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Start-ups, killer acquisitions and merger control – Note by Israel

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More documents related to this discussion can be found at
http://www.oecd.org/daf/competition/start-ups-killer-acquisitions-and-merger-control.htm

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1. Introduction

1. The discussion of how to deal with acquisitions of technological start-ups has been going on for a while and has gained substantial momentum in the last year or two.

2. The discussion can be divided to two parts: The first part of the discussion deals with the concern that many of the start-up acquisitions fall below the filing thresholds of many jurisdictions and therefore are not notified and are not reviewed from a competition point of view. Due to this concern there is an open discussion whether filing thresholds should be amended in order to allow competition authorities to review such mergers and hence prevent the potential harm to competition that may occur from such transactions.

3. The second part of the discussion deals with the essence of the start-up acquisition phenomena and can be separated to two different questions: one question is whether start-up acquisitions may raise competition concerns that are currently (or until recently) neglected by competition authorities; another question – assuming there are competition concerns that are unique to start-ups acquisitions - how can competition authorities conduct a useful analysis and what tools do competition authorities have that allow them to identify acquisitions that are potentially harmful to competition. The question of how to review start-up acquisitions is complicated due to the fact that competition authorities do not properly understand how technological markets evolve and therefore are not always able to crystalize a theory of harm. In addition, start-ups (as their name indicates) are acquired in their early stages and therefore, in many cases, do not have revenues, customers, a clear business model or any other indication that will guide us on where the start-up is heading to.

4. Being a competition authority in what is frequently referred to as "the Start-Up Nation", the Israel Competition Authority (“ICA”) has found a growing interest in the subject. As part of our preparation for the discussion in the OECD, several weeks ago, we initiated a market study on acquisitions of start-ups in Israel in the last 5 years in order to understand whether the concerns related to start-up acquisitions are valid and how competition authorities should handle such acquisitions. It should be noted that our inquiry into the start-ups acquisitions is still underway. We were able to collect a substantial amount of information but there is still work to be done in order to fully understand the relevant acquisitions. We find it valuable to share our interim thoughts with the OECD Competition Committee.

5. Our interim thoughts are shared for the first time in this contribution. This contribution does not intend to present a complete model. Our intention is that this contribution will serve as a starting point for further research and discussion and to be able to improve it with the assistance of peer competition authorities' experience and knowledge in this area.

6. In this contribution we do not discuss the issue of notification thresholds and how such thresholds should be designed in order to "catch" start-up acquisitions that may raise competition concerns without flooding the authority with transactions that may be unnecessarily delayed. Instead, we concentrate on material tests that are intended to provide competition authorities with indications on which acquisitions are likely to require a more thorough analysis.

7. For this purpose, we propose a basic and rough model for a first stage merger analysis in digital markets. The purpose of the model is to provide simple classification tools intended to identify the type of start-up acquisitions which, due to the unique characteristics of digital markets, should require an enhanced review, as opposed to those that are not expected to raise competitive concerns other than the traditional merger review concerns.

8. We then apply the tools presented in the model on 21 transactions in which Israeli high tech companies were acquired by the five big tech companies: Google, Amazon, Facebook, Apple and Microsoft ("GAFAM") over the years 2014 to 2019.[1]

9. It should be noted that this exercise is still in progress. The ICA is in the process of collecting all the information required for such analysis. Therefore, at this stage, we do not know the extent to which acquisitions of start-ups were *ex-post* harmful to competition. One of the questions that will be examined in our next stage of the study, is whether acquisitions of start-ups in Israel caused harm to competition.

2. Background on Start-Up acquisitions in Israel and Motivation

10. The disruption of new digital technologies in recent years led to transformations of many economic activities and new business models have been continuously developing. Data and information have become important inputs in a wide range of economic activities, across various sectors and markets. The development of computing performance and analytics tools, such as big data and artificial intelligence, are constantly improving and driving digital innovation.

11. Over the last decade the Israeli high-tech ecosystem has grown rapidly. Local players and multi-national corporations, have greatly expanded open innovation activities such as M&As, investments, corporate venture capital, R&D centers, accelerators and incubators, in a wide variety of sectors and verticals.[2,3] The number and value of "exits" (IPOs, M&A and Buyouts) has continuously grown year by year, throughout the decade. In 2019, there were approximately 138 transactions involving Israeli parties with a total value of $21.7 billion.[4] Four IPOs were completed and approximately 121 M&A transactions executed,[5] with an aggregate value of $12.4 billion, a record high value.

[1] It should be noted, that until now the ICA only received information regarding 16 transactions. Of the five big-tech companies that were asked by the ICA to provide information on their acquisitions activity in Israel, four companies provided helpful information in a timely manner. As of now the ICA was unable to receive the required information from Google due to the unwillingness of Google Israel to provide the information.

[2] IVC MAGAZINE – OPEN INNOVATION IN ISRAEL, SEPTEMBER 2019 https://www.ivc-online.com/Portals/0/RC/Magazine%20&%20YB/ivc_magazine%20_Sep_23_Final/mobile/index.html.

[3] Multi-national corporations refers to a foreign corporation that controls the R&D or owns a high-tech company in Israel.

[4] IVC-MEITAR – 2019 ISRAELI TECH EXITS REPORT. http://www.ivc-online.com/Portals/0/RC/Exits/IVC-Meitar%20Exit%20Report%20-%202019%20final.pdf?ver=2020-01-13-191641-380&timestamp=1578997533450. There were 4 deals of over $1 billion, with the acquisitions of Mellanox by Nvidia for $6.9 billion, Habana Labs by Intel Corp. for $2 billion, Click Software by Salesforce for $1.35 billion and Lumenis by Baring Private Equity for $1.2 billion. The total value of exits of up to $1 billion was $10.29 billion, a record high.

[5] Fiverr, Tufin, Podium and Splitit. Fiverr and Tufin were listed on the NYSE.

Moreover, the amount of high-tech capital raised in 2019 reached a new record of about 9 billion dollars.[6]

12. The sectors with the highest number of deals and total value of exits in the last five years are IT & Enterprise Software, Life Sciences and Internet. The verticals with the highest number of deals and total value of exits are Artificial Intelligence (AI), Cyber Security and Fintech. Moreover, in the last four years there is a significant increase in the number of AI,[7] Fintech, Cyber and Digital Health companies.

13. Notably, in international comparisons, the Israeli innovation ecosystem continues to stand out. Israel has significantly improved its position in a variety of global innovation indices. Israel continues to hold second place among OECD countries in the share of its R&D expenditures of its GDP sourced from private capital, and is the world leader in its number of start-ups per capita.[8]

14. Many of these transactions that take place in the different technological industries, whether they are in the form of M&A, buyouts, financial investments or strategic investments, fall below the revenue thresholds, set forth under the current Israeli merger control regime. Hence, many of such transactions were not pre-notified to the ICA, and did not require the General Director's approval.[9] This may raise a general concern that some of those transactions may have caused harm to competition or prevented the development of potential competition. However, the discussion of what should be the relevant threshold that will allow competition authorities to review mergers in the high-tech sector is beyond the scope of this document. Instead, we contribute in this document to the discussion of how the high-tech sector's transactions should be reviewed and analyzed once they are notified and whether such transactions raise concerns to competition or theories of harm

[6] Israel Innovation Authority's 2019 Innovation Report. https://innovationisrael.org.il/en/report/innovation-israel-2019-innovation-report.

[7] Israel Innovation Authority's 2019 Innovation Report. There are currently 1,400 companies in Israel working on AI technologies, and roughly 70% of them were established in the past five years. This demonstrates significant industry growth. Around half of these companies are in R&D stages and half have matured to sales. Israeli start-ups develop and apply AI to a variety of uses, such as business analysis, apps, cyber security, and health. Over 40% of AI companies in Israel are in the information technology and software sector, 30% provide online services and communications, and 13% are in life sciences.

[8] Israel Innovation Authority's 2019 Innovation Report.

[9] Israel has a suspensory merger regime, due to stand-still obligation. For completeness it is noted, that a "merger of companies" is defined under Section 1 of the Israeli Competition Law as "*including the acquisition of the main assets of a company by another company or acquisition of shares in a company by another company which give the acquiring company more than a quarter of the par value of the issued share capital or of the voting power or power to appoint more than a quarter of the directors or participation in more than a quarter of the company's profits. The acquisition may be direct or indirect or by means of rights granted by contract*". A "company", is defined under the Economic Competition Law as *"founded and registered under the Companies Ordinance [New Version], 5743-1983, including a foreign company registered as aforesaid.*" Moreover, the Guidelines of the General Director of the ICA Reporting and Evaluating Mergers Pursuant to the Economic competition Law (chapter d.3), clarify the circumstances in which the Law applies to a foreign company that has not been registered in Israel as a foreign company, based on a material test of it nexus to Israel. Section 17 of the Israeli Competition Law, then sets forth the thresholds for filing, requiring a Pre-merger notification to be submitted by each party to the merger, if one of the following applies: (1) The aggregate market share of the merging parties exceeds 50 per cent post-merger; (2) One of the parties to the merger is a monopoly under the law pre-merger; (3) The aggregate domestic turnover of the merging entities, in the preceding fiscal year, exceeds 360 million NIS and each one of the merging entities separately had a domestic turnover of at least 10 million NIS.

that are different from the traditional theories of harm that are familiar to us from brick and mortar industries.

3. Competition concerns that arise from acquisitions of start-ups in digital markets

15. Digital markets are often characterized by substantial economies of scale due to the combination of a large fixed cost with a low marginal cost. In addition, digital markets have significant network externalities because many digital markets are two-sided (or multi-sided) markets, which are driven by network effects (direct and indirect). Another common feature of digital markets is strong economy of scope due to advanced technology which improves the ability of the companies to collect, store, and process data and thus gain valuable insights. Furthermore, some large digital companies organize different product markets within one ecosystem and can therefore benefit from interoperability between services that belong to the same ecosystem. Moreover, many digital markets are characterized by competition for the market rather than competition within the market.

16. These characteristics suggest that many digital markets suffer from high barriers to entry and therefore, the incumbent, which is not threatened by immediate competition, is likely to maintain (or increase) it's dominance in the market.

17. M&As in digital markets can raise horizontal, vertical or conglomerate competition concerns.

18. **Horizontal** and **Vertical** competition concerns in digital markets do not differ from those in traditional markets. However, due to the characteristics of digital markets and high barriers to entry, the merger competition effects might be more substantial. Particularly, in cases the competition is for the market.

19. **Conglomerate competition concerns** may arise in cases where an indirect relationship exists between the products of the parties, for instance, sharing certain inputs such as data and information, or sharing infrastructure such as network distribution or computing infrastructure, which might rise to substantial economies of scale and scope. In cases in which the merged company would gain substantial competition advantages in the acquired product market or in the acquirer product market, it might lead to weaken competitors and competition in such markets, in certain circumstances, for instance, by raising barriers to entry, raising barriers for expansion etc. It is important to mention and emphasize at this point that this contribution does not suggest that the gaining of substantial competition advantage should be seen as weakening competition or as a potential harm to competition. On the contrary – frequently such competitive advantage is seen as an efficiency that works in favor of allowing the transaction to be executed. This is the case in most circumstances in which non-horizontal mergers are discussed. This is why it is even more challenging to decide what kind of mergers require an in enhanced review.

20. In most cases, it is difficult to foresee the competition effect of conglomerate mergers. Therefore, even in cases that competition authorities raise conglomerate concerns during a merger examination, these concerns do not usually lead to the block of the merger.

4. Preliminary model for First Stage Merger Analysis in Digital Markets

21. Our proposed model classifies two categories of transactions: "Green" and "Yellow". The transactions which are classified as "Green" do not require a different review other than the ordinary competition review in brick-and-mortar markets, while the transactions which are classified "Yellow" require an enhanced review into the particular

competitive concerns which may arise in digital markets. The classification is based on a matrix with the following two dimensions:

1. The characteristics of the acquired product.
2. The acquirer's motives for the transaction.

22. The purpose of the proposed model is to offer an effective, simple and relatively fast tool for competition agencies to classify transactions based on specific characteristics of the acquired product, and the acquirer's motivation for the transaction. Nowadays, competition authorities tend to approve, relatively fast, mergers that raise only conglomerate concerns. However, as mentioned above, due to the importance of economies of scope in the digital markets, we believe that conglomerate competition concerns in these markets may be more problematic than in other markets. The proposed model offers a tool for competition authorities to identify whether a specific merger requires an enhanced analysis of conglomerate competition concerns or not.

4.1. The fundamental factors of the model

4.1.1. Defining the product characteristics of the acquired company

23. For the purpose of our model, we define two main types of products (or services): interface products and stand-alone products.

1. **Interface products (or services)** are products that are developed intentionally as complementary products (or services) based on a specific platform(s) in order to improve or expand the functionality of the platform. Moreover, an interface product cannot operate independently. Transactions in which the acquired company develops an interface product for the purpose of solely integrating it with the platform of the acquirer are less likely to damage competition or prevent the development of a potential competitor. However, in cases that the interface product can be integrated with products other than the acquirer products, competition analysis becomes more complex. Hence, in our model we defined two types of interface products – interface product and interface product to a specific company.[10]
2. **Stand-alone products** (or services) are products that operate independently from other products or platforms. Stand-alone products can be connected directly to other products as an input or as a complementary product. They can also be indirectly connected to other products due to economies of scope, for instance by using analytic tools such as big data or AI in order to gain valuable insights on consumers (or users) behavior, or by enriching the ecosystem of the acquirer company and thus benefiting from interoperability between services that belong to the same ecosystem. Acquisitions of start-ups that developed a stand-alone product may raise various competition concerns. Apart of traditional horizontal and vertical competition concerns, conglomerate competition concerns may arise. Acquisitions of complementary products are generally efficient. Nevertheless, in cases in which the acquired company has the potential to grow and develop new products and enter to the product market of the acquirer, the acquisition of the start-up may lead to anti-competitive effects. However, this concern depends on the ability of the acquired start-up to scale-up on its own**.** For instance, in cases in which the acquired company needs to invest large amounts of capital to enter to the acquirer

[10] To the best of our knowledge, start-ups that develop complementary interface products to a specific company are not rare in the innovation space.

complementary product markets, the probability that the acquired company may turn into a competitor of the acquirer is low.

4.1.2. Acquirer's motivation for the transaction

24. In general, assets of technological companies tend to be intangible, especially those of start-ups. Intangible assets refers to assets that do not have physical presence, such as technology, knowledge, information, data, brand, patents, trademark and rights. With this in mind, we distinguish between three main motives for executing the transaction:

1. **'Acqui-hire'** – the main purpose of some acquisitions is to recruit high quality employees who are organized in highly-functional organic teams. Acquiring a start-up may be more efficient than recruiting employees separately. The ability to recruit employees depends on the conditions of the relevant labor market. In general, human capital is a scarce recourse in the high-tech sector (in some fields the lack of talented and skilled employees is higher than in other fields)[11]. Particularly, if a multinational company does not have any local operation, acquiring a local start-up allows recruiting a qualified organic team that already works together. In addition, the acquirer has the opportunity to review the performance of the acquired company and gain insight on the quality of the work. A slightly different format of acqui-hire refers to the wish of some acquirers to start operating a local R&D center based on the employees of an acquired start-up.
2. **Technology –** sectors that rely extensively on technology are more dynamic than others. High technology companies operate in a dynamic and fast-changing environment. Incumbent companies, including dominant entities, need to innovate and develop new technologies continuously in order to maintain their position in the market. In some cases, acquiring a start-up is an easy, fast and affordable alternative rather than self-developing. However, due to the acquisition, dominant incumbent may benefit from competitive advantages, for instance by preventing competitors from obtaining the acquired company's technology which could have given such competitors the ability to strongly compete with the incumbent.
3. **Data and information** –In the digital era, trade and production of goods and services are heavily dependent on collecting, moving, storing and on the ability of using digital information. Apart from technology and human capital, the main asset of some start-ups that operate in the digital markets is valuable data and information such as users' information or consumers' data. Due to the digital transformation, data and information become important inputs in a wide range of economic activities in variety of sectors and markets. The collection, control and analysis of large amounts of data in order to gain valuable insights can provide firms that are active in the digital markets with a competitive edge. Therefore, acquisitions of entities that hold or control valuable data (user, consumer, etc.) may have anti-competitive effects. Particularly, in cases that one of the parties is a large digital platform, which is characterized by extreme returns to scale and network effects, it may also enjoy economies of scope that may lead to markets concentration. Acquisitions that will enrich the ecosystem of the acquirer company may have significant efficiencies, which are likely to benefit consumers. However, due to interoperability between services belonging to the same ecosystem, they may also create a strong advantage for services that belong to the ecosystem, and thus lead

[11] Despite the increase in skilled human capital in the high-tech sector, high-tech companies operating in Israel are still lacking skilled personnel. Source: Israel Innovation Authority's 2019 Innovation Report https://innovationisrael.org.il/en/report/innovation-israel-2019-innovation-report.

to a competition advantages. Especially when the ecosystem is large and involves numerous and diverse services.

4.2. Classification of Transactions

25. Transactions classification is based on the three product characteristics of the acquired company (two types of interface products and stand-alone product) and on the three motives for the execution of the transaction as examined by the acquirer company (hiring, technology, data and information), described above. The model suggest an initial indication of whether a specific transaction requires a closer look into digital markets competition concerns. The result of this classification is the matrix featured in Figure 1.

Figure 1

Product's Characteristics / Motives of the transaction	Interface (specific company)	Interface	Stand-alone
Acqui-hiring			
Technology			
Data & Information			

26. This proposed classification may be useful for the first stage of the examination of the competitive effects. In general, for any type of transaction the competition effects that may arise are different. Below we suggest a non-exhaustive reference to competition concerns which may arise under each category.

4.2.1. "Green" category represents acquisitions that do not require a special 'digital economy' review'

27. The Green category includes acquisitions of interface start up's that can only be integrated to a specific company and acqui-hiring acquisitions.

28. Acquisitions of interface start-ups that can only be integrated into a specific company do not raise conglomerate concerns since the products of the companies are intertwined. In addition, these kind of acquisitions, tend to hold a high level of efficiency. We thus assume that these kind of transactions, which their motives is one of the presented above (aqui-hire, technology and data and information), should not receive any special digital economy attention and should be examined according to the regular competition assessment.

29. In acquisitions of start-ups where the main motive is acquiring employees, one can assume that no conglomerate competitive concerns will arise. We thus assume that transactions, in which the acquired product characteristics is one of the presented above (two types of interface products and stand-alone product), should not receive any special digital economy attention and should be examined according to the regular competition assessment.

4.2.2. "Yellow" category represents acquisitions that require a closer look into digital economy concerns

30. In acquisitions of start-ups whereas the main motive is to acquire technology: traditional horizontal or vertical concerns may arise. In addition, in cases which involve

interface product, since an interface product can be used in several companies, the acquirer may gain elements such as data or information which will enlarge its economies of scope. These elements may very well contribute to the efficiency of the merged company. However, in certain circumstances, the use of such elements may raise rivals cost, increase barriers to entry or expansion etc. Therefore, these transactions require a deeper look into digital economy concerns and are classified as "Yellow".

31. Moreover, in cases which involve stand-alone products, conglomerate competition concerns may also arise. For instance by tying between the products of the parties in order to foreclose competition in the markets; or in case the acquired company has the potential to grow and develop new products and enter to the product markets of the acquirer, it may lead to anti-competitive effects. Such concerns are not unique to digital markets, however due to the unique characteristics and the barriers to entry in digital markets, these concerns, in certain circumstances, may be more substantial in digital market and should be examined accordingly. Therefore, these transactions are classified as "Yellow".

32. Acquisitions of start-ups in which the main motive is to acquire information and data may raise conglomerate competition concerns, in addition to traditional horizontal and vertical concerns. Conglomerate concerns may arise due to strong economy of scope. For instance, in cases that the acquirer purchases a valuable database, which may be beneficial to other acquirer's product markets, in a way that may weaken competitors (current or future) and competition in the markets; or in cases in which the acquired company has the ability to scale up and may turn into a competitor in the acquirer's product markets. Therefore, these transactions require a deeper look into digital economy concerns and are classified as "Yellow".

4.3. Implementation

33. In order to test the model, the ICA issued a Request for Information ("RFI") to the five big tech companies: Google, Amazon, Facebook, Apple and Microsoft. The RFI's included information regarding 21 transactions in which one of GAFAM acquired an Israeli technology company between the years 2014-2019.[12] For every transaction, the ICA requested information, which will allow it to better understand the field of activity of the companies and the motive for the deal from the acquirer's point of view. This RFI included valuation of the acquired company, Purchase Price Allocation ("PPA"), protocols of all board meetings, shareholders meetings and general meeting relating to the acquisition transaction and any document presented or sent in preparation for such meetings.

34. The responses that we received to the RFI assisted us to classify the transactions according to the matrix of the model.[13]

35. It should be noted, that of the 21 transactions that the RFI referred to, 7 transactions were notified to the ICA for approval and were examined (and approved) before execution.

[12] It should be noted, that until now the ICA only received information regarding 16 of these transactions. As of the day of this document Google has not yet provided the ICA with the information that was required.

[13] Summaries and memos presented to the management as part of a request to negotiate or as part of a final approval to execute the transaction. These memos describe the activity of the acquired company, the main assets it holds, the integration between the acquirer and the rationale of the deal from the point of view of the acquirer company. And PPA of the transaction – by viewing the PPA, one could learn how the acquirer divided the purchase price between the acquired assets. It provides a good understanding of the incentives of the deal as it reflects which assets were purchased and the percentage of the transaction cost allocated to each of these assets.

Analyzing the information received following the RFIs regarding 19 transactions enabled us to classify the transactions.[14] Below is the summary of our findings:

Figure 2

Product's Characteristics / Motives of the transaction	Interface (specific company)	Interface	Stand-alone
Acqui-hiring		1	1
Technology	1	8	6
Data & Information		1	1

36. It should be mentioned that some of the transactions had more than one motive and therefore could be classified to more than one category. The final classification was made according to the main motive as evidenced from the documents received.

37. Figure 2 reveals that the main incentive of 15 out of the 19 transaction was to purchase technology. Acqui-hiring was the main cause for only two mergers. In terms of product type, in most cases it was an interface product with only one case of interface solely to a company (who was the acquirer). In most of the transactions the product type was a stand-alone product that had scale-up limitations.

38. In summary, most of the transactions fall into "Yellow" cells and three into "Green".

4.4. Next Steps

39. The next stage of our study will be to examine - with reference to those transactions regarding which we received information - what in fact happened to the acquired companies, post-acquisition. Accordingly, we would like to examine if there is a significant phenomenon of killer acquisitions; or if there are mergers which harm competition but were not identified as having the potential to do so.

40. Moreover, we would like to find out whether there is correlation between the classification of the transaction according to the model and the competition impact of the merger.

41. However, even if we will find a strong and positive correlation, our sample is rather small. Therefore, in order to underpin the model validity, competition agencies are invited to use the model in their internal work and retroactively review the correlation between the model and the competition impact.

5. Conclusion

42. In this contribution, the ICA proposes a basic and rough model for first stage merger analysis in digital markets. Our interim thoughts are shared for the first time in this contribution. With this exercise, we hope to contribute to the lively worldwide discussion

[14] In three transactions in which Google was the acquiring party and did not provide the requested information we used information that was received with the notification of the merger to the ICA.

regarding mergers in digital markets. We invite our peer competition authorities worldwide, to refer to this initial model as grounds for discussion, and based on their valued experience and knowledge, we would appreciate all input and comments.