These slides were prepared to support the oral presentation. They are

The Economics of the Digital Economy

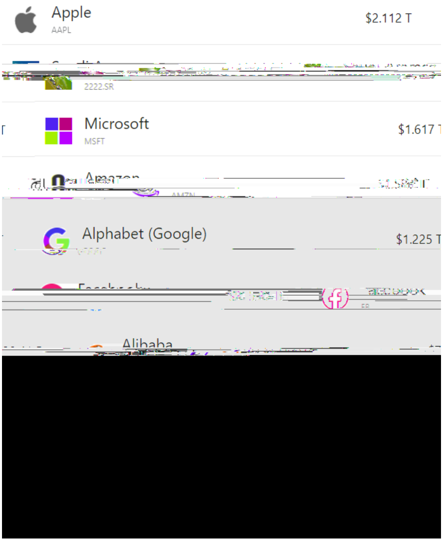
Jacques Cremer

Toulouse School of Economics

WTO Webinar on
The economic characteristics
of data and data-driven markets
Thursday 10 December 2020

Introduction

Valuations


Apple
AAPL
$2.112 T
2222.SR
Microsoft
MSFT
$1.617 T
Alphabet (Google)
$1.225 T

Disruption / Innovation

+ Replacement of old market places: Amazon;
+ New social etiquette: eHarmony,Tinder;
+ Totally new \intermediaries": Swyft, Uber and their competitors, energy markets, blablacar.

The characteristics of the digital economy

The \characteristics" of digital industries

- Innovation
- Increasing returns to scale.
- The role of intellectual property.
- Switching costs.
- Data.
- Network e ects.
- Two sidedness.

Monopoly is not bad

+ Many of these characteristics encourage the creation of monopolies.
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- \+ Many of these characteristics encourage the creation of monopolies.
- \+ And it is \socially e cient" to have monopolies.
- BUT We do not know how \competition for the market" should function to discipline large network rms.
- =) We do not know how much of a problem this is.

Network externalities

Network externalities: definition

There are (direct) network externalities if the `utility' of a participant to a platform increases with the number of other participants on the platforms.

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\If you want to play the odds when it comes to online dating, you need to be swiping where everyone's swiping."

Network externalities: definition

> There are (direct) network externalities if the `utility' of a participant to a platform increases with the number of other participants on the platforms.

+ Sometimes network externalities can be dominated by the consequences of congestion when the number of participants become too large. Example: movie theater.
+ Sometimes people also speak of `indirect' network externalities.
  Example: more people at the movie theater $\Rightarrow$ fresher popcorn.
  Example: more users $\Rightarrow$ more data $\Rightarrow$ better service.

...

. . .

Network externalities =)

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Those are the \goods" aspect of competition between platforms but

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=) Ine cient coordination is possible.

=) Incumbency advantage.

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+ These e ects are reinforced by competitive advantage due to access to data.

Two sided platforms

De nition

+

De nition

+ Two sidedness: utility of agents depends on the number of agents on the other side of the market.

buyers	platform	sellers
consumers	credit cards	merchants
buyers	EBay	sellers
men	Meetic	women
users	StackExchange	experts
readers/viewers	media	advertisers

A user is both a client and something which is sold to users on other side.

New issues

Pricing

+ Price structure should aim at getting both sides on board, not to allocate costs \fairly".
+ Price low on one side if users on that side are very valuable to users on the other side.
  å Google charges 0 to consumers | and provide them with a very valuable service.

\Platforms as regulators"

Two sided platforms organize the interactions between the two sides:

+ Restrict / encourages entry: iOS and Android apps.
+ Regulate prices: no surcharge rules for credit cards.
+ Law enforcement: arbitration processes.
+ Organize matching: Meetic.

Access to data enables them to

+ \regulate e ciently";
+ extract pro ts from this regulatory activity.