Acquisitions of Israeli Start-ups: Ex-post Examination

Israel Competition Authority

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Introduction

The debate around the acquisitions of technological start-ups has been the subject of international discourse within the international competition community, during recent years. The OECD held a number of roundtables on this topic recently,1 the FTC initiated an examination of past acquisitions by large technology companies,2 the CMA carried out a study aimed at evaluating past merger decisions in the digital sector in the UK3; other reports and market studies, focused on the digital sector, were issued by competition authorities and additional organizations around the world, have, to various extents, addressed this issue.4

As part of the Israel Competition Authority's ("ICA") efforts put into tackling challenges of the digital economy, the ICA recently initiated a study on acquisitions of start-ups in Israel in the last 5 years. Preliminary insights from this study were featured in the ICA's contribution paper for the roundtable on "Start-ups, Killer Acquisitions and Merger Control" held before the competition committee of the OECD in June 2020 ("ICA's Contribution Paper").5

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1 For instance, the roundtables on "Start-ups, Killer Acquisition and Merger Control" (http://www.oecd.org/daf/competition/start-ups-killer-acquisitions-and-merger-control.htm) and on "Conglomerate Effects of Mergers" (http://www.oecd.org/daf/competition/conglomerate-effects-of-mergers.htm) held by the OECD Competition Committee Meeting at June 2020.
To follow up on the aforementioned study, the ICA held an ex-post examination of start-ups acquisitions. The main purpose of this examination was to inquire into the prevalence of what is referenced as "killer acquisitions" or as the "killer acquisitions" theory of harm.

For the purpose of this ex-post examination, the ICA issued a Request for Information ("RFI") to five tech giants: Google, Amazon, Facebook, Apple and Microsoft ("GAFAM"), which acquired 21 Israeli start-ups over the years 2014-2019. For each transaction, the ICA requested detailed information on the field of activity and the acquirer's motives. In addition to the RFI's, the ICA held conversations with Israeli "angels", venture capitalists, founders and CEOs that were involved with some of the acquired start-ups.

This paper consists of two chapters. In Chapter 1, we present the conclusions of the inquiry regarding the prevalence of "killer acquisitions" (as defined below) in our sample. In Chapter 2, we discuss two additional questions that arose from our inquiry and are related to other horizontal theories of harm.

Chapter 1 – Are there "Killer Acquisitions" in Our Sample?

In its Background Note, the OECD refers to the theory concerning killer acquisitions as one specific theory of harm in which the acquisition of a nascent firm, aims to terminate the development of the acquired product (or potential product), remove it from the market and preempt future competition. The termination of a new (or potential) product not only relaxes price and quality constraints on related products, but also directly harms consumer welfare by limiting the set of products consumers can choose from (the "Killer Acquisitions Theory of Harm" or "Killer Acquisitions", as applicable).

6 It should be noted, that the ICA received information regarding all 21 transactions. All five big-tech companies that were requested by the ICA to provide information with reference to their acquisitions in Israel provided helpful information.


8 Background Note for the Roundtable Discussion on "Start-ups, Killer Acquisitions and Merger Control" prepared by the secretariat for the Competition Committee of the OECD in June 2020 ("OECD Background Note"), Chapter 2 ; under "Definitions and theory of harm".

9 Closely related to the killer acquisitions theory of harm, the OECD in its Background Note defines a nascent potential competitor theory of harm. According to the definition set forth in the Background Note, if the acquired product might grow into a rival product in the acquirer's product market, then the acquisition eliminates the competitive threat, even in cases the product itself is not terminated or "killed" by the incumbent. Our inquiry will not address the nascent potential competitor theory.
The Killer Acquisitions Theory of Harm raises horizontal competition concerns. Such concerns arise when there are horizontal (current or future) relationships between the parties' products. Potential horizontal competition concerns might also arise when it appears that the parties' products are complementary or even unrelated,\(^{10}\) for instance in cases the startup might have the potential to enter into direct competition with the acquirer's complementary (or adjacent) product market in the future.

Taking into consideration the above, sub-chapter (a) below will examine ICA's insights on whether the examined transactions in the sample reflect a termination of acquired products from market. Sub-chapter (b) will present insights concerning the possible termination of a potential development by the target into the acquirer's complementary (or adjacent) markets.\(^{11}\)

(a) Termination of the Acquired Product from the Target Market

Hereafter, we will reflect on the possibility of a post-acquisition termination of any of the acquired products in our sample. We will do so by examining the relationship between the parties' products, the acquirer's ex-ante motives and the key outcomes of the transactions. These outcomes include the (post-acquisition) operational status of each acquired startup – its degree of independence, its degree of integration into the acquirer's operation and whether its operation and product were terminated – as well as the post-acquisition linkage between the acquired firm and its employees.

The main finding of this examination is that we did not find direct evidence of an elimination of an acquired product from the target market.\(^{12}\)

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\(^{11}\) Closely related to, and in essence should be considered as part of, the killer acquisitions theory of harm, is the ‘reverse’ killer acquisitions theory of harm, as defined in a Vox article by Cristina Caffarra, Gregory Crawford and Tommaso Valletti (May 2020): “‘How tech rolls’: Potential competition and ‘reverse’ killer acquisitions, See [https://voxeu.org/content/how-tech-rolls-potential-competition-and-reverse-killer-acquisitions](https://voxeu.org/content/how-tech-rolls-potential-competition-and-reverse-killer-acquisitions). What is referenced as the reverse killer acquisitions theory, aims to address instances in which, post-acquisition, the acquirer terminates the development of its own potential product (from the target product market). In this paper, we will not directly address the ‘reverse’ killer acquisitions theory. However, we believe that the latter theory, in essence, represents very similar concerns, as does the Killer Acquisitions theory of harm - as a bottom line: a termination of a product from the market, post-acquisition, with the aim of pre-empting future competition.

\(^{12}\) In drawing conclusions from the lack of findings as mention above it is important to take into consideration that our request for internal documents was limited in scope. The RFI focused mainly on documents that were presented to the management of the companies and the board of directors.
First, in 17 cases, the acquired technologies and products were integrated into the acquirers’ operations, their development was advanced and the acquired technology or product was not removed from the market. Two cases were acquisitions of talents (also known as Acqui-hire) and IP rights, and one case included only IP rights. In all three cases, we did not find evidence for a termination of an acquired product. One startup was converted into a local R&D center of the acquirer in the same field of activity of the acquired start-up.

Second, according to our examination of internal documents of the 21 transactions, in most cases the acquirer considered the business environment of the market, and whether the transaction would provide competitive advantages vis-à-vis its competitors, particularly with other large tech competitors. Furthermore, in most cases, the acquirer decided to enter the start-ups’ product market in order to improve (or maintain) its position in other complementary or adjacent markets by advancing the development of the acquired technology or product, rather than eliminating it.

The internal documents also indicate that the acquirers’ main economic considerations for acquiring start-ups were saving time and money and shortening the "time-to-market" of the acquirer’s product; Lowering the risk associated with independently developing a product; and saving costs in cases the acquirer is a consumer of the target or purchases a similar product (or service) from third parties.

Third, our sample shows that key employees and the R&D team of the acquired startups were considered to be a major factor for successful integration of the acquired technology and.

Therefore, the lack of findings is limited to the latitude of the RFI. It is also important to take into consideration the fact that big tech companies are sophisticated entities that choose their words carefully in internal documents that are bound to be scrutinized.

13 It should be noted however, that in some of the cases, in which the acquired products were complementary (or adjacent) to the acquirer’s products, the merged firm continued self-development of the product but stopped developing (or terminated) the acquired product from being integrated with competitor’s products. In such particular cases examined in our sample, it appears that the acquirers’ competitors, which are also big tech companies, had alternatives to the acquired product and thus upon an initial look, we would not consider these cases to present a “termination” of a product which preempts future competition. In other cases, the acquirer advanced the development of the acquired technology in order to improve its products (or services) in another market.

14 In one acqui-hire case, the start-up was in an early stage of its life cycle. Taking this into consideration, as well as other factors relevant to the particular case, we tend not to refer to a "termination" of a product. In the other two cases, according to interviews with Israeli investors that invested in these start-ups, the potential growth of the acquired products was low and the start-ups were struggling to maintain their operation active. Under these circumstances, as well additional particular circumstances of these cases, we also do not view the acquisitions as "terminating” a product.

15 The acquired product was an input in the acquirer product. Thus, it appears that no potential horizontal concern is raised.
product into the operation of the acquirer. In most acquisitions, the start-ups' key employees and R&D employees joined the R&D teams of the acquirers and continued working on the acquired technology or products.

The above, supports a conclusion according to which, the acquired products were not eliminated from the market. This conclusion is primarily based on the ex-ante motives of the acquirer, the significant role attributed by the acquirer to the employees of the acquired target for the purpose of the successful integration process and the fact that most acquirers, where relevant, continued developing the acquired technology and product.

(b) Termination of a Potential Development by the Target into a Complementary Market

In order to examine the concern that an acquisition aims to terminate the potential development by the target into a complementary (or adjacent) market, we first address a related question: what is the likelihood of a startup to be able to compete directly with the incumbent complementary (or adjacent) product market? This likelihood might affect the competitive risk that the acquirer faces from the acquired start-up. Notably, since considerable uncertainty is associated with the success of a start-up's product in the complementary (or adjacent) product markets, the insights reflected in this sub-chapter, are limited in nature. Thus, notwithstanding the insights presented below, we cannot rule out the possibility of termination of such potential competition. We suggest two indicators, which may assist in examining the above mentioned likelihood question. These indicators are the stage of the startup in its life cycle and the startup's barriers for expansion (or entry).

The stage of the startup in its life cycle: Acquired start-ups may be at different stages in their life cycle. Such stages also tend to reflect different types of acquisitions. With reference to

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16 By key employees, we refer to founders, CEOs, engineering managers, R&D managers, etc.
17 This finding arose from internal documents and conversations with key employees and Israeli investors. The term Israeli investors refer to senior partners across Israeli ventures capital firms and Israeli serial angels.
18 These indicators inter alia arose in interviews with investors, in our inquiry.
19 The following are types of acquisitions according to the life-cycles stages (from early to mature) as described by Israeli investors, in our inquiry: Acquihire, is the recruitment of a high quality team of employees with proven experience in a specific sector (the start-up field of activity), which might have the ability to contribute immediately to the relevant R&D teams of the acquirer company. In general, acquihire transactions occur in an early stage of a start-up life cycle and do not include technologies or products, and hence the total value of these transactions is expected to be relatively small; Technology acquisition – the start-up has already developed technology (and registered patents) but has yet to reach a product development level; Technology and product acquisition – the start-up already applies its technology into a product in the market, but has yet to reach a significant amount of consumers.
a target's likelihood to develop into a complementary market, the more mature a target is, there should be a better understanding of its likelihood to develop into a complementary or adjacent market.

**Barriers for expansion (or entry) faced by startups:** The potential of a startup to scale up fast and the lack of barriers to entry, may also serve as indicators for its likelihood to compete directly with the incumbent complementary (or adjacent) product market.

According to interviews with Israeli investors of the acquired companies in our sample, selling products (or services) to business (or private) consumers, under some circumstances, requires extensive distribution capacity needed to reach a high volume of business (or private) consumers. Building and maintaining such a capacity is not only costly, but also requires rich experience. Therefore, it might be difficult for start-ups to gain significant scale on their own, particularly in case of a start-up that needs to compete directly with a big tech company, which enjoys significant economies of scale advantage and strong relationships with many business consumers. However, start-ups that produce a product (or service) that can be distributed online face lower distribution costs or may benefit from significant network effect, may have the potential to grow fast and might be in a good position to enter complementary or adjacent markets.

It should be noted that under the scope of our inquiry, we did not dive into an in-depth ex-post examination for each of the acquisitions in our sample – vis-à-vis these indicators. However, our examination of internal documents and the interviews conducted with key employees and Israeli investors provided the following insights, in this regard:

Five acquired start-ups had developed technology or products (or services) that post acquisition served as components in one or more of the acquirer product markets. Another acquired start-up produced a product that was an input in the acquirer product market. In these cases, due to barriers to entry, such as the requirement for extensive knowledge and experience in the field of the incumbent product, it appears that the target was not in a
position to develop its own product in order to enter into direct competition with the incumbents' product markets.\textsuperscript{20}

Twelve acquired start-ups had developed technology or products (or services) that were complementary to the acquirers' products.\textsuperscript{21} In all of these twelve cases, according to internal documents, the acquirer decided to enter the market of the start-up's product in order to improve (or maintain) its competitive position vis-à-vis its large tech competitors in other complementary markets, rather than in view of the competitive risks arising from the acquired start-up.\textsuperscript{22} In all of these cases, due to barriers to entry, it appears that the target was not in a position to develop its own product in order to enter into a direct competition with the incumbents' complementary product markets.

Finally, another three acquired start-ups were acquisition of talents and IP rights and as mentioned above did not raise horizontal competitive concerns.\textsuperscript{23}

Thus, in our sample, we also did not find indications for the ability of the acquired start-up to enter into direct competition with the incumbent in the incumbent's complementary or adjacent markets. This conclusion is primarily based on scalability challenges and barrier to entry to complementary (or adjacent) markets. However, as mentioned above, the insights reflected in this sub-chapter, are limited in nature and cannot rule out the possibility of termination of such potential competition.

\textbf{Chapter 2 – Are there other horizontal competition effect?}

In addition to our main insights related directly to the Killer Acquisitions Theory of Harm, two issues arose, following our inquiry of 21 transactions. We will briefly discuss preliminary insights concerning these two issues below.

\begin{itemize}
\item[\textsuperscript{20}] According to Interview with key employee of one acquired start-up, prior to the acquisition, the acquired start-up was struggling to maintain its operation active. The acquisition included technology and key employees, and the acquirer post-acquisition, continued to develop the technology and produce its own products.
\item[\textsuperscript{21}] Some of the acquired products were complementary to the acquirer product portfolio.
\item[\textsuperscript{22}] Interviews we had with Israeli investors and key employees of three of these acquired start-ups, also support the conclusions that the acquisition improved the ability of the acquirer to compete with other large tech companies in other product markets, rather than the risk for direct competition with the target.
\item[\textsuperscript{23}] See footnote number 14.
\end{itemize}
1. What may be the effect on Potential Competition in the Target Market?

Due to the economy of scale and the strong relationship that the large tech companies have with vast amounts of business consumers in other products, the merged company might enjoy a competitive advantage in the target market. This raises the question – what is the acquisition’s effect on other start-ups’ activities (current or future) in the target market, post-acquisition?

As arises from our inquiry, the effect on other start-ups (current or future) in the target market, post-acquisition of the target, depends on the competitive environment (including the degree of concentration and barriers for expansion or entry) in the target market, and on the characteristics of the industry. For instance, some mature industries, such as the cloud services industry, tend to consolidate to a few big incumbents in the market. In our sample, a few start-ups developed various services on top of the infrastructure cloud services held by a few giant companies, and were all acquired by these big tech incumbents. These big tech incumbents expanded into new markets in their ecosystem. This might raise a barrier for expansion (or entry) for start-ups into the post-acquisition target markets, due to their lack of ability to compete directly with giant companies, and force them to find new applications or markets in this sector. Therefore, these acquisitions might have a chilling effect on various markets in the acquired space of activity by reducing the economic incentives of start-ups and investors to enter into the acquired product markets, post-acquisition. However, in some cases, due to competition between the incumbent and other big tech companies, the new and improved product of the merged firm might drive other big tech competitors to improve and develop their own products, which in turn might increase start-ups’ activities and acquisitions in this sector. Moreover, in "young" industries, an acquisition of a startup by a large tech company might have a boosting effect on the economic activity in the industry – in terms of innovation efforts by entrepreneurs, investors such as angels and VCs and in terms of development of new start-ups.

2. Are there competition effects in other product markets of the acquirer?

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 markets. As also discussed above, in many of the acquisitions in our sample, the acquirers considered the "time to market" and the technology, as important factors in order to benefit from competitive advantages or to have a better competitive position vis-a-vis dominant incumbent in the market. In our sample, for
instance, a few start-ups developed services in the cloud services industry in various markets. As indicated by our inquiry, the providers of the cloud services market acquired these start-ups in order to gain a better competitive position in this market and not due to the potential risks that the startup will enter the cloud services market. Similarly, a few start-ups in our sample developed products in the cybersecurity industry in various markets. The acquirers indicated, that they considered how they would benefit from the acquisition, vis-à-vis the competition with other large tech companies operating in this sector, and according to their representations, they did not consider the potential risk that the startup will enter the incumbent's market.

This issue raises a general question – yet to be further discussed – on what are the theories of harm and metrics that might be take into consideration in assessing such acquisitions; should we take into consideration a competition form of one-stop-shop market in which incumbents compete on a product (or service) portfolio that they provide to business consumers; alternatively, should we take into consideration competition between large ecosystems; or otherwise, should we only look into the competition in the start-ups' product markets?

Conclusions

Our ex-post examination, which was based on a small sample of transactions, did not present indications for Killer Acquisitions. In addition, some insights, which arose during our study, might be helpful when examining horizontal competition effects of start-ups acquisitions. In a horizontal competition analysis, additional to the existence of horizontal relationships between the products of the merging parties, one should take into consideration the stage of the lifecycle of the target startup, the characteristics of the industry and the ability of the startup to grow fast and to expand into other markets.