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THE ANDROID DECISION: WHICH THEORY FOR WHAT HARM TO COMPETITION?

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GCLC Lunch Talk

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Disclaimer

- I have not worked on the case for any side
  - E.CA staff provided very limited support to the FairSearch consortium, though
  - I worked for a complained on the Google shopping case in 2010

- Presented views are my own:
  - Based on publically available information
  - In particular, I have not had access to the EC Decision

Agenda

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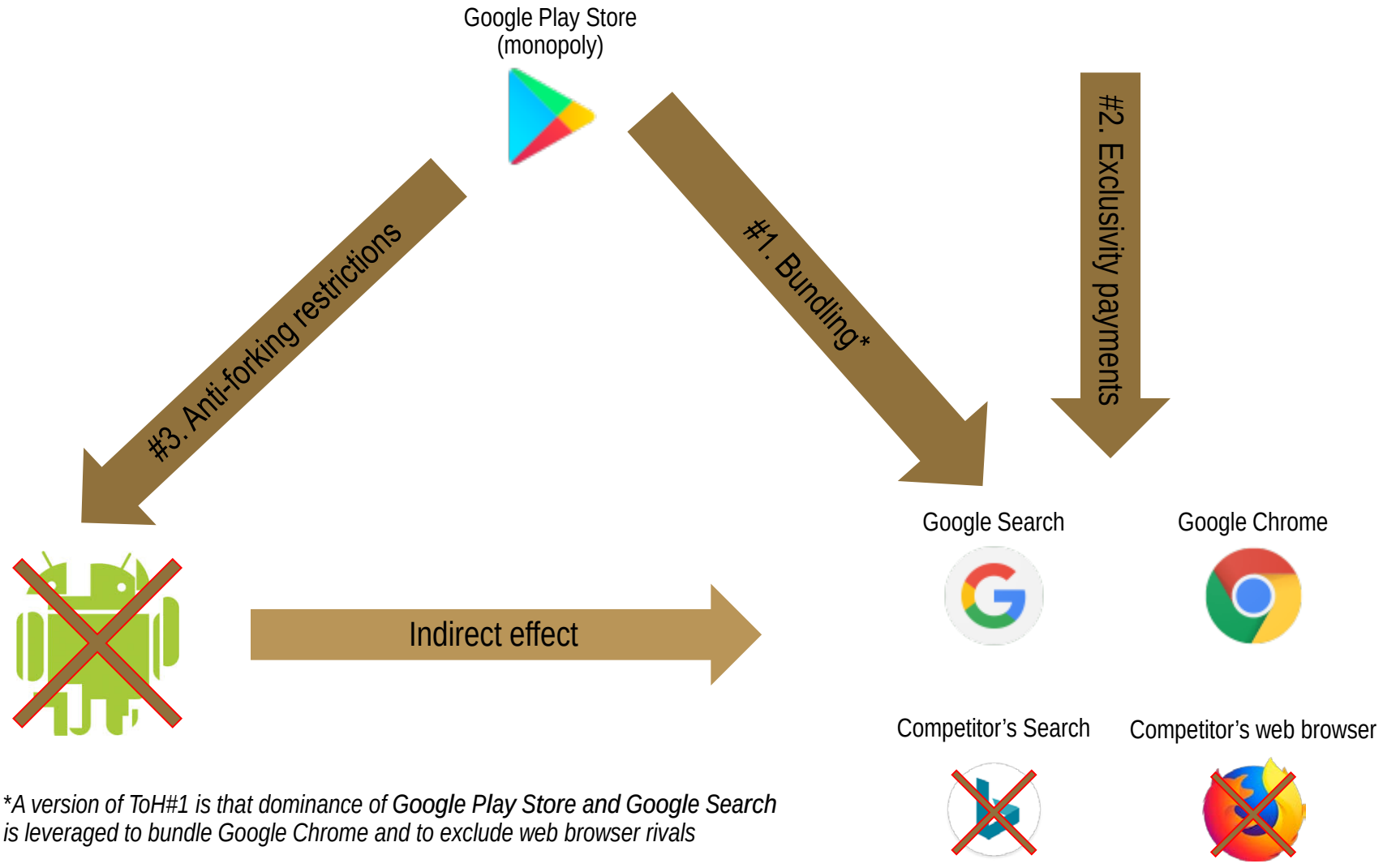
Conduct

- Affected markets where Google is considered dominant (all without China)
  - General internet search service
  - Licensable smart mobile operating system
  - App store for the Android mobile operating system

- Google required that Android device manufactures and mobile network operators:
  - if they wanted to install a „must-have" Google Play Store on their device they must also install Google Search and Google Chrome, and 8 other Google applications like YouTube or Google Maps, etc. (ToH #1, Bundling)
  - exclusively pre-install Google Search app for some financial compensation, until 2014 after the Commission started its investigation, (ToH #2, Exclusivity payments)
  - can only install Google's applications on devices with Google-certified version of Android and in such case they cannot sell any non-certified (or „forked") devices (ToH #3, Anti-forking restrictions)

Conduct illustrated



*A version of ToH#1 is that dominance of **Google Play Store and Google Search** is leveraged to bundle Google Chrome and to exclude web browser rivals*

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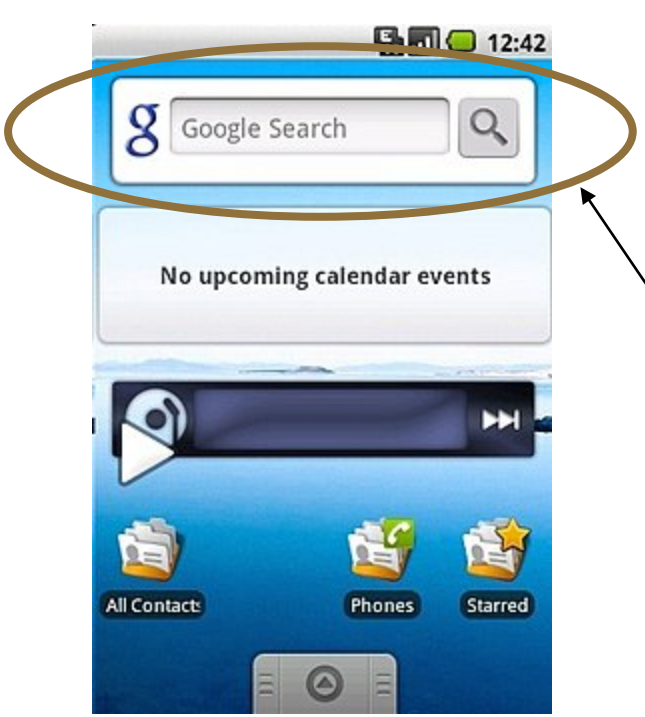
Historical perspective

In the summer of 2005, Google acquired a start-up Android Inc. for an estimated 50 million USD:

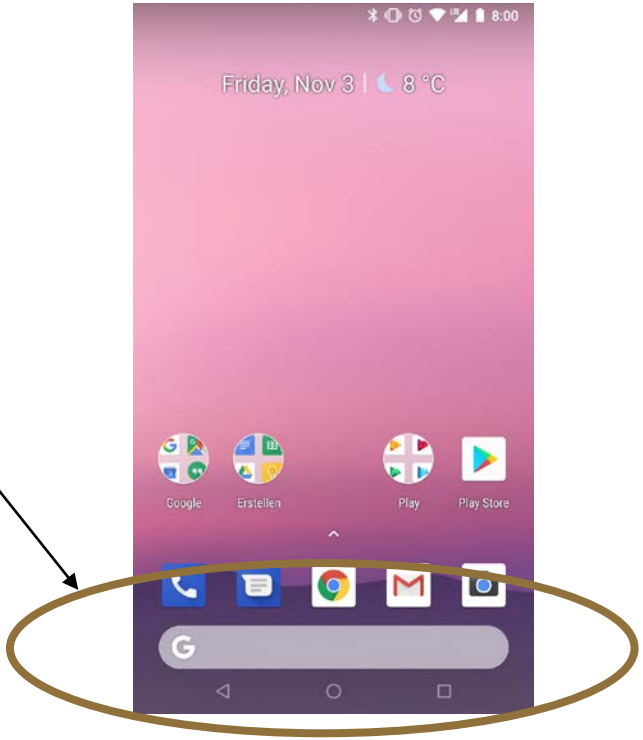
- Google recognised that mobiles are „**the next frontier in search**" and that there was potential in developing smarter and better mobile devices
- Google acquired Android because of the „**talented engineers and great technology**"
- Android **did not have any commercial products** at the time acquisition
  - Android 1.0, the first commercial version of the software, was released on September 23, 2008

Google purchased a rather raw product. Recent changes to notification threshold, for instance, would not have brought this case into the limelight of competition authorities at that time

Home pages of the first and most recent version of Android



It is all about Google Search



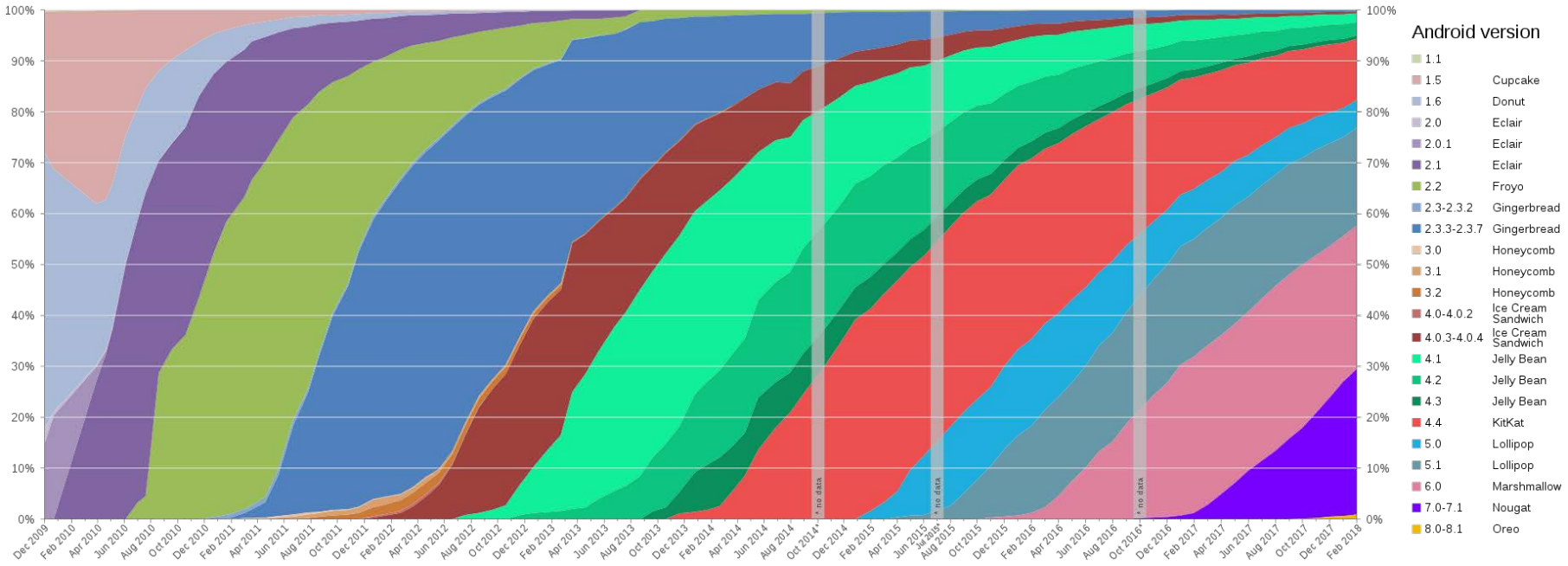
Android 1.5 (April 2009)

Android 8.1 (December 2017)

Android was always, even at its origin, about pushing Google Search to the market

Source: Wikipedia

Global Android version distribution since December 2009



Google continues to innovate, regularly releasing new and improved version of the operating system

Source: Wikipedia

Remark 1: Regarding Android, Google is an innovator who noticed a market opportunity and through an investment brought a successful product into the market with the view to expand its search from PCs to mobile

Contrast: In the 2017 Google „Shopping" decision EC found out that „Google did not invent comparison shopping." (para 343)

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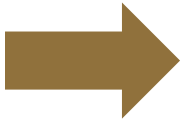
Android (Google) – IOS (Apple) comparison

Android (Google)

- OPEN SYSTEM: Licensable to OEMs
- Controls mainly OS (and some apps)
  - This is partially supported by MADA!
- Tying Google Chrome browser
- Google is dominant in general internet search services
- Dominant (with Google Play Store) in the „market for app stores for the Android mobile operating system"
- Monetizes via advertising revenue

iOS (Apple)

- CLOSED SYSTEM: Non-licensable to OEMs
- Controls the whole vertical stack (OS, many apps, hardware)
- Tying Safari browser
- No presence in general internet search services
  - Google search pre-installed for estimated 3 Bn US in 2017
- Presumably: Dominant (with App Store) in the „market for app stores for the IOS mobile operating system"
- Monetizes via hardware sales, and app store revenue



Reminds one to credit cards markets – competition between open (VISA/ MasterCard) and closed systems (AMEX/ Diners)

Remark 2: ToH #3 (Anti-forking restraints) seems contestable from an efficiency perspective

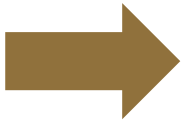
What is the counterfactual in this case?

One could argue:

- MADA contracts, **which were in place from Android's inception**, have contributed to Android's success to compete on a more equal footing against the established and prevalent proprietary (closed) system (iOS)
  - Absent these provisions, Android may well have failed to achieve commercial success
  - This was, e.g. the fate of another open source system (Symbian)
  - The counterfactual outcome might have been a virtual Apple smartphone monopoly today

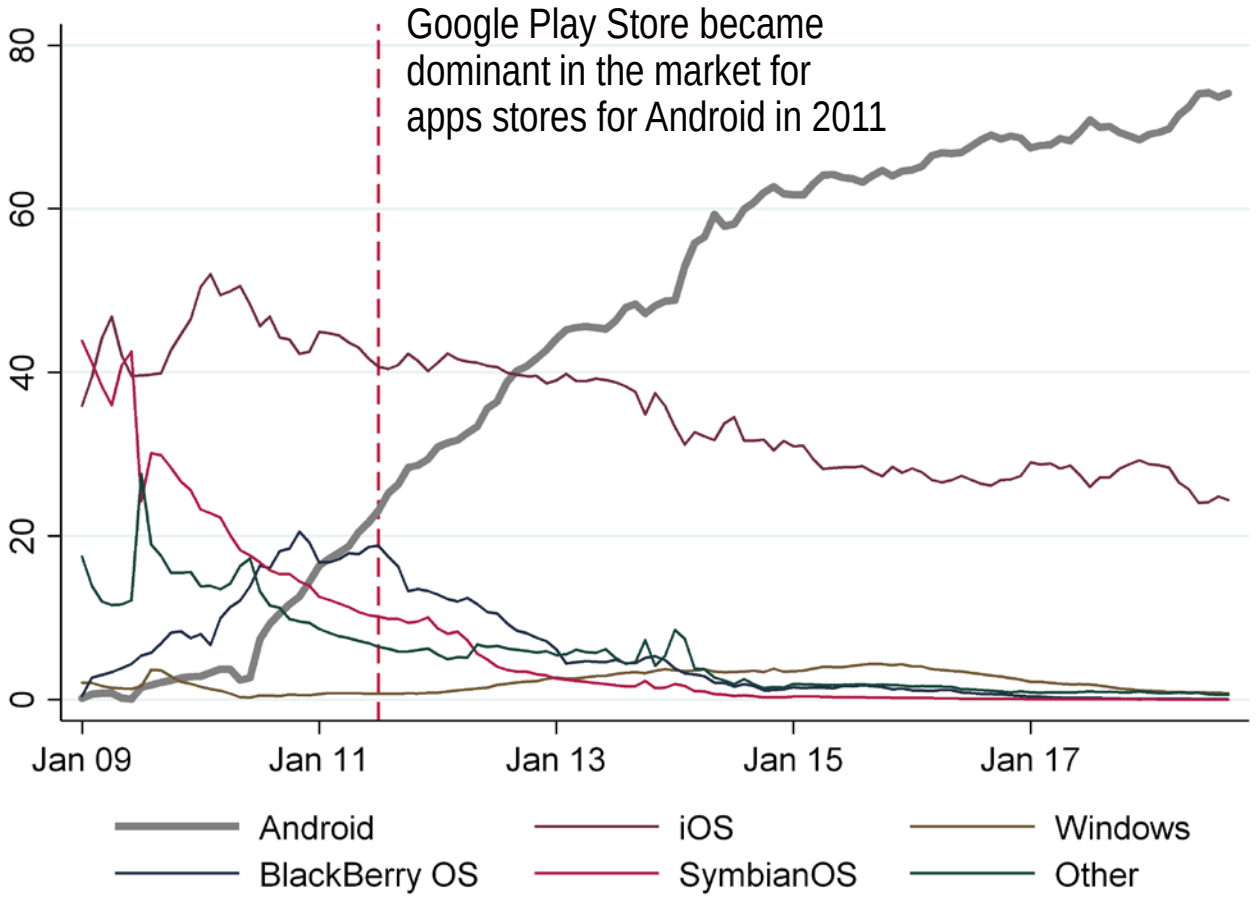
I tend to argue with the Commission:

- It only shows that there is room for a **second or third** mobile operating system, besides iOS…
- …which in the counterfactual would, most likely, not be controlled by Google:
  - In order to be able to pre-install on their devices Google's proprietary apps, including the Play Store and Google Search, manufacturers had to commit not to develop or sell **even a single device running on an Android fork**



This part of the provision seems overly excessive

Mobile OS shares in Europe 2008-2018



Dominance found at a time, it seems, when Android was not the leading mobile operating system
Remark 3: Rebuttal of indirect substitution effects central to the case

Source: Stat Counter Global Stats

At the end this is a question of facts...

- Indirect effects are weak between iOS and Android according to the Commission
  - Apple and Android devices are weak substitutes, price and quality differences, switching costs
  - And Google search is pre-installed at Apple devices as well

- Evidence provided for *status quo* bias:
  - on **Android** devices (with Google Search and Chrome pre-installed) more than 95% of all search queries were made via Google Search
  - on **Windows Mobile** devices (Google Search and Chrome are not pre-installed) less than 25% of all search queries were made via Google Search. More than 75% of search queries happened on Microsoft's Bing search engine, which is pre-installed on Windows Mobile devices
  - Presented evidence seems weak: potential selection bias, i.e. users with preference for Bing choosing Windows Mobile devices, **specifically given the Commissions assessment regarding market definition**

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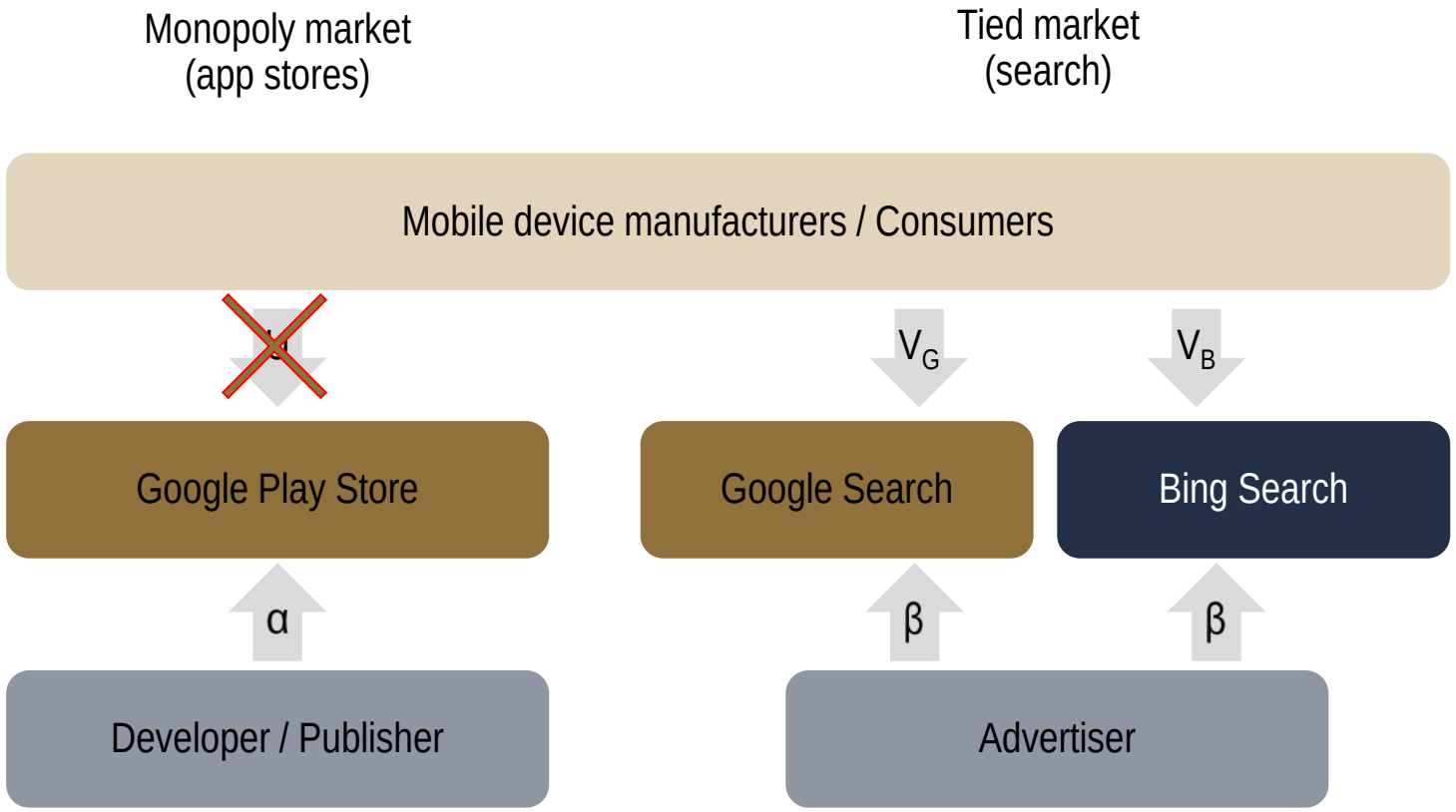
Conduct and theory of harm

- „Leverage" theory, based on papers by
  - Choi, Jeon (2018)
  - Etro, Caffarra (2017)
  - De Cornière, Taylor (2018)

- Google Play Store is dominant in the „market for app stores for the Android mobile operating system"
- It leverages that dominance to **force hardware manufacturers to pre-install Google Search as a default search engine**
- This pre-installation, due to the „status quo bias", is sufficient to foreclose (potentially more efficient) competitors in the search market
- Search market is characterised by economies of scale and Google's practice is sufficient to deny its search competitors achieving minimum viable scale

Stylised market structure in the papers



Consumers / OEMs value app store (Google Play) and search services (and would pay for them)

Platforms (Google or Bing) get more money from the other side (Developer / Publisher / Advertiser)

There is perfect competition between OEMs, so the price of the phone is equal to its cost

Theory of harm

- Theory of harm as **developed in those papers** is as follows:

- **Status quo:** Even though Google is dominant, it does not charge anything for the Google Play Store
  - Instead it bundles it with many of its other apps (Google Mobile Services which include Google Search and Google Chrome)
- **No tying counterfactual with „non-positive price constraint":** Without bundling, Google would have to offer the Google Play Store for free because of the „zero price pledge" it made historically when it wanted Android to expand in the market
  - Thus in the „no tying scenario" Google is leaving some of its monopoly profits „on the table" (it has a „surplus slack" in the terminology of the papers above) because of the zero price pledge
  - Tying is more profitable for Google (allows to recapture some of the surplus slack if it does not want to violate the „zero price pledge" (which would be optimal now, that Android has high market share)
  - Additionally, complementarity of the applications can further strengthen the effect of tying – the presence of an application such as Google Play on a device increases the demand for this device, which means that more consumers will also use this device's default search engine, generating more revenues and, hence, allowing Google to outbid competing search engines

Those papers depend on several assumptions though…

- It is a static story, it does not (explicitly) take dynamic considerations into account
- Assumes a more efficient competitor (in search and web browsers) exists right now (and not in the future)
- Assumes that pre-installation by OEMs is the only viable way to the market by more efficient competitor
- There is perfect competition between OEMs, so that the price of the phone is equal to its cost and OEMs behave non-strategically
- Google will keep the zero price on the OS and Apps even when forced to unbundle by EC

A simpler (more standard) theory would be that Google is raising barriers of entry in search by bundling by forcing a potential entrant to enter two markets simultaneously

Remark 4: New “leveraging” theories of harm are somehow plausible but miss the big point in my view

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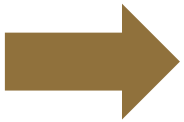
Summary and reflection points

- Regarding Android, Google is an innovator who noticed a market opportunity and through an investment brought a successful product into the market with the view to expand its search from PCs to mobile
  - This needs to be credited at some point
  - Definition of a licensable smart mobile operating system market seems a strong position here, as a matter of policy
- New “leveraging” theories of harm are somehow plausible but miss the big point
  - The very reason in building of Android by Google lies in its conduct to transfer its dominant position in search also to the mobile word



It seems again: mission accomplished – FCOs are too slow!

Clearer ex-ante guidance is needed!

Thank you!