelf with good visibility to shoppers (in this scenario the supermarket is now offering them a service..)

- Only then would the producer care about how many clients the



# Types of Two-sided Markets

---



There are different kinds of two-sided markets

- the “payment card type” or “two-sided transaction” markets
- the “media type” and “two-sided non transaction” markets
- Also two types of two-sided markets of the “payment type”: these can be “3-party system” and the “4 (or 5) party system”

# Types of Two-sided Markets

---



## 1) Two-Sided Transaction Market:

- There is a transaction between end-users and it is observable to the platform e.g. payment cards, auction houses

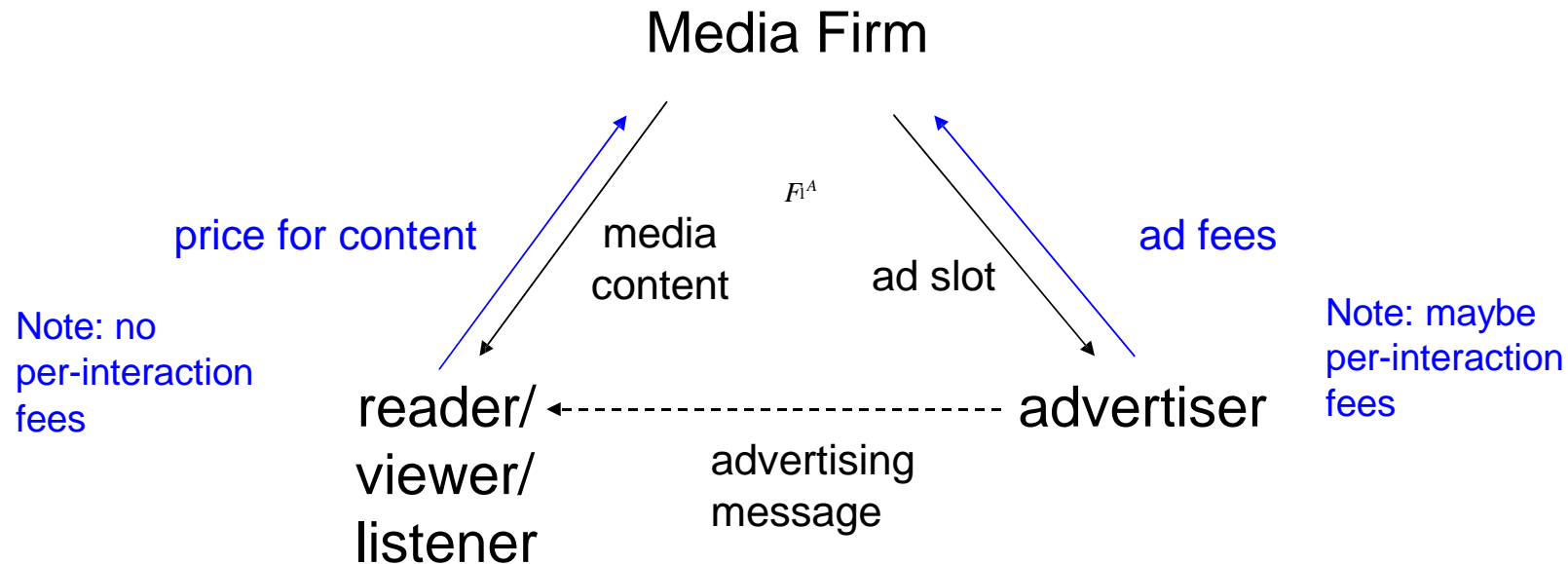
## 2) Two-Sided Non-Transaction Market:

- There is no transaction between end-userse.g. newspapers, TV

### Please Note that:

- A non-transaction market is an extreme case of two sided market
- at the other extreme there is a one-sided market

# Newspapers, TV, Radio, Internet...



**Note: no transaction here, but interaction, usually not observable (but see clicks on ads)**





# Application to specific markets

---

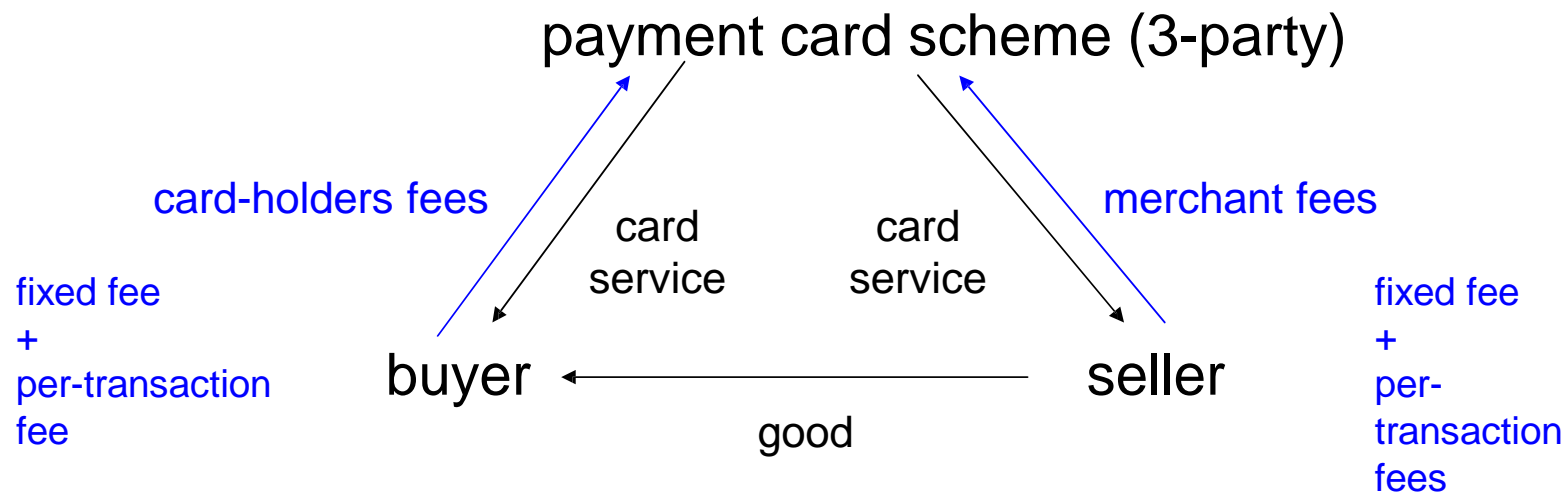


Media as two-sided markets: the idea – 1

- two markets: advertisers & readers/viewers/listeners
- Membership (or adoption) externalities (indirect network externalities):
  - the larger the audience, the higher the demand from advertisers at a given price or the higher the price which can be charged for a given ad slot
  - the more advertising (concentration), the ... the demand from readers/viewers/listeners
- not internalized by advertisers & readers/viewers/listeners
- internalized by media company

# A Two-Sided Market: Payment Cards-1

**Also: auction house, operating systems**



**Note: transaction here, usually observable**



# Application to specific markets

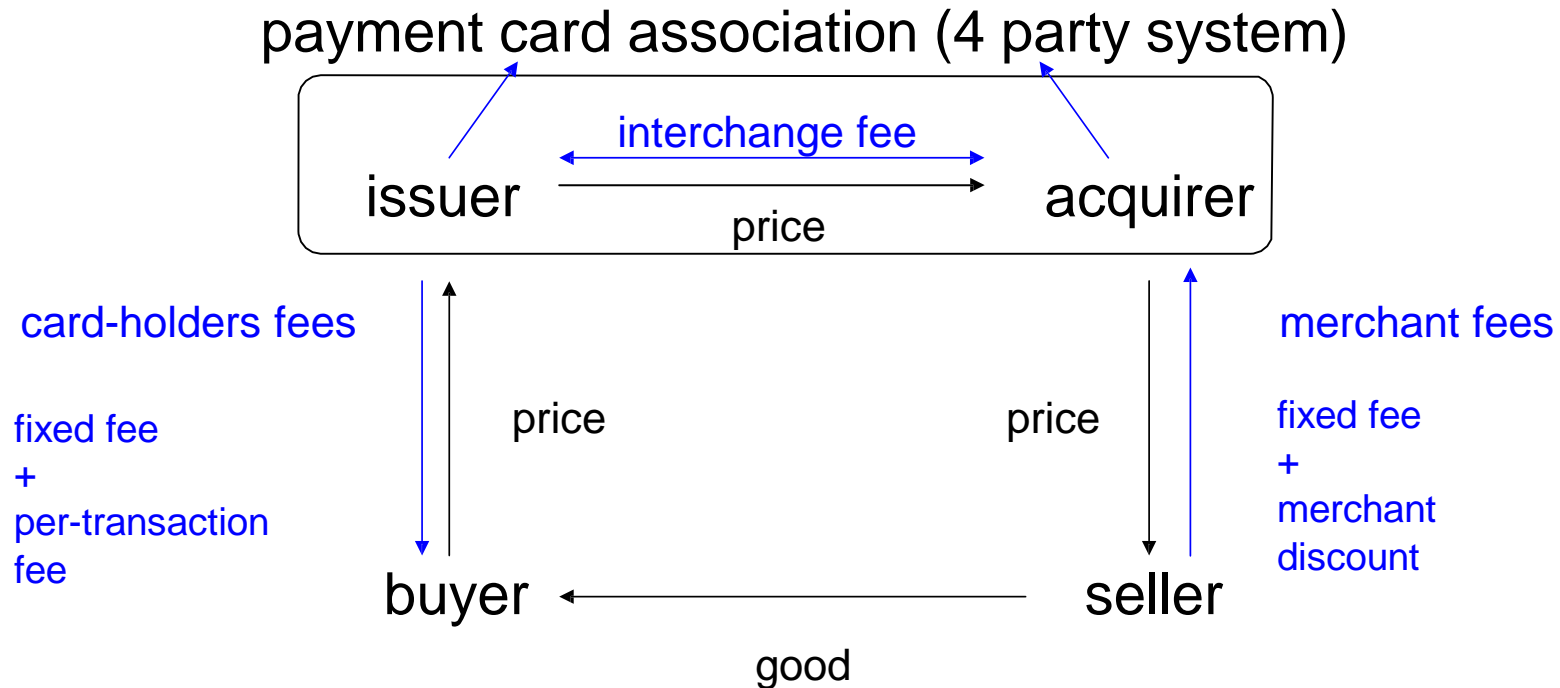
---



Payment cards as two-sided markets: 2 party system

- two markets: cardholders & merchants
- membership externalities (indirect network externalities):
  - the more cardholders, the higher demand from sellers
  - the more sellers accept it, the higher demand from buyers
- usage externalities:
  - for the cardholder to pay with his/her card the merchant must be willing to be paid with it
  - for the merchant to be paid with a card the cardholder must be willing to pay with it
- not internalized by buyers and sellers
- internalized by card firm/association

# A Two-Sided Market: Payment Cards-2



Note: on-us vs off-us transactions



# Application of one sided approach to two sided market

---



Challenges in applying a single-sided approach to a two-sided market

Profit-maximizing prices:

- A high-price cost margin indicates market power
- A price below marginal cost indicates predation

Welfare maximizing prices:

- An efficient price structure reflects relative costs (in mature networks)

The role of competition:

- Higher competition results in a more balanced price structure
- Higher competition results in a more efficient price structure (only price level)



# Application of one sided approach to two sided market

---



Issues in Competition Policy

- **Market Power**
- **Total welfare**
- **Market Definition**
- **Assessment of Market Power**
- **Merger evaluation**
- **Incentives to collude**
- **Predation**
- **Tying**

# Application to specific markets

---



Payment cards.

The simple settings usually used in the two-sided market literature may not adequately account for the complex structure of payment cards networks.

- Payment card transactions involve indeed a set of interrelated bilateral transactions between consumers and their banks (so-called issuers), merchants and their banks (so-called acquirers), and among banks via some network operators.
- These transactions generate a set of distinct monetary transfers.
- Examining the implications of this complex fee structure and of other rules imposed by network operators is crucial to assess the welfare impact of regulatory interventions in this industry.

# Application to specific markets

---



## Media markets.

- A common feature of media markets is the presence of advertisers on one side of the market.
- While readers or viewers exert positive cross-side effects on advertisers, the reverse is not necessarily true: advertisers may exert positive cross-side effects on some users (identified as 'ad-lovers') but negative effects on other users (identified as 'ad-haters').
- This feature sets media markets apart from other two-sided markets where it is generally reasonable to assume that cross-side effects have the same sign for all participants on a given side.
- It is important to examine how this feature affects media platforms when they make their decisions about advertising prices and content provision.