

Competitive Advantages in the Video Streaming Industry

Does the release of original content have an impact on platform competition and subscriber base?

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Abstract

The television industry and the way we consume video entertainment has changed massively over the past decades. Innovations and the technological development have facilitated the establishment of new business models within the entertainment industry. We have seen the emergence of the subscriber video on demand (SVOD) sector, which is growing to replace linear television, and with new players entering the market seemingly every year. As the competition within the industry intensifies and the market is moving towards its maturity level, it is becoming increasingly more important for the actors to find ways to make their platform attractive to the consumers. Thus, it is important to obtain competitive advantages.

In this thesis we aim to explore the impact the release of new original content has on subscriber base for the SVOD platforms. Original content, being produced by and thus exclusive to a platform, is often pointed to as a key activity for making the platform attractive to new and existing subscribers. To conduct our research we will develop a comprehensive analysis of the SVOD industry. We will also utilize two different regression methods to analyse a potential relationship between our variables of interest, using data on some of the biggest platforms on a global scale. While the release of new originals will serve as our main independent variable, we will also account for time trends, content quality and price increases.

Through our regressions we find weak support for a positive correlation between the release of new original content and subscriber growth. The quality of the new content does also appear to have an impact. We do however acknowledge that there are several other factors that might affect the development in subscription numbers, in particular the aggregated industry trends, making us unable to credit this growth to the release of original content without taking more aspects into consideration.

As an extension of our analysis, we also discuss the impact of original content in a bigger perspective. Here we conclude that there are competitive advantages to be obtained by the platforms from having original content as a part of their growth strategy, that go beyond subscription numbers as an isolated success metric.

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1. Introduction

There are several reasons as to why the television industry is an interesting subject of study. Few other mediums have held the same position in society as television has over time. For decades, television has dominated our leisure time and held a unique power in its ability to impact people's opinions, preferences and beliefs (Crawford, 2015). While traditional television is now losing grounds to online streaming and internet-distributed content, for a long time it held itself remarkably well towards the rapid growth in popularity of the internet.

The advances in the distribution of video entertainment have completely transformed the media marketplace, along with the way we consume entertainment. Instead of planning activities around the scheduling of our favourite shows, our choice of entertainment is now available for us at any point in time. Furthermore, continuous technological development ensures that the mechanisms within the media industry never stay the same for long.

As a result, the video streaming industry is constantly developing. Recent years have seen the market grow to become densely populated by both major global players and smaller local providers. The recent Covid-19 pandemic played a major part in this, and saw consumer habits change massively, and practically overnight. During lockdown people had more time on their hands than ever and streaming video became a way to make time pass as well as a welcome escape from the current events. The subscription video on demand market faced an enormous upswing, with new platforms emerging and an abnormal growth in subscribers for most key players. Then, as people eventually returned to their pre-pandemic lives, the growth slowed, the average number of streaming services per household decreased and platform competition intensified (Adgate, 2021).

The heightened competition makes for an interesting shift in the industry dynamics. Nowadays, the competitive situation in the streaming market is often referred to as the *streaming wars*, as the streaming platforms to a lesser extent fight to attract brand new subscribers. Instead they are fighting each other. While the streaming platforms have increased in number, the consumers' available time and attention is still as limited as before. These are the scarce goods that the platforms are all striving to obtain.

In order to win over consumers who are spoilt with options, knowledge of how to differentiate to remain competitive is crucial. This comes down to the fact that while the growth of

individual platforms might be on the decline, and the industry actors face both internal and external competition, people still spend enormous amounts of time on the streaming platforms. In 2022, Americans alone streamed 19.4 million years' worth of content (Nielsen, 2023). Thus, even if it is expected that the number of available streaming platform will decrease in the upcoming years, the industry will remain highly profitable for those who survive (Adgate, 2021).

1.1 Research question

Offering attractive content has been highlighted as an effective way to stand out in the competitive environment of the television industry since long before the first platforms started to offer video distributed over the internet. Recent industry studies and surveys continue to prove that the importance of quality content remains (Statista, 2022; Nielsen, 2023). A key outtake from these studies is that users subscribe to streaming platforms to access specific content. In recent years they particularly emphasize the significance of original content, which is content produced and owned by a platform. Original content appears to be an important reason for why consumers subscribe to specific streaming platforms, while also being among the most consumed content in the platform libraries (Nielsen, 2023).

Competitive forces within the streaming industry is a topic that could make for a very wide research. In this thesis we have chosen to limit ourselves to examining if original content serve as a competitive advantage for some of the biggest global subscription-funded streaming platforms, by analysing a potential relationship between the release of new original content and the growth in subscription counts. We aim to answer the following research question:

How does the release of original content affect platform competition and subscriber base in the video streaming industry?

To answer this research question, we will develop a comprehensive industry analysis to provide an understanding of the competitive environment in the industry. Different regression methods will be utilized to uncover any potential connections between our dependent and independent variables. Here we will also account for some of the factors we assume might have an influence on subscription growth, such as time trends, content quality and price increases. To strengthen the analysis, we will run a separate regression for Netflix in addition to one for all our selected platforms. This is due to Netflix's position as an industry leader

throughout our research period, and them being an outlier in terms of the amount of original content created. When discussing the implications of our findings, this will also extend to discussing the role and impact of original content in a larger perspective.

The end purpose of the thesis is to provide some insights into the significance original content can have for the subscription-funded streaming platforms and whether it is fair to assume that producing their own original content can be seen as a competitive advantage in this industry.

1.2 Outline

Our thesis consists of eight chapters. In this chapter we have described our background and motivation for conducting our research. Chapter 2 will present relevant literature and previous research conducted in similar fields of study. In chapter 3 we have conducted a comprehensive industry analysis, where we both present key mechanisms within the industry and analyse its competitive forces. Chapter 4 and 5 present our data and choice of methods. Our results are analysed in chapter 6, while we in chapter 7 discuss their implications along with some of the limitations of our research. We will also make some suggestions for further research, based on our findings and improved understanding of the industry. Finally, chapter 8 concludes our findings and wraps up our thesis.

2. Literature review

To put our research into context we will present some literature related our field of study. It is interesting to view our research in light of older literature on traditional television standards and media markets. Here we will present some key mechanisms in the television marketplace.

2.1 Theoretical background

The economics of online television

Media markets are, as explained by Crawford (2015), two-sided. They provide content and entertainment to households in return for subscription fees. By doing so, they can provide an audience to advertisers, also for a payment in return. In the television marketplace, Crawford highlights four dimensions along which traditional broadcasters can make decisions: price, advertising, program quality and program genres. Their decisions may be affected by regulations, competitive conditions, and technological constraints. This summarizes some of the most fundamental mechanisms of the traditional television marketplace, yet they are also largely applicable to online video markets.

In the context of content choice, Crawford (2015) compares different business models within the television industry, looking at central elements of a purely advertising-funded television versus pay TV and subscription television systems. He points to advertising being the sole source of funding as a central cause for market failure in the analogue television era, referring to how a broadcaster's determination of a program's success was not necessarily contingent on how strongly the content appealed to the viewers. In other words, broadcasters might give lower priority to expensive productions or niche shows that would appeal strongly to a narrow segment, if they could draw the same audience, thus have the same advertisement earnings, with less costly productions. Crawford explains how this problem is more or less eliminated in a subscription-funded television model, because broadcasters can extract the viewers' surplus directly. Thus, they will be more inclined to focus on a wide content selection over maximizing the audience for each individual program. Crawford argues that this approach is likely to be more aligned with total consumer welfare, and particularly links it to increased quality of programs. His insights are just as valid for modern distribution models and online video markets, considering the fundamental similarities between subscription television and

the subscription video on demand business model, which usually also involves a content aggregation strategy.

Another central mechanism in television markets is bargaining. Crawford (2015) explains that since both content providers and distributors possess market power, any agreement or contract between the two parties will be a result of bargaining to determine agreeable terms. To optimize profitability it will be in the interest of each player to increase their bargaining power.

2.2 Empirical research

Overall, there does not appear to have been done much empirical research on the connection between original content and platform growth in the television or streaming industry. There are however, studies available on strategies and mechanisms that are relevant to our research.

Content aggregation and bundling

Content aggregation has been a common practice for the cable networks since long before the entry of the streaming services. In 1999, Bakos and Brynjolfsson studied the strategy of bundling a large number of information goods and selling them at a fixed price. They found that the practice of bundling could lead to greater economic efficiency. Similar conclusions have been drawn by Cullen and Crawford (2007), Yurukoglu and Crawford (2012), and Waterman et al. (2013), who have all conducted empirical studies on bundling's impact on pricing, product choices and consumer welfare.

Exclusive programming

Helen Weeds (2014) examines incentives for distribution of exclusive programming on pay TV. Her findings show evidence of content exclusivity being among the most important ways for distributors to compete for market shares, especially considering the pay TV cost function where marginal costs are negligible. As we will explain later in this thesis, subscription video on demand has a cost function similar to pay TV, suggesting that Weeds' findings may extend to this sector. Weeds explicitly states that the growth of internet-based and mobile distribution services for entertainment is likely to lead to an increased use of exclusive content as a competitive strategy on digital platforms, like it has for pay TV. She also emphasizes how content exclusivity will serve as an important competitive strategy whenever attractive content is a main factor in the buyer's decision-making process.

Original content and brand equity

In a fairly recent study Anthony Palomba (2022) investigates the impact of original content on brand loyalty and brand equity for OTT (over-the-top) platforms. Palomba finds evidence supporting that viewing certain types of original content will affect the viewers perception of the brand, and also that these perceptions do influence brand loyalty and brand equity. Several studies have been conducted on the link between brand equity and customer acquisition and retention. Stahl et al. (2012) examines a potential relationship between brand equity and customer acquisition, retention and profit margin in the automotive sector, and find a positive link to both acquisition and retention. Rambocas et al. (2018) find a positive association between brand equity and intention of repeat a purchase and word of mouth in the banking industry, whilst a negative association to switching intent. We assume that if original content can contribute to building brand equity and more loyal subscribers, it is also plausible that a high amount of original content on a platform can contribute to subscriber growth.

Vertical integration

Vertical integration is a well-known term in economics and management. Crawford et al. (2018) explore how vertical integration affects consumer welfare and firms in the television industry. They look at situations where content providers and distributors are vertically integrated and whether the market has sufficient controls to prevent foreclosure. Their main factors of interest are content selection and bargaining power. In the case where market regulations are effectively enforced, the authors find that vertical integration leads to welfare gains. These benefits arise due to both lower cable prices (a result of reduction of double marginalization) and greater carriage of content. In the absence of efficient controls, vertical integration leads to market inefficiency and reduce welfare. The authors discuss how integrated firms may have incentives to favour their own content, thus potentially limiting customer choice and variety. Additionally, the increase in bargaining power for vertically integrated firms can result in higher prices for consumers and reduce the competition in the market because it can potentially control and limit the resources available, creating an environment of scarce resources. Waterman et al. (2013) expresses similar concerns if the largest industry players take a more control of the supply chain through vertical integration.

As we will later discover, streaming video on demand services have taken ownership to a larger part of the production process and are investing heavily in producing original content. We will also see how this has them obtain several of the benefits related to vertical integration.

3. Background and industry analysis

3.1 The evolution of the video streaming industry

The way we consume video entertainment has changed massively over the last few decades. As technology continues to evolve, there are increasingly more ways to access television, tv-series and movies, and the competition within the industry is tougher than ever. In this chapter we will give a brief analysis of the evolution of the streaming industry, with special emphasis on the subscription video on demand (SVOD) sector. With this we aim to outline how the introduction of the streaming services has changed the dynamics within the television industry, as well as the competitive situation, and provide some context for the analysis we will later perform.

3.1.1 The entry of the video streaming services

Originally, and for the first several decades, television was purely available as a linear service. Audiences had access to a limited selection of TV channels and consumed video entertainment based on a set, predetermined schedule. By the end of the 1990s, satellite providers, and later also telephone providers, started offering the first subscription-based television services (Conlon, 2020). However, these services were still fairly similar to the traditional television services, and while they offered more choice in the form of bundles of TV channels, the audience still lacked freedom in terms of deciding where and when to consume a particular program or movie.

The main enabler for the entry of the streaming services as we know them today, was the advances in the internet technology (Crawford, 2015). The possibility of having a stable internet connection presented the providers of media and video entertainment with new and grand opportunities. When Youtube launched in 2005, it was a game changer (inStreamly, 2021). Youtube was among the first platforms to enable streaming of content directly in the internet browser. Its easy-to-use interface made the service immensely popular, especially among younger internet users, and it paved the way for the emergence of new video platforms.

In 2007 Netflix became the first service to launch an online streaming platform, offering their users access to movies over the internet (Conlon, 2020). This was a so-called “Watch Now” service, which made it possible for subscribers to watch movies directly via their internet

browser without having to download them first. The service was an extension of what Netflix was already offering as a movie rental service, and included in the rental subscription fee. However, at this point, only a very limited selection of titles was available and users needed a decent internet connection to be able to utilize the service. Netflix themselves named safe access and instant gratification as the main benefits of their new streaming option (Anderson, 2007). By this they meant that users did not have to expose themselves to the risks related to digital piracy or illegal streaming sites, and that they could start watching immediately after choosing a title, without visiting a physical store or waiting for the movie to arrive in the mail.

The second service to enter the streaming market was Hulu in 2008. Unlike what Netflix was offering, Hulu's streaming service was free, but ad-supported (Conlon, 2020). In November 2010 both Netflix and Hulu released stand-alone subscription services, where users could access content through a library. In the years to follow, more services entered the market by launching their own platforms. Examples are Amazon Instant Video (now Amazon Prime Video), Disney+ and HBO Max.

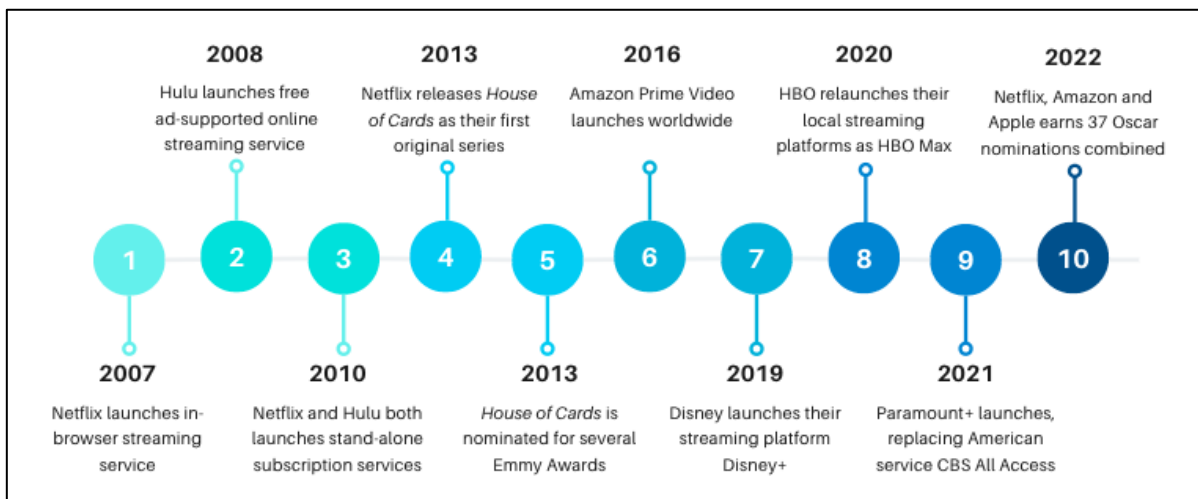


Figure 3-1: Timeline: the evolution of the video streaming industry

As already mentioned, the development in technology played a crucial role in the streaming services gaining substantial market shares and causing the fall of traditional television. While internet might have been the most important enabler, new technological devices like tablets, smartphones, AppleTV, Chromecast and Smart TVs all played their part in making streaming services accessible and convenient for the general public (Crawford, 2015).

Between 2007 and 2012 the streaming providers were solely offering convenient access to already existing movies and tv shows. Then, in 2013, there was a shift after Netflix released

House of Cards as their first original series. This marked the introduction of what is now commonly referred to as original content. Not only was *House of Cards* a huge hit with Netflix's subscribers, in 2013 it was also the first show produced by a streaming platform to be nominated for an Emmy Award, with its nomination for "Outstanding Drama Series" along with eight other categories (Holpuch, 2013). Following the success, Netflix has continued to increase their original content budgets yearly, and other SVOD platforms have followed. With Netflix, Amazon and Apple collectively earning 37 Oscar nominations in 2022, it is clear that the streaming services are now serious and well-respected players in the movie production industry (Abarinova, 2023).

It is safe to say that the technological development of the 21st century, with high-speed internet and social media, has completely changed the way we consume entertainment. For many consumers, their viewing preferences are no longer compatible with the traditional television model. We will explore this further in the following chapters.

3.2 SVOD: Subscription Video on Demand

SVOD is an acronym for subscription video on demand. The term emerged alongside several other terms describing internet-distributed video, such as OTT (over-the-top), video streaming and internet television (Lotz, 2022). The SVOD term covers the type of services that has most significantly transformed the way we consume video at home or on-the-go: they are funded by subscriptions and the video is available on demand. A key idea, which differentiates SVOD services from linear television, is the focus on building a content library instead of building a content schedule (Lotz, 2022).

In comparison to SVOD, video streaming, OTT or Internet-distributed video are much broader terms, as they cover all types of video accessible directly to viewers over the internet, including Youtube, Facebook, Instagram and TikTok (Lotz, 2022). However, as SVOD has become such a fundamental part of most people's everyday lives, this is the type of platforms that is usually referred to when using the term streaming services.

3.2.1 Geographic strategy and reach

Lotz (2022) presents four characteristics that are significant for the SVOD sector. One of these is geographic reach. While the origins of television and film industries were largely national,

Ramon Lobato (2019, as cited in Lotz, 2022, p. 7) offers three distinct variations of geographic reach in the SVOD sector: national single-territory, transnational multi-territory and transnational global. Among other things, the geographic reach of a platform will impact its choice of content strategy.

Most of the bigger SVOD platforms pursue a transnational strategy, where the platform is available in most or all important geographical areas, but the content is adapted to each market. The evolution from a national to transnational or global strategies is a natural consequence of the technological progress, and especially the development of the internet. However, the use of a transnational strategy is particularly characteristic for the SVOD platforms (Lotz, 2022). By opting for a transnational strategy, streaming services can take advantage of economies of scale and being able to offer goods with low to no marginal cost.

Netflix, Disney+, Amazon Prime Video and Apple TV+ all have a transnational global reach, which serves as a foundation for their business models and strategies (Lotz, 2022). This means that they have different content available in different geographic regions, and pricing models adapted to the library size and income level in different areas or countries. As the focus on original content has increased, platforms are also commissioning more original content from local production companies in different geographical areas. Netflix is leading this development, with hugely successful shows such as *Narcos*, *Squid Game* and *Casa de Papel*. The commissioning of local content is a mutually beneficial arrangement for platforms and producers. The platforms get access to different types of exclusive content and are able to differentiate from their competitors, while local producers get to bring to life ideas that otherwise would not have been picked up by a big network (Smith & Telang, 2019).

3.2.2 Price discrimination and SVOD: The bundle

Price discrimination has always been the most economically efficient way for creators to sell content (Smith & Telang, 2019). In the movie industry, the traditional policy has been to follow a strategy with several product-release windows staggered over time and variations in quality, usability and price. Movies would first be released exclusively in the movie theaters, and then be available for DVD rental about 90 days after the release. Most often, content would not premiere on broadcasting TV or subscription platforms until 2 years after its initial release. This model exploits the fact that consumers value watching a movie individually. Some people value the theater experience and being able to watch a new movie instantly after its release,

thus they are willing to pay a higher price for the experience. Others prefer to wait and consume the content from the comfort of their home at a lower price. This so-called windowing strategy has been hugely successful because it allows for price discrimination. However, in recent years it has also been hurt by digital piracy and illegal torrent sites where users can stream or download content for free almost instantly after its release.

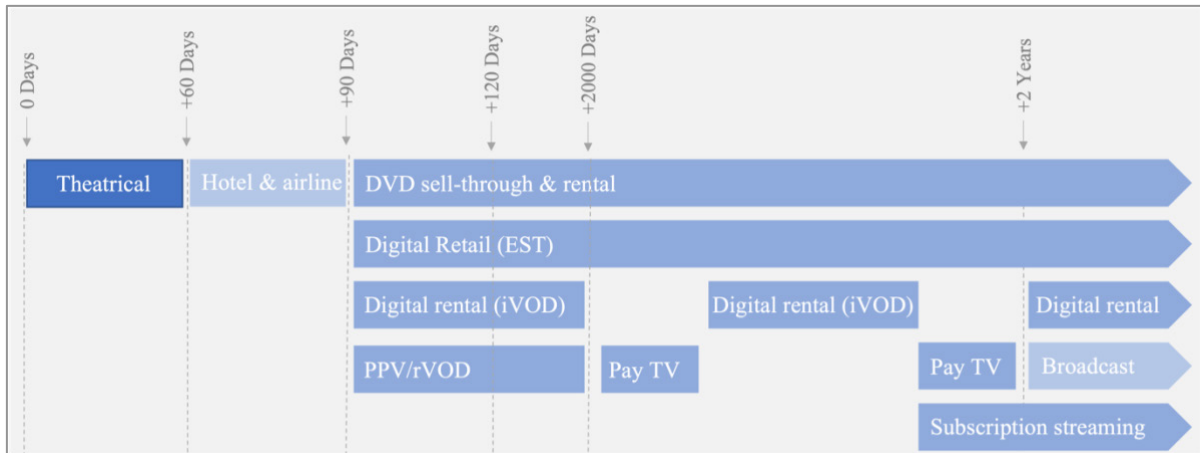


Figure 3-2: Typical release windows for movies in 2014 (*Smith & Telang, 2016*)

The SVOD services, led by Netflix, have challenged the traditional industry norms (Smith & Telang, 2019). Similarly to the big production studios, they are now putting billions of dollars into creating their own original content every year. However, most shows and movies produced by streaming services are released onto their platforms immediately, and not premiered in the movie theatres. While it is reasonable to believe that huge revenues would be lost by skipping the theatrical release, this practice is sustainable because the SVOD services are pursuing a different business model, known as a subscription model or the bundling model. With this business model, companies are less dependent on selling individual movies to large audiences (Smith & Telang, 2019). Instead, they sell bundles of content, containing many different movies and shows, to individual consumers at a flat subscription price. What makes this business model so profitable is that platforms can license or produce content at a certain cost, and will have no additional cost if more people watch it. Thus, like with traditional pay TV, the marginal cost is negligible. Platforms will however have higher revenues when more people subscribe to their service to consume the content.

One of the several benefits of pursuing a bundling pricing model is that it allows a provider to make use of price discrimination (Smith & Telang, 2019). It eliminates the need to spend resources figuring out how much a customer will value an individual title. Instead providers can predict the average value across all titles and consumers, and use these insights to price the bundle at a profitable level. The bundling model also makes providers less dependent on the success of every title. Like with the local content, providers are in a position to commission niche content that, without this business model, never would have been produced out of fear for financial loss (Smith & Telang, 2019). As a result, the streaming platforms are able to offer broad libraries, containing the major titles subscribers would expect, along with niche titles that will only be appreciated by a minority but still adds value to the bundle. They can also more easily analyse the sentiment of the market and observe how susceptible it is to new projects or genres. These insights will be utilized when commissioning new content.

3.2.2.1 Types of subscription plans

Ad-free plans

There are different ways for an SVOD provider to offer a subscription to the consumers. Some providers offer only one plan, and let every subscriber have the same price, content and features included. In most markets, HBO Max and Disney+ are using this model, with the option of paying a monthly fee or yearly at a discount. Others offer more than one pricing tier, so subscribers can opt to pay a higher monthly fee for better quality, additional attributes or more content. Netflix generally offers three ad-free pricing tiers. These all include the same content, but by upgrading your plan you can watch content on more than one device simultaneously and enjoy higher image quality (Netflix, 2023). In the United States, Disney allows customers to subscribe to Disney+, Hulu and ESPN+ as a bundle. A third example is Scandinavian provider Viaplay, which offers three content-dependent pricing tiers: «Movies and series», «Movies, series and sport» and «Movies, series and sport, including Premier League football» (Viaplay Norge, 2023).

Offering their content through different subscription plans is a type of price discrimination where SVOD providers, similarly to the strategy with different product-release windows, can exploit how audiences value the experience of consuming video entertainment differently.

Ad-supported plans

To incorporate additional price discrimination, platforms such as Netflix, HBO Max and Disney+ have all introduced new ad-supported tiers at a reduced price in selected countries

during the last two years (Robbins, 2023). Although doing so does propose a risk of cannibalization, the platforms are expecting that by broadening their offer they will attract new customers, rather than convert those who are currently subscribing to premium plans (Aquilina, 2022). The lower tier plan is a measure in response to the global increase in inflation and the economic situation that sprung as a result of the Covid-19 pandemic (McCarthy, 2022; Probasco & Richtmyer, 2023). At the same time, it allows the SVOD platforms to explore new ways to monetize their subscribers. With a successful advertising strategy, platforms can make a higher profit per subscriber with the ad-supported plans, even though the subscribers are paying a lower fee (Aquilina, 2022).

3.2.3 Content library

A common characteristic for the SVOD platforms is their large libraries with a wide range of content. Offering such a broad selection of content is sustainable because online platforms are not limited in space like traditional brick-and-mortar stores. They are also not restricted to broadcasting only the most popular genres, which is a common practice for linear TV due to limitations from schedules and the desire to attract the largest possible audience. Thus, the larger and wider access to content is a result of advances in the online distribution technology.

3.2.3.1 Content producers

Content producers are defined in this thesis as companies that create movies and tv shows that are made available on the streaming platforms. There are numerous content producers, but on a global scale only a handful of companies are behind the biggest successes. Often referred to as “The Big Five” are Universal Pictures, Paramount Pictures, Warner Bros., Walt Disney Studios and Sony Pictures. These companies held between 74 and 84 percent of the total market share in the US and Canada from 2005 to 2021 (Statista Research Department, 2023). In addition to the global market leaders there are also smaller local content producers taking shares of the market, such as Norwegian producers like NRK, Egmont Gruppen and Paradox.

3.2.3.2 Licensing content

When a content producer authorizes an SVOD platform to access their intellectual property, it means that the platform will be allowed to add their copyrighted content to its library. This is called licensing (MasterClass, 2021). Different types of licenses determine the time-period for which the content will be available on the platform along with its exclusivity. The most desirable agreement will often be *exclusive licencing*, which is when the platform buys the

right to be the sole distributor of the content. This type of license will add something guaranteed unique to the platform, and thus greater value. It also removes the option for the price-sensitive viewer to wait for the content to become available at a less expensive ad-supported service. Obtaining exclusive rights to certain content may serve as a strategic competitive decision, because consumers with an interest in that exact content will feel the urge to switch from a different SVOD platform. The exclusive rights can be bought across all geographical markets, or for a single country or region. (Lotz, 2022).

3.2.3.3 Original content

In this thesis, the term original content describes video productions that are produced, owned and controlled by an SVOD platform. As described, original content has made up an important part of the business strategies for several of the SVOD platforms ever since Netflix's success with *House of Cards* in 2013 (eMarketer, 2022). This strategic move can be seen as a form of backward vertical integration where streaming platforms and content producers collaborate to make content. The original content will be exclusive for the platform, thus not available anywhere else, nor will the platform have to renegotiate licensing agreements in order to keep the content in their libraries. Similarly to obtaining exclusive licenses, having a substantial amount of original content on the platform creates a competitive advantage, as viewers will have to subscribe to the platform producing the content in order to access it.

Original content is steadily increasing in popularity. In 2022 the viewing minutes for top-performing original content outperformed the top-performing acquired content for the first time and Netflix's original *Stranger Things* had more viewing minutes than any other program available for streaming (Nielsen, 2023). This is illustrated in Figure 3-3. While most of the shows on this top list are long-running, classic shows with solid fan bases, such as *The Simpsons*, *NCIS* and *Grey's Anatomy*, almost one third of the entries are original titles produced by SVOD platforms. This serves well in reflecting the popularity of the newer original shows.

Another outtake from Figure 3-3 and Figure 3-4, is that the majority of the top content in 2022 is exclusive to a single platform. Netflix holds 10 of the top 15 streaming programs. This suggests that Netflix has an enormous advantage in terms of popular series. Disney captures most of the list for the most streamed movies. A second important notion here is that these movies almost without exception are aimed at the *Kids & Family* segment, indicating, not surprisingly, that this might be the most important segment for Disney. Considering the total

minutes viewed on this list, one can also assume that the *Kids & Family* segment might be an attractive subscriber segment for SVOD platforms overall as people within this segment clearly spend a lot of time streaming movies.

2022 Top 15 Streaming Programs (Overall)				
	Program Name	Originator	Episodes	Mins viewed (Billions)
1	STRANGER THINGS	Netflix	34	52.0
2	NCIS	Various	356	38.1
3	COCOMELON	Netflix	18	37.8
4	OZARK	Netflix	44	31.3
5	ENCANTO	Disney+	1	27.4
6	GREYS ANATOMY	Netflix	396	26.8
7	CRIMINAL MINDS	Various	328	24.9
8	BLUEY	Disney+	114	21.1
9	GILMORE GIRLS	Netflix	153	20.8
10	SEINFELD	Netflix	176	19.3
11	SUPERNATURAL	Netflix	328	18.8
12	WEDNESDAY	Netflix	8	18.6
13	HEARTLAND	Netflix	225	18.0
14	COBRA KAI	Netflix	50	16.7
15	THE SIMPSONS	Disney+	667	15.9

12/27/2021-12/25/2022 | Rank based on Persons 2+ Minutes Viewed In Billions
Source: Nielsen Streaming Content Ratings (Netflix, Amazon Prime, Disney+, Apple TV+, Hulu, HBO Max (beginning 5/30) and Peacock (beginning 9/26/22), Nielsen National TV Panel, Viewing through Television




Figure 3-3: 2022 Top 15 Streaming Programs (Nielsen, 2023)

2022 Top 15 Streaming Movies			
	Program Name	Originator	Mins viewed (Billions)
1	ENCANTO	Disney+	27.416
2	TURNING RED	Disney+	11.427
3	SING 2	Netflix	11.347
4	MOANA	Disney+	8.629
5	THE ADAM PROJECT	Netflix	6.141
6	HOCUS POCUS 2	Disney+	5.697
7	DON'T LOOK UP (2021)	Netflix	5.141
8	FROZEN	Disney+	5.133
9	LUCA (2021)	Disney+	4.974
10	GRAY MAN, THE (2022)	Netflix	4.972
11	ZOOTOPIA	Disney+	4.437
12	COCO	Disney+	4.253
13	ETERNALS (2021)	Disney+	4.236
14	FROZEN II	Disney+	4.195
15	UNCHARTED (2022)	Netflix	4.179

12/27/2021-12/25/2022 | Rank based on Persons 2+ Minutes Viewed In Billions
Source: Nielsen Streaming Content Ratings (Netflix, Amazon Prime, Disney+, Apple TV+, Hulu, HBO Max (beginning 5/30) and Peacock (beginning 9/26/22), Nielsen National TV Panel, Viewing through Television




Figure 3-4: 2022 Top 15 Streaming Movies (Nielsen, 2023)

3.2.3.4 Niche content

In a *Harvard Business Review* article from 2008, Anita Elberse points out that a large proportion of entertainment sales are concentrated in the most popular 10 percent or even 1 percent of available products. However, more recent research on how digital distribution affects market dynamics shows that online access has increased the likeliness that consumers will purchase niche products, and that such products create an enormous amount of value for customers (Smith & Telang, 2016). The availability of a wider range of products, better search functionality, recommendation algorithms, user reviews, and more comprehensive product information are factors which contribute to directing online consumers towards niche products. This opens up a much broader market for content producers, and a competitive advantage for platforms adding niche content to their libraries.

These results highlight the evolution of content distribution. In traditional models, human experts curated and used their control of scarce promotion and distribution channels to reach the mass market. In contrast, newer business models, like the ones of Netflix and Amazon, build on selection processes that allows consumers to discover and consume a wide variety of content. The models leverage an integrated platform, using data insights, recommender systems and peer reviews, to help consumers sift through a wide selection of content to discover exactly the products they want, when they want it. This way, human creators are replaced by technology-based processes that empower consumers to determine what they consume (Elberse, 2008).

3.2.4 Data and technology

Netflix releasing *House of Cards* in 2013 is one of the most profound examples of how technology is changing the entertainment marketplace (Smith & Telang, 2016). At that time, the standard way for new programs to enter television and entertainment distributors was for the developers to pitch an idea with the goal of receiving funding for a pilot episode. This pilot episode could cost up to \$5 million, which made it a high-risk investment. Based on the pilot the television networks would determine if they believed there would be an audience for the show or not, and potentially order six to twelve episodes. The episode duration would be limited to between 30 and 60 minutes, and it also had to fit with the timing of advertisements. As the pilot episode was the key to success, it was subject to a significant amount of pressure.

However, in the case of *House of Cards* the producers wanted to tell a multi-layered story with characters that would develop over time throughout the series. Thus, the series did not fit the standard pilot episode format. In meetings with television networks, the pitch received mixed receptions. The production team consisted of several famous figures, including director David Fincher and Academy Award-winning actor Kevin Spacey (Smith & Telang, 2016), and networks were intrigued by the idea and the talents behind it. Still, they were hesitant to fund a pilot episode, especially considering how the concept of a political drama had not succeeded for almost a decade.

Netflix, however, did not follow the same matrix as the traditional production companies. When meeting with the developers, they were equipped with data on the viewing habits of their 33 million subscribers (Smith & Telang, 2016). Among other things, their analysis showed that a large share of their subscribers were fans of movies directed by Fincher or starring Spacey. Netflix was so convinced of the potential of the show that they offered to distribute it directly on their platform, bypassing the regular TV window. Their offer went beyond a pilot episode, offering \$100 million up front for a commitment of two full 24-episode seasons. This commitment was all based on insights obtained from their own data. By making this show to be distributed directly on their platform, Netflix eliminated concerns regarding episode duration and having them fit with commercial breaks and the schedule of a TV broadcaster. Also, while shows distributed on regular television would normally release one episode per week, Netflix made all the episodes of *House of Cards* available at once for their subscribers watch whenever it best fit. This new model created more freedom for writers and producers.

The collection and analysis of data has been a key factor for Netflix's business model. In comparison to SVOD platforms, television broadcasters have limited data and will only know the general characteristics of their viewers, thus not on an individual level. Furthermore, they will not be able to differentiate and promote content directly to individual consumers. Streaming platforms can access and analyze the viewing history of each subscriber, including what they watched, at what time, for how long, and on what device. These insights give them the opportunity to target each subscriber, for example by personalizing the trailer of a movie based on characteristics the viewer might find interesting. Being able to create experiences like personalized content based on individual preferences is one of the biggest advantages for the streaming platforms (Lotz, 2022).

3.2.5 Consumer behavior and loyalty in the SVOD market

Finally, to understand why certain factors are important in order to obtain competitive advantages in the SVOD industry, it is useful to view the industry from the perspective of the consumers. Unlike the music streaming market, where one can get access to most songs and artists by subscribing to one or two services, the video streaming market is fragmented with more exclusivity and content spread across multiple platforms.

A survey conducted by Nielsen in 2020 showed that access to more or exclusive content was the top reason for consumers to subscribe to a new streaming service. A similar survey, conducted by audience targeting company GWI in 2022, revealed that the top reason for subscribers to cancel a streaming service was that they were paying for too many subscriptions already. One quarter of the respondents said that they had cancelled a subscription because they wanted to subscribe to a different streaming service instead. It is apparent that the weakening of the economy has made consumers more price sensitive and that holding subscriptions to several streaming services simultaneously has become a luxury for some.

In general, the way the subscription model is used by the SVOD platforms makes it easy for consumers to be disloyal. The cancellation process is uncomplicated, switching costs are low and there are no clear disadvantages related to cancelling as subscribers can just as easily resubscribe at a later point in time. With a constant flow of new streaming services emerging, consumers will be more inclined to swap between platforms in order to access desired content. Deloitte's "Digital media trends, 17th Edition" revealed that around 25 % of consumers have cancelled a paid SVOD service, only to renew the subscription for the same service within the next six months (Westcott, et al., 2023). Younger consumers, namely Gen Z and Millennials, are the most likely to "churn and return".

3.3 Key actors

To outline the competitive environment of the SVOD industry, we have chosen to present some of its key actors. As we seek to understand the industry on a global scale, we have selected the biggest SVOD platforms globally for our initial descriptive analysis. That being said, for various reasons that will be addressed, not all of these platforms will be included in the regressions we perform later.

Because not all providers in the SVOD industry operate in the same way in all markets, it is difficult to find global market shares for the platforms. However, Figure 3-5 shows the US market share for the biggest platforms as of Q3 2022, which gives a good indication of their overall positioning.

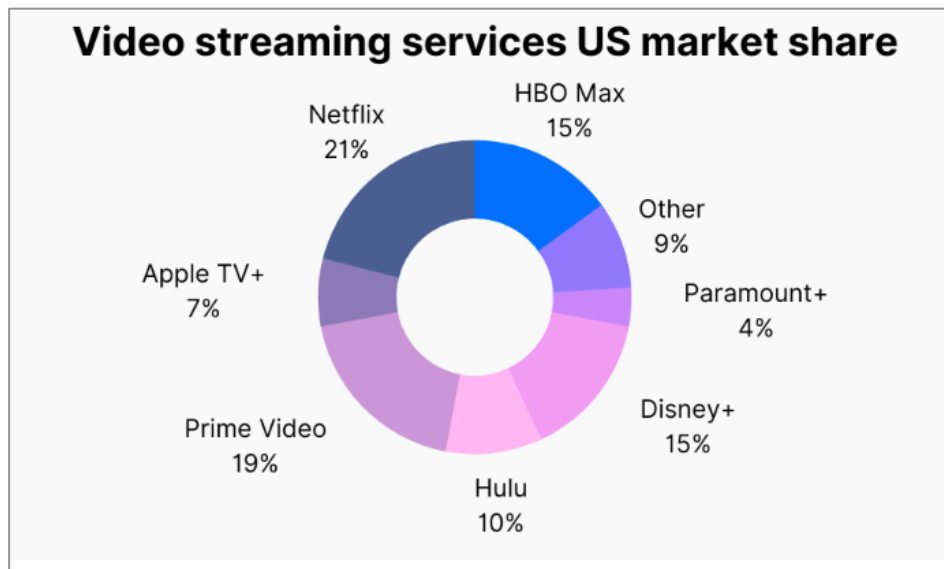


Figure 3-5: Video streaming services US market share (Headphones Addict, 2023)

3.3.1 Netflix

By being the first company to move into the video-on-demand market, Netflix obtained the first-mover advantage. While several big actors have now entered the market, Netflix still reaps huge benefits from having been first. Over the years Netflix's content strategy has evolved massively. They have gone from attempting to offer every movie available on the market, a natural approach considering their history as a DVD rental service, to a more concentrated library and being heavily focused on original content (Lotz, 2022).

In terms of original content, this has played a crucial role of Netflix maintaining their position as a leader in the SVOD market. Netflix has been producing massive amounts of original content for the past decade, and has by far the largest original content budget in the industry (Statista, 2022). Furthermore, Netflix has adopted a truly transnational strategy, and spends millions of dollars commissioning content from local production companies. This makes the platform attractive on a global scale.

3.3.2 HBO Max

HBO Max first launched in the US in May 2020, and is now available in a wide range of European and Latin American countries. The service replaced local services, such as HBO Now in the US and HBO Nordic in the Nordic countries, and united content from studios such as Warner Bros., HBO, DC, Cartoon Network and Max Originals (Business Wire, 2021). Following the merger with Discovery+, HBO Max is set to be replaced by new platform Max, starting in the US in May 2023 (Pateman, 2023). The merger will surely bring an even bigger variation in content to the platform.

The current content strategy of HBO Max is similar to Netflix's, with a library that provides entertainment for all audiences, and a combination of original and licensed content. HBO Max is known for producing high-quality content, and has, according to Reelgood, more high-quality movies than any other SVOD platform (Clark, 2022). Some of their biggest original successes are Game of Thrones, The Last of Us and Succession.

3.3.3 Disney+

When Disney launched their streaming platform, Disney+, in 2019 it was with the advantage of already owning large amounts of original content from their own entertainment production studios. Not only did their existing intellectual property make it easier for them to establish themselves as a key actor in the SVOD industry; Disney launching their own streaming platform was in fact highly anticipated by the consumers. Their platform is expected to outgrow Netflix's subscriber count in the near future, as we will see in chapter 4.

The Disney+ content library contains both tv-series and movies, and they rely heavily on original quality content. The platform is particularly popular in the Kids & Family segment. According to Disney CEO Bob Iger the aim of their content strategy is to "grow 'quality' subscribers", meaning that instead of chasing subscription numbers they want to offer content that will create loyal, less cost-sensitive subscribers (Benjamin, 2023). This will be achieved by focusing on original franchises like Marvel, Star Wars and Avatar.

3.3.4 Amazon Prime Video

Amazon Prime Video is a streaming platform offered as a stand-alone service, but also as a part of Amazon's Prime subscription. Out of all the SVOD platforms currently available,

Amazon's platform offers the largest library, with a particularly large selection of movies available. Amazon focuses mostly on acquired content, with only about 6 % of their library being original titles (Statista, 2022, p. 17).

3.3.5 Apple TV+

Apple TV+ is Apple's own streaming platform, which launched in November 2019. Apple's content strategy differs greatly from the other big platforms on the market. In the Apple TV+ library there is only a slim selection of titles available, but all of these are branded Apple Originals and available exclusively on Apple's own platform. Quality is the main focus for Apple, and they are setting aside large budgets to secure high-profile talents for their productions. Their efforts were rewarded with eight Golden Globe Awards nominations in 2022 (Statista, 2022, p. 32).

3.3.6 Hulu

Unlike the other platforms to be discussed in this thesis, Hulu is available in the US and not on a global scale. Hulu was the second company to move into the SVOD market, after launching their subscription service in 2010. Since 2019 Walt Disney Company is the majority shareholder in Hulu, but the platform is still run independently of Disney+.

The Hulu library contains films and television series from several major studios, including 20th Century Studios, Searchlight Pictures, Disney Television Studios, ABC, Freeform, and FX Networks. Hulu also produces their own original content, with *The Handmaid's Tale* being among their biggest global successes.

3.4 Industry analysis

To analyse the competitiveness of the SVOD industry, we will rely on the Porter's Five Forces framework. The framework was developed in the 1980s by Harvard Business School professor Michael Eugene Porter, as a contribution to his ground-breaking work in the field of competitive strategy and competitiveness (Vikrøen, 2021). It is often used to determine the ultimate profit potential in an industry, thus evaluating its attractiveness along with identifying potential opportunities and threats (Porter, 1998).

The five forces that, according to Porter's framework, shape the competition within an industry are suppliers, buyers, substitutes, potential entrants, and industry competitors. The rivalry among existing firms is affected by the strength of the four other forces, as illustrated in the Figure 3-6.

Figure 3-6: Porter's Five Forces (Porter, 1998)

By analyzing these five forces we aim to develop a comprehensive understanding of the competitive dynamics within the SVOD industry. This knowledge will be valuable when undertaking quantitative analysis to identify relevant factors that could lead to strategic advantages. Such an understanding can also be useful when interpreting our results.

3.4.1 Buyers

The bargaining power of the buyers refers to the degree of control that buyers have over the price and quality of the products and service in the industry. The buyers battle with the industry to force prices down and quality up. Among other things, Porter highlights the level of differentiation, switching costs and volume as factors that may affect the buyers' power of negotiation (Porter, 1998).

In the SVOD industry, buyers are the consumers subscribing to the platforms. The bargaining power of buyers in the streaming industry is high due to several reasons. Buyers have the option to choose between several streaming platforms, and as providers increase in number,

the power of the buyers will continue to rise. They also have the opportunity to subscribe to several platforms at the same time, known as multihoming. According to Deloitte Digital Media Trend Study, 15th edition, the average user in the US in 2023 subscribes to four different video streaming services (Cook, 2023). Buyers can also just as easily cancel or switch to seek other media providers. Like we described in section 3.2.5 switching costs in the SVOD industry are minimal, due to the monthly fee paid by the buyers being relatively low and there rarely being any cancellation fee or contractual period longer than a month. This grants buyers even more power and contributes to increase the rivalry among streaming platforms.

According to a 2020 Nielsen report, 84% of users rank cost as very important when selecting a streaming service (Cook, 2023; Nielsen, 2020). While cost appears to be the most important decision factor for subscribers, usability (81%) and availability of content (79%) is almost equally as important. There are some variations in subscription prices between SVOD platforms. Different pricing strategies in the industry will be explored later in the thesis, but, as we have already seen, some platforms meet the different consumer preferences in terms of pricing by offering different pricing tiers. With more choices available, the power of the buyers will also increase.

SVOD platforms have limited influence over buyers and must strive to stay relevant in the eyes of the consumers. Subscribers are the main driver of revenue for the streaming platforms, and since increasing revenue solely by continuously increasing subscription fees is not sustainable, attracting and retaining subscribers will always remain a main focus. Focusing on content appears to be among the most important strategic moves, as subscribers will often choose platforms based on specific content (Statista, 2022). A poll done by Morning Consult in 2019 revealed that 49% of subscribers between the ages 18-29 would cancel Netflix if *Friends*, *The Office*, *Marvel* movies and Disney content were removed from the platform (Shevenock, 2019). While the actual effect was not that substantial, Netflix has experienced a loss in both popular content and subscribers following the launch of the new SVOD platforms. This could explain why they are now relying more heavily on original productions.

3.4.2 Suppliers

The bargaining power of suppliers refers to if suppliers are in a position to increase prices or reduce quality of the product. Their negotiation leverage depends on the number of suppliers. If the suppliers are more concentrated than the industry to which they deliver, they may be in

a more powerful position. Other factors that may affect their position is the uniqueness of the input, the cost related to switching to a different supplier and the threat of vertical integration (Porter, 1998).

The suppliers of the SVOD platforms are mainly content producers and media houses negotiating and selling content licenses. The platforms depend on being able to offer desirable content, and since the supply is limited and quality differs greatly, the suppliers have had a lot of power in the industry. Platforms will often rival to obtain exclusive rights to shows or movies, either in a specific region or globally, because this can provide a significant competitive advantage. Thus, the higher the exclusivity of a contract, the more power lies with the suppliers. Contracts with less exclusivity, where several platforms obtain the rights to distribute the same content, will be less valuable for the platforms. The power of the suppliers also increases when the quality of and demand for the content they offer is high.

The trend of vertical integration, with production studios creating their own streaming platforms and distributing content themselves, increases supplier power further. This is due to the studios no longer being dependent on external platforms to have their content distributed. For example, since launching Disney+, Disney has taken exclusive rights on Disney and Marvel content. When studios distribute their own content, there will also be less content available for the remaining platforms to licence, which increases the bargaining power of the suppliers. As this vertical integration continues, the production studios are diminishing market shares for existing companies in the SVOD industry.

However, streaming platforms are also participating in vertical integration by producing their own original content. When the platforms become less dependent on external productions, the power of the suppliers will be reduced. An additional benefit for the platforms is that vertical integration removes the bargaining between the SVOD platform and supplier, which can result in better opportunities for a more competitive price strategy. It also creates more freedom for SVOD platforms to produce and select the content they want to offer to their subscribers. Thus, while suppliers still tend to have large power over the streaming platforms, new trends and business models have contributed to reducing this power to an extent.

3.4.3 Industry Competitors

The intensity of competition in an industry depends on the rivalry among existing competitors, which is also influenced by the other four forces. The rivalry is a result of one or more

companies feeling pressured or wanting to improve their position. It will also depend on the growth in the industry, fixed costs, switching costs and the number of competitors. High levels of competition, like price reduction tactics or advertisement battles, can reduce profitability and make it difficult to gain market shares, thus reduce the attractiveness of the industry (Porter, 1998).

In the SVOD industry, the intensity of competitive rivalry appears to be high. There are many different platforms, but it is only feasible that a few major players hold positions as market leaders. This makes the business environment highly competitive. We see evidence of this in Figure 3-5. The key players in the SVOD industry are similar in many ways, but also differentiated through different pricing and content strategies. According to Porter, differentiation contributes to reducing the internal rivalry because consumers can more easily identify the individual companies. Different strategies aiming to improve competitive positioning and achieve competitive advantages can be analysed through Porter's generic competitive framework.

Porter's generic competitive strategy framework introduced four strategies, each with their own tactics, as visualized in Figure 3-7 (MasterClass, 2022). A competitive strategy is a long-term plan that includes decisions on how companies can stand out from their competitors using tactics like product differentiation, cost plans and scope.

As mentioned earlier in this chapter, many of the larger SVOD platforms have expanded their reach by adopting a transnational strategy. This strategy is particularly powerful if the platform invests in local content, using local actors and language, historical events or characteristics that is adapted to local preferences. Investments in local content is adding value to a company in terms of product differentiation.

Competitive advantages through differentiation can also be obtained by SVOD platforms by acquiring exclusive and high-quality content, either by securing exclusive licences or through production of original content. Furthermore, the platforms can differentiate by focusing on being the leader in specific content segments or niches. Crawford et al. (2012) found that certain customer groups have a higher willingness to pay for specific content. For example, they found that black households are willing to pay more than the average for Black Entertainment TV, and the same for families with young children and Disney content. User experience is also a way for platforms to differentiate. Companies can invest in improving

their platform and personalizing their content to be able to offer a more engaging and tailored viewing experience.

Lastly, pricing strategies are often used as a tactic to attract customers. As presented earlier, some platforms offer different pricing plans, differing in content quality and exclusivity, to attract different customer segments. Others offer only one pricing tier, and can do so due to following a specific content strategy or using exclusive content as their unique selling point. Some platforms, like Disney+ and HBO Max, offer a discount on yearly subscriptions as a part of their pricing strategies, aiming to gain loyal customers. Recently, many platforms have also revised their pricing strategies by including ad-supported tiers at a lower price as a response to the global economic downturn.

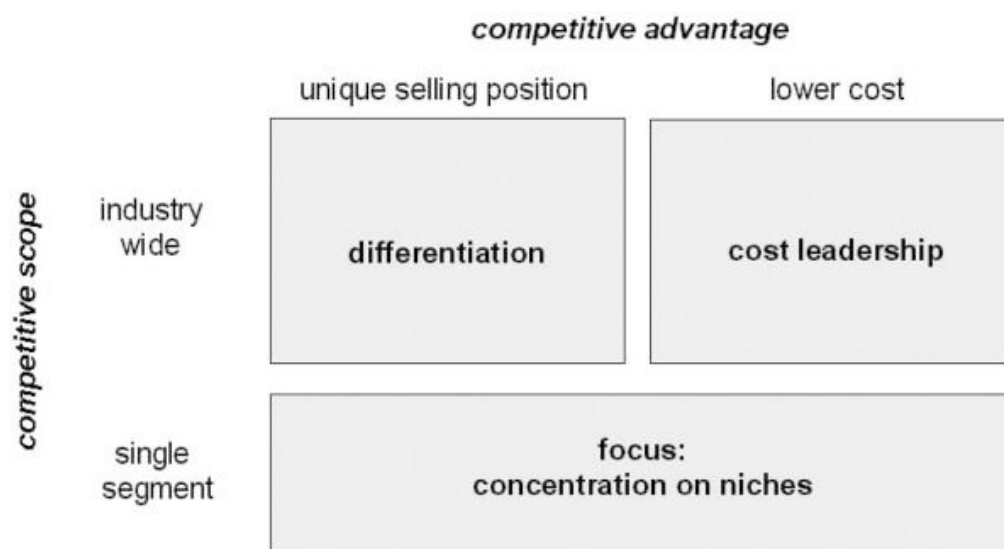


Figure 3-7: Generic Competitive Strategy (Yeung, 2007)

3.4.4 Potential Entrants

Threat of new entrants refers to the likelihood of increased competition due to new companies entering the market. The level of this threat depends on barriers of entry, such as economies of scale, brand recognition and loyalty, and capital requirements. These are all factors that can make it difficult for new companies to enter the market (Porter, 1998).

As long as an industry is profitable, it will be attractive for new entrants. Low switching costs for consumers is also in favour of new entrants, as it will be easier for them to gain initial

market shares. To enter the SVOD industry a new company will have to create a distribution platform. From a purely technical standpoint this is highly feasible because the technology is available for anyone equipped with the necessary skillset. However, the wide library requires large capital investments, supplier contracts and networking. This can be difficult to obtain for a new entrant. As Alan Horner, chairman of Walt Disney Studios, quoted in Anita Elberse's *Blockbusters: Hit-Making, Risk-taking, and Big Business of Entertainment*; "Very few entities in this world can afford to spend \$200 million on a movie. That is our competitive advantage". Also, it will take time for new entrants to obtain the amounts of data that the established companies possess. Thus, it can be more difficult for new entrant to create personalized content for their subscribers. These factors create barriers that make entering the market less attractive.

On the other hand, actors that are already established in the entertainment industry might have an easier time expanding into the SVOD market. As we have already pointed out, there is a trend of vertical integration from production companies like Disney. These companies already have a strong brand, a solid foundation of intellectual property and a network, thus the initial investments required will be low, while potential customer base will be high. Other potential new entrants are broadcasting companies seeking to expand their distribution system to include a streaming platform. As they too already have a library of content and a network, the entry barriers are lower. For example, the UK leading broadcaster ITV launched ITVX as their new video on demand platform in December 2022, combining SVOD and linear TV (Ainsworth, 2022).

In conclusion, the threat of new entrants is at a moderate level. New entrants are mainly a result of vertical integration. These will have an advantage over brand new companies entering the market, making it less attractive for the new companies to establish. Nevertheless, new technology and changes in the business environment may increase the incentives for new companies to enter in the future.

3.4.5 Substitutes

The threat of substitutes refers to the degree of which alternative products or services can replace the industry's offerings. The availability of substitutes can limit the pricing power of businesses in the industry (Porter, 1998).

Possible substitutes of streaming platforms are other entertainment services that complements the entertainment demand. Examples include linear TV, cinemas, digital piracy, social media platforms and YouTube, to name a few. A Deloitte case study also identifies video gaming as one of the most significant substitutes to SVOD services, especially among the younger generation (Westcott, et al., 2023). What makes up the competitive environment here is that actors within these industries and sectors all compete for the same segments and user groups. If some take larger shares of the market, this may lead to reduced profitability for remaining players like the SVOD platforms.

Illegal piracy might pose as one of the greater risks. For acquired content the original release window strategy incorporated by the industry still applies. It will typically takes several months after content has been released in the theatre before it is accessible through TV or SVOD (Smith & Telang, 2016). Outside of the US the waiting time can be even longer. Thus, if certain content is considered attractive by the consumers, they may opt to watch it illegally on piracy websites. This is however rarely a concern with original content produced by the SVOD platforms themselves, because it tends to skip the original window timeline and be made available on the platform right away. By removing the waiting time, the platforms reduce the risk of being affected by piracy.

Overall, consumers have a limited amount of spare time to use on entertainment (Oslo Economics, 2018). For instance, if a user spends more time reading, they will have less time to watch videos on an SVOD platform. One of the advantages of the subscription model is however that the platforms are not dependent on users spending a lot of time on the platform. Instead, they make their profits by having users subscribe to their service over time, regardless of whether they actually use it. At the same time, a common reason for subscribers to cancel a service is not using it enough to make it worth the subscription fee (GWI, 2022). Therefore, viewing time is still a relevant factor. It can serve as a metric indicating the attractiveness of a platform, while also giving an indication regarding the likeliness of churn. It also means that despite SVOD platforms being less dependent on viewing time for profits, they still need to make sure that they remain competitive against other media sources in order to prevent subscribers from cancelling.

4. Data

In this section we will present our data collection and data processing process. We will also give a short presentation of the information our data contains, and describe how we constructed the data to fit our regression analysis, which will be presented in chapter 5.

4.1 Data collection and cleaning

In order to obtain a sufficient data basis, we had to collect data from several different sources. The datasets we retrieved were later cleaned and merged together.

4.1.1 Platform library data

Data on which titles are included in the libraries of each platform was collected from Kaggle. This is a database where users can upload datasets to be freely available for other registered users to use. We were able to obtain complete datasets for all streaming platforms. All datasets were updated in March 2023, except for the Netflix library which is from July 2022 and the Hulu library from May 2022. The data in all datasets is sourced from American streaming guide JustWatch, and contains data on platform libraries in the United States.

4.1.2 Original content data

Our data on original content was manually sourced from various pages on Wikipedia. We collected the data from the relevant pages and gathered it in CSV files for further processing. Some initial cleaning was done when putting together the CSV file, like removing columns that would not be of any use to us and adding a platform indicator column.

4.1.3 Subscriber data

Quarterly subscription data for the respective platforms was collected from different sources. We have collected subscriber data for the time period 2014-2023, or for however long the platforms have been on the market and reported subscription numbers. Information on Netflix, Hulu and Disney+ was collected on Statista, while subscription numbers for HBO Max was found on Headphones Addict, which provide information based on reports from HBO's parent company WarnerMedia. An important notation regarding HBO Max's reported numbers is that after Q2 2022 the subscriber count also includes Discovery+ subscribers (Susic, 2023).

For Hulu the subscriber reports were somewhat sporadic before 2018, and we have therefore only collected data after this.

4.1.4 IMDB ratings

As a quality or popularity indicator we use the IMDB rating for all individual titles. The IMDB rating is an average weighted rating based on reviews from the audience (IMDB, 2023). According to the IMDB website weighted ratings are being used to avoid disruptions following deviant user behavior, although they do not disclose exactly how their weighting algorithm works. There are several metrics we could have used as indicators of popularity. Our decision to utilize IMDB ratings is based on these being purely audience-generated scores. The people rating shows and movies on IMDB will also most likely subscribe to one or more SVOD platforms. Thus, if a platform has a high average score on their content, this could indicate that the content is perceived as attractive. We also know that other professional entertainment platforms, such as Reelgood, use the IMDB ratings to define high-quality content. For a movie to be defined as high-quality, Reelgood requires an IMDB score of at least 7,5 (Clark, 2022).

The IMDB ratings were downloaded from the IMDB database on May 3rd, 2023. The IMDB datasets are updated daily, so we have the average score based on the ratings of this date. We collected one dataset containing the titles of shows and movies and a second dataset containing IMDB scores. These were merged by a common identification number to obtain one dataset containing titles and their respective score.

4.1.5 Pricing data

The information of subscription price changes was collected from several news sources. Most of which were specialized entertainment magazines like the Variety Magazine and The Verge. We used these news announcements to map out a timeline of prices for each platform. Like previously discussed, SVOD platforms charge different markets differently, and in their respective currencies. As it is difficult to account for the exact changes in all markets, we have selected the US prices as our baseline, based on the US market size and most platforms being US based. Also, it is reasonable to assume that the platforms announced changes in pricing for other geographical markets around the same points in time. For platforms with several subscription plans, the base plan is selected because it tends to be the most common ad-free plan.

4.2 Data construction

Our data is constructed as a panel dataset to fit the regression analysis we will perform in chapter 6. We have chosen to present it as a panel data to obtain a larger dataset, aiming to gain more precise estimates.

Our panel data includes data from four different SVOD platforms; Netflix, Hulu, Disney+ and HBO Max. Even though there has been an increase in the number of platforms over the last couple of years, we have a limited data selection due to the restrictions we have drawn for this thesis. We have limited our research to only including the largest streaming platforms globally, and not more local platforms like TV2 Play or Viaplay. Hulu is however included, despite only being available in the US, because of its significant size. Some SVOD platforms do not report subscription numbers, or they report aggregated numbers across different business areas, like Apple TV and Amazon Prime Video. To avoid distorted results we have chosen to exclude these platforms, and this is limiting our data further.

The dataset consists of a cross-sectional dimension, which is a selection of different SVOD platforms, in addition to a time-dimension which spans over the period from 2014 to the beginning of 2023. The data is presented quarterly because this is how subscription numbers are reported by the platforms. Starting the time period in 2014 is due to availability of data, but also because it was around this time that the platforms started producing original content. Because some platforms enter the panel late, we have an unbalanced dataset. While Netflix has reported subscription numbers since the beginning of our chosen time period, other platforms entered the market as late as in 2020. As a result there are $n=4$ different streaming platforms observed over anywhere between $T=10$ to 32 quarters. The total number of observations is $N=75$.

To construct our dataset, we have added columns representing the number of titles released, along with the maximum IMDB score of the releases within a quarter for each platform. The «Originals» variable was obtained by sorting the titles into quarters by their release dates and counting the releases per quarter per platform. The maximum rating among the titles within each quarter was then extracted and stored in the «IMDB_Max» variable. All measures were calculated by using summary functions in R.

4.3 Descriptive statistics

To capture industry trends, dynamics and strategies, we look at some statistics for the main actors in the global streaming market.

4.3.1 Library composition

Figure 4-1 shows the library sizes for six of the biggest SVOD platforms as of March 2023. It also shows the share of movies compared to series for each of the platforms. The graph gives us an indication of the different content strategies. Amazon Prime Video is by far the platform offering the largest library, with a predominance of movies. Netflix also has a substantial library, but with more of an even distribution of movies and series. Apple TV+ is on the other side of the scale, with a very slim library. This is in line with their strategy of offering fewer titles, and their focus on high quality and exclusivity. The libraries of Disney+, HBO Max and Hulu appears to be of similar size and composition.

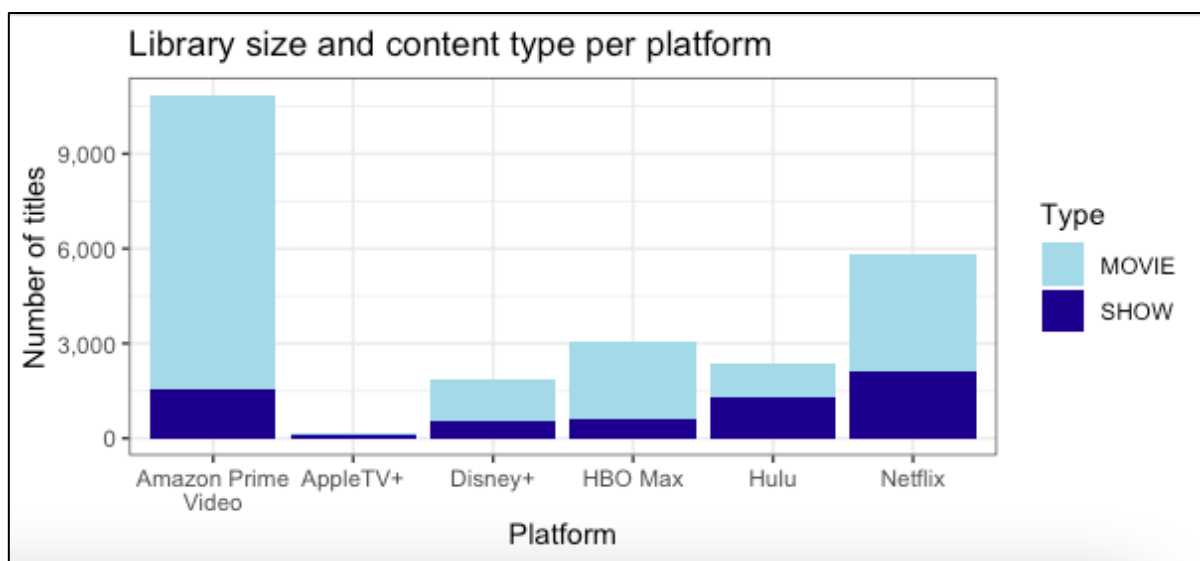


Figure 4-1: Library size and content type per platform

4.3.2 Subscriber development

Figure 4-2 illustrates the evolution in subscribers for the platforms Netflix, HBO Max, Disney+ and Hulu between 2013 and 2022. This time period captures both Netflix's reign as a clear market leader, and recent years with more dense competition. While Hulu was also

available for the entirety of this period, the few reports we were able to obtain indicate that their numbers were marginal and the growth fairly flat for the years we are not displaying.

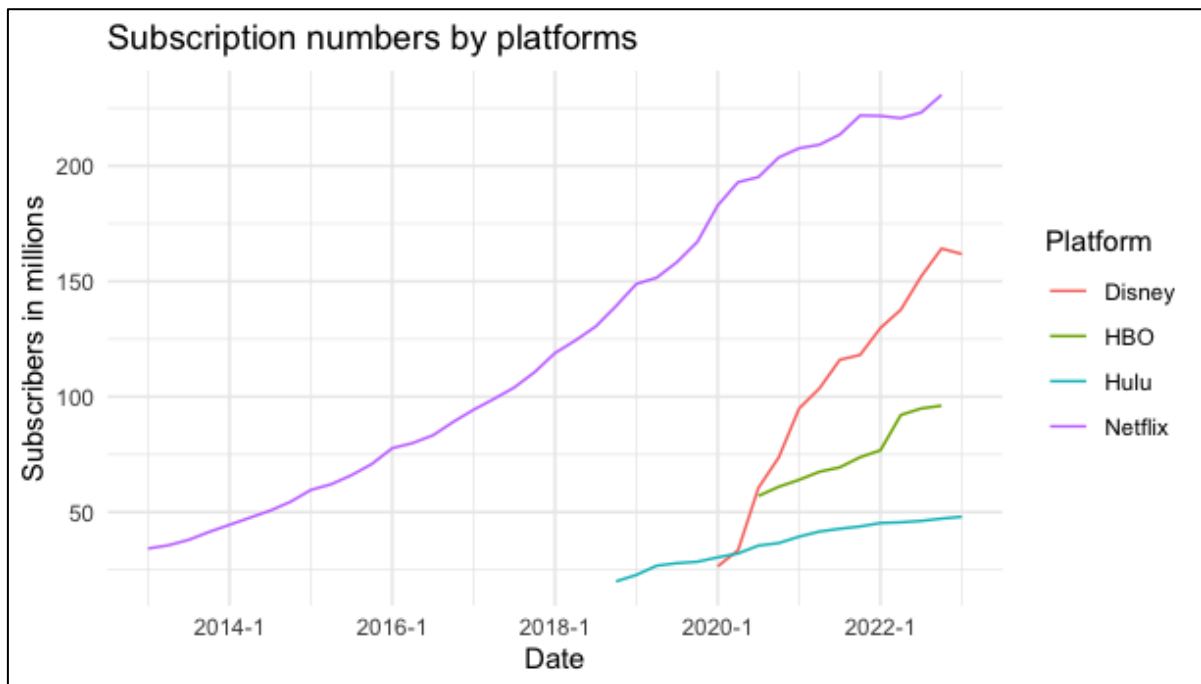


Figure 4-2: Subscription numbers over time

Another important notation regarding Hulu is that since they are only available in the US, their subscription numbers will never be comparable with the other three. For HBO we have only taken their HBO Max service into consideration, and have not accounted for subscribers at any prior local service like HBO Now or HBO Nordic. When studying the market on a quarterly basis, it will be harder to spot any abrupt movement. Still, the figure gives a good indication of the market trends and a simplified picture of the industry situation over the years.

For all platforms we see a steady growth, which is compatible with there being a general growth in the market. Disney+ has had the most rapid growth since its launch in 2019. Netflix has had a solid growth, from about 50 million subscribers in 2014 to more than 200 million subscribers in 2020. However, with more providers entering the market Netflix's growth has stagnated, and in Q1 2022 the company reported a decline in subscribers for the first time in a decade, followed by an even bigger decline in Q2 2022.

4.3.3 Content quality and popularity

Table 4-1 gives an indication of the overall popularity of the content on the different SVOD platforms. For all platforms except for Disney+ we have also distinguished between original

and acquired content. Our reason for only computing an average score for Disney+ is that their library contains a high share of content that was produced by the company, but long before the launch of their platform. This is likely to give less comparable results.

As we can see, the average rating for the original titles is indeed higher than the overall average rating and for the non-original titles. Somewhat surprisingly, Netflix is an exception. Netflix appears to have the exact same average rating for originals and licensed content, as well as overall. A possible explanation could be that Netflix by far has the largest share of original content out of all our platforms, with about 30 percent of their library being classified as originals. Since not all of these productions will achieve the same attention or acclaim, it is reasonable to assume that Netflix's ratings will be more normally distributed than that of their competitors (Conlon, 2020).

The differences could also reflect the platforms choosing different content strategies for original content. While Netflix is producing a high quantity of titles, HBO and Disney have a higher budget per title they produce for their platforms, and a focus on expanding existing, popular franchises, such as *Game of Thrones* for HBO or *Star Wars* for Disney. An assumed weakness for Netflix is that they are lacking big franchises of similar character, because these are sure to receive immediate attention and can easily be expanded.

Platform	IMDB Score	Non.originals	Originals
Amazon Prime Video	5.97	5.94	6.82
AppleTV+	7.13	NA	7.13
Disney+	6.62	NA	NA
HBO Max	6.94	6.91	7.29
Hulu	6.70	6.69	6.91
Netflix	6.51	6.51	6.51

Table 4-1: Average IMDB scores: overall and on original vs non-original content

In our case, we are not looking to decide which SVOD platform has the highest quality on their libraries, but rather to investigate whether there are any noticeable differences in ratings for original and licensed content. At the end of the day, most movies and series are considered as average. Therefore, the bigger the library a platform offers, the more likely will it be that

the average rating of their library is fairly average. However, it is interesting to highlight that Apple TV+, whose strategy is to only offer exclusive, original content, also has the highest average IMDB rating out of all the platforms we have looked into.

For our regression analysis we have decided to use the maximum score as an indicator of the popularity of original content released in a given quarter. This is to capture the effect of producing high-quality original content particularly, and in line with insights from Kantar stating that it often takes a highly trending title to win new subscribers (Avery, 2023).

4.3.4 Subscription price

Figure 4-3 displays the development in the monthly fee for a basic subscription on the various platforms over time. All prices are displayed in US dollars. Since we have a short sample period and some of the platforms just recently entered the market, there are few price changes. The blue dotted line displays the average price for the entire time period starting from Q1 2019. This makes for a better comparison when the other platforms entered the market.

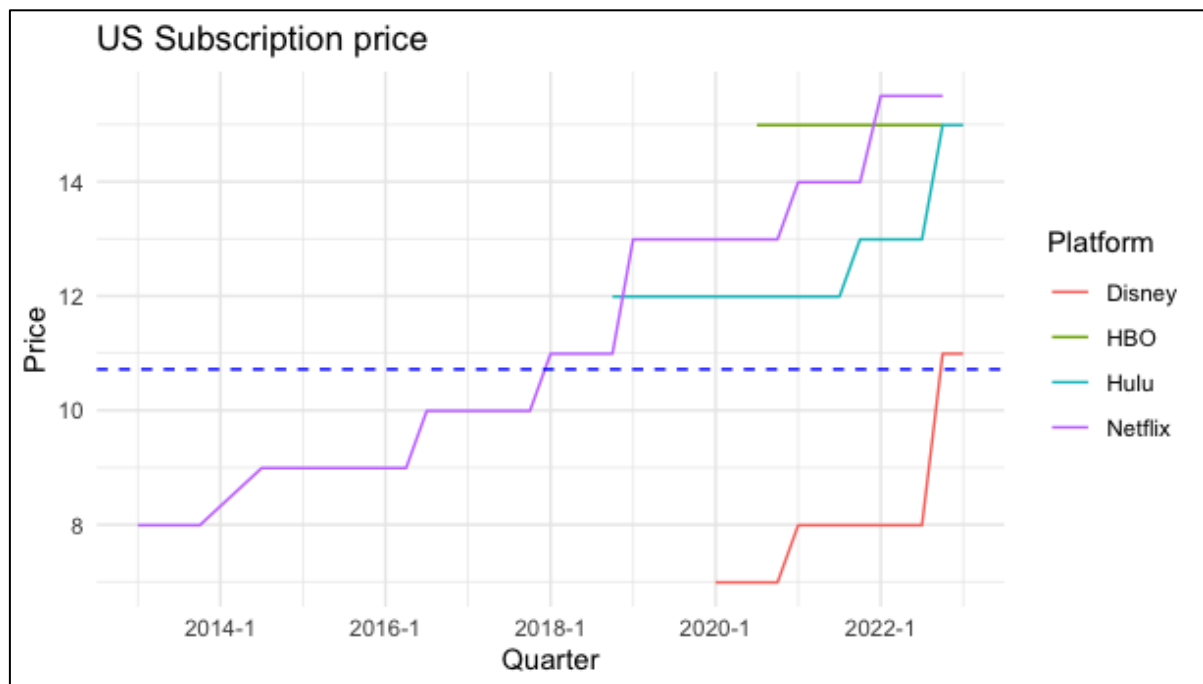


Figure 4-3: US Subscription price change over time

Netflix is the highest priced platform for most of the time period. It is reasonable to believe that they can maintain this price strategy due to their unique selling position, by having a great brand awareness and a solid established position in the market. Netflix is also the platform that has had the most frequent price increases, seemingly changing their price about once a year.

The changes are however marginal, by only \$1 or \$2 at the highest. While it could be coincidental, our graph suggests that Hulu is following Netflix's price increases with a lag, which could be a deliberate strategic move.

Disney+, on the other hand, is among the lowest priced platforms of our sampled distributors. Their subscription price was particularly low compared to their competitors during the first period after the platform was launched. Penetration pricing is a classic strategy for new entrants to attract new customers and build an initial customer base by offering a low price for a limited period (Kenton, 2023). After 2 ½ years they announced their first substantial price change, increasing the price by almost 40 percent from \$8 to \$11. However, they are still placed in a lower price segment compared to the other large platforms, making them highly competitive in this area. Their price strategy appears to be working. Based on the subscription numbers in Figure 4-2, Disney is the platform with the most rapid growth since the launch of their platform, and they are on a steady course to outperform Netflix in terms of subscribers. According to a report from Statista (2022), this is estimated to happen by 2026. The development in subscription numbers can be credited to Disney's strong brand name, amounts of intellectual property and their strong position in the family segment.

HBO Max is among the highest priced platforms, and have held their subscription fee constant since the launch in 2020. The platform justifies the high price by pointing to their high-quality library with high-budget original productions like *House of the Dragon*, and popular licensed content such as *Friends*. The platform also benefited from their status as a cable TV provider and already having a solid user base through their US platform HBO Now.

4.3.5 Original content produced

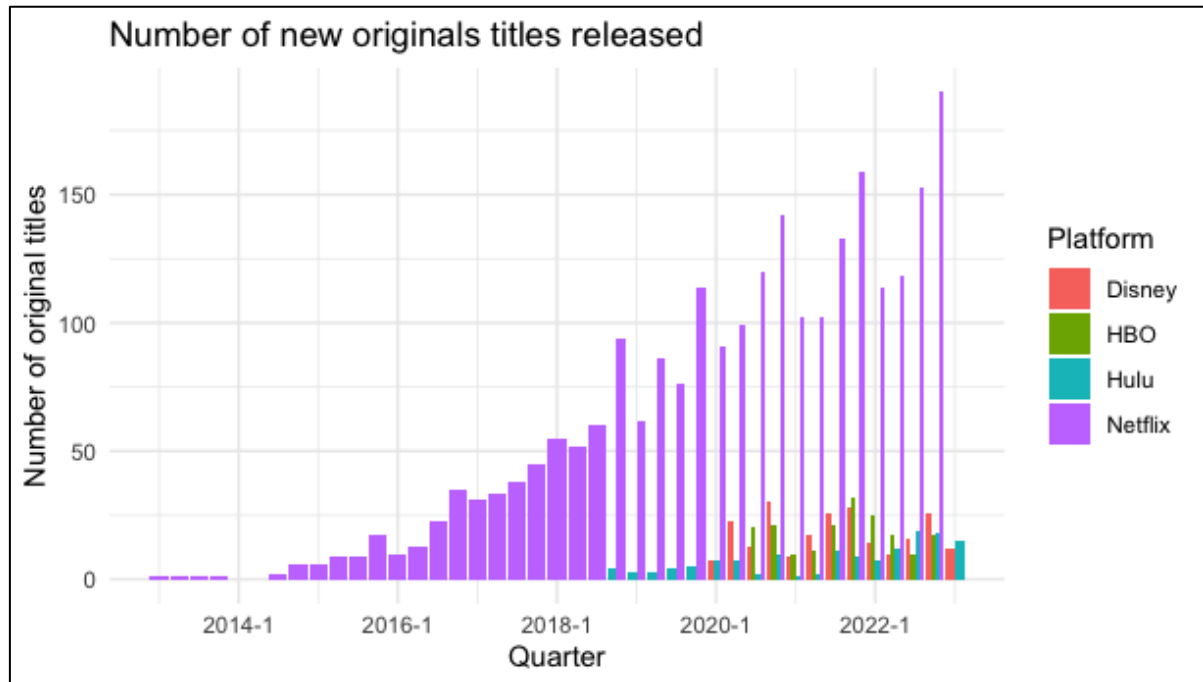


Figure 4-4: Amount of original content released over time

Figure 4-4 visualizes the amount of new original content each platform has released per quarter during our sample period. Firstly, the graph makes it particularly clear that Netflix has had a steady increase in original content released. Secondly, and more importantly, it clearly shows that Netflix has released an overwhelming amount of original content each quarter compared to the other platforms. This indicates that Netflix has a lot of content that is exclusive to their platform, which could be seen as a competitive advantage. It is also a possible explanation for why it is sustainable for Netflix to run a high-price strategy. Their strategy of producing a high quantity of original content, while pricing their platform high, is feasible due to their advantage of economies of scale.

The other platforms are releasing a much lower amount of content each quarter. However, as we know, they pursue different content strategies than Netflix, and opt to invest more in each title they produce to generate more quality content rather than a large quantity.

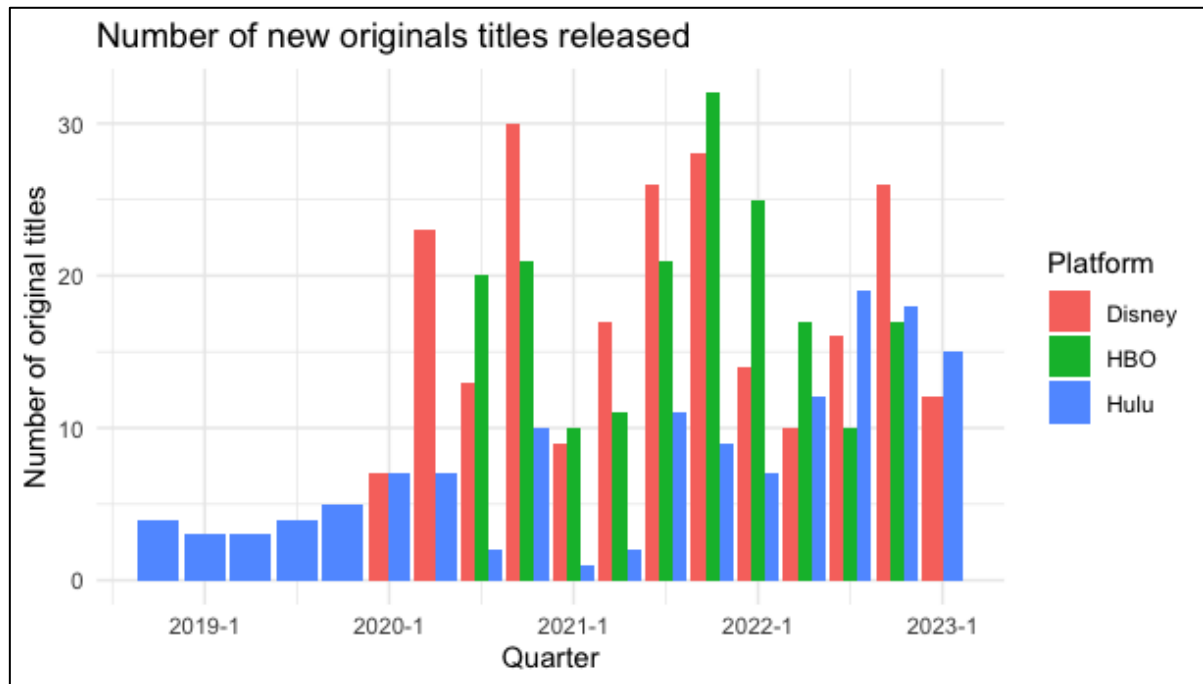


Figure 4-5: Number of original content released over time for selected platforms

Figure 4-5 displays the original content released by the platforms, excluding Netflix. Disney+ and HBO Max have the most original titles released during our sampled time period overall. Hulu appears to release the lowest amount of original titles, but the graph does show an increasing trend.

Table 4-2 presents the numeric values that Figure 4-4 and Figure 4-5 are visualizing. The table summarises the maximum and minimum number of original content released in the quarters starting from Q1 2019, as well as the mean value. As presented, Netflix has the most releases with an average of 116 each quarter while Disney+ and HBO Max follow with 18 quarterly releases on average. Hulu remain at the bottom with about 8 releases per quarter.

Platform	Min Originals	Max Originals	Mean
Disney	7	30	18
HBO	10	32	18
Hulu	1	19	8
Netflix	62	190	116

Table 4-2: Summary of original content released each quarter per platform

5. Empirical Methodology

In this chapter we will describe the empirical methodology applied to answer our research question. Our aim is to investigate if the growth in SVOD subscription numbers is affected by certain competitive factors. We are particularly interested in quantifying the effect of original content, along with factors such as the pricing and content quality. These are some of the competitive factors we identified in the industry analysis we conducted in chapter 3.

5.1 Choice of regression model

We have included two different regression methods in our analysis with the aim of developing a comprehensive analysis, and be able to account for the challenges related to our data. The Fixed Effect methods is a model commonly used with panel data sets. The Pooled Ordinary Least Squares (POLS) method uses the standard OLS regression and will ignore the panel data structure. However, the POLS method works well as a baseline, and the two methods combined make for informative comparison.

For panel data, the error terms can be decomposed into three parts with different characteristics. In this case, the error term equals one component that does not change over time, one that does not change over individuals (also known as time effects), and one that changes over time (also called idiosyncratic error). This is represented as follows: $\varepsilon_{it} = a_i + d_t + u_{it}$. The panel data method is advantageous as it can help us reduce the error terms, and thus account for unobservable variables that may affect the dependent variable. It may result in more precise estimates, as the model can explain more of the variation in the data. It can also help us come closer to a causal interpretation of the beta parameter and get a more consistent result.

As pointed out in chapter 4, our panel data is highly unbalanced. Therefore, we will also perform a time series regression solely on Netflix, since we have data on a longer time period for them than for the other platforms. Another reason for why it is interesting to analyse Netflix separately, is that they could be considered an outlier among the SVOD platforms. During our data period, Netflix is dramatically outperforming the other platforms both in terms of subscribers and the amount of original content created, as visualized in Figure 4-2 and Figure 4-4 respectively.

5.1.1 Pooled OLS

The Pooled Ordinary Least Squares (POLS) method pools the data across individuals and time periods, treating the panel as a single cross-section dataset. It assumes that there are no individual-specific effects or correlation across time. Pooled OLS estimates the coefficients of the variables based on the overall variation across individuals and time without considering the time dependence or correlation between observations for the same individual.

5.1.2 Fixed Effects

We will use the Fixed Effects (FE) method to estimate our model, as it is commonly used when dealing with panel data. The FE method considers the individual specific time-invariant characteristics of our data and can control for unobserved heterogeneity. This includes characteristics that do not change or changes slowly but varies across platforms, like the firm's long-term strategy. Examples are demographics, personal preferences, and socioeconomic factors within subscriber groups that might be correlated with subscription numbers. For example, Disney have a clear focus on family content which is more attractive for families with kids. This is expected to stay relatively stable over time. These variables can be difficult to quantify. Therefore, the FE method includes fixed effects for each individual platform, controlling for unobserved individual characteristics and allowing for individual specific intercepts.

More specifically, the fixed effects method eliminates the a_i error term by calculating the individual-specific average over time for all variables and subtracting them from the main equation. This transformation removes a_i since it does not vary with time, and also the intercept term.

5.2 Model specification

5.2.1 Model 1: Main model

We use the following regression:

(1) POLS model:

$$\begin{aligned}
 \text{Log}(\text{subscription numbers})_{it} & \\
 &= \beta_0 + \beta_1 * \text{Original content}_{it} + \beta_2 * \text{Original content}_{it-1} + \beta_3 \\
 &* \text{Max IMDB score}_{it} + \beta_4 * \text{Price Increase}_{it} \\
 &+ \delta_t * \text{time dummy variables}_{it} + u_{it} + a_i
 \end{aligned}$$

(2) FE model:

$$\begin{aligned}
 \text{Log}(\text{subscription numbers})_{it} & \\
 &= \beta_1 * \text{Original content}_{it} + \beta_2 * \text{Original content}_{it-1} + \beta_3 \\
 &* \text{Max IMDB score}_{it} + \beta_4 * \text{Price Increase}_{it} \\
 &+ \delta_t * \text{time dummy variables}_{it} + u_{it}
 \end{aligned}$$

For each cross-sectional unit i at time t , the dependent variable is y_{it} and the explanatory variable is x_{it} . Thus, the dependent variable is the number of subscriptions given for each platform i at time t . Subscription numbers are transformed to log values, because there is a wide gap in subscription numbers between the different platforms. For example, as visualized in Figure 4-2, Netflix has increased from 50 million to about 200 million subscribers between 2014 and 2023, while Hulu have less than 50 million subscribers in 2023. By using log transformed values we are accounting for this skewness. The transformation is visualized in Figure 5-2. As a result, any change in an explanatory variable will affect the dependent variable as a percentage change rather than an absolute change.

One of our main variables of interest is the quantity of original content. This variable is representing the number of new original titles added to the platform each quarter and not the entire exclusive library for each platform. Thus, the variable indicates the growth in original content on the platform.

A lagged variable of the original content variable is added to see if subscription numbers are changing immediately or not until the quarter following the release of new content. The lagged variable being lagged with one quarter, means that it contains the number of titles added the quarter before present time. We include this because we assume that while existing subscribers are expected to be well informed of new releases, new subscribers might take some time before

they are made aware of new attractive content. Thus, they might purchase a subscription plan with a lag.

The IMDB variable contains the highest IMDB rating held by an original title released to the platform in the respective quarter. The variable intends to represent the quality of the new original content produced by the platform. It is included to account for how consumers might be more interested in good shows rather than the size of the library. Our reasoning behind utilizing the maximum IMDB score rather than an average score, is to enhance the effect of the most popular titles. This effect might be reduced by using the average, as we saw in the case of Netflix in chapter 4.3.3.

The price variable is meant to quantify the effect of changes in subscription prices. It is constructed as a binary dummy variable equal to 1 when the subscription plans changes, and 0 otherwise. We use a dummy variable because there is little to no variation in the variable throughout the period of our data analysis. Therefore, we will only consider what happens to the subscription numbers when the price changes rather than the absolute price change.

Furthermore, we add time dummies, which are binary variables representing each time period, to capture time-specific trends. As Figure 4-2 shows, there is a general market growth throughout the entire time period, resulting in subscriber growth for all platforms. The time dummies will account for the aggregated time trend in our data, capturing the systematic changes in the dependent variable over time and removing the error component that capture time effects. We use yearly instead of quarterly dummy variables to control for time, because quarterly time dummies would result in 33 coefficients which could reduce the precision of the estimates. As a result, our FE model will control for both individual-specific and time-specific effects.

The descriptive analysis points out that both the subscription numbers and new release of original content overall are trending in the same direction, thus it appears that our data is non-stationary. We conducted an Augmented Dicky-Fuller (ADF) test, often used as an indication to whether the data is stationary or not. Our results reject their null-hypothesis, and we conclude that our data is in fact non-stationary. Ignoring that two variables are trending in the same direction can lead us to falsely conclude that change in one variable is affecting the other, rather than the variables exhibiting a relationship purely due to a common trend. This problem

can be resolved by including a time trend (Wooldridge J. M., 2012), as we have incorporated in our model using time variable dummies.

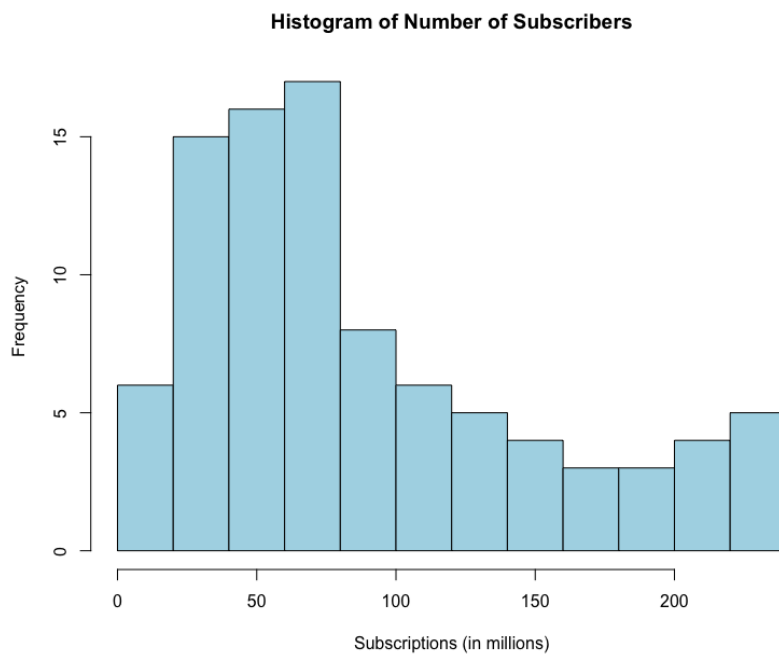


Figure 5-1: Histogram of the dependent variable raw data

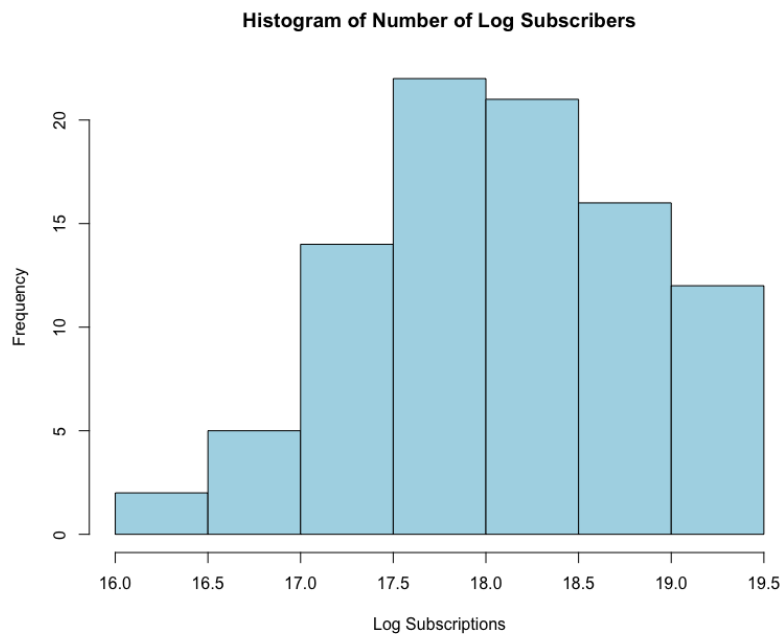


Figure 5-2: Histogram of the dependent variable using logarithmic transformation

5.2.2 Model 2: Netflix

The regression model for Netflix will be the same as our main model, with the same explanatory variables and the log transformed subscription numbers as the dependent variable. However, since the Netflix data will create a single time series data structure, we will use a time series analysis by using Multiple Ordinary Least Squares with time trend dummies. The variables will still have the same interpretation as in the main regression, but only in regards of Netflix.

The following regression is a time series regression with data for each quarter t , from the third quarter of 2014 to the last quarter of 2022. This makes for a total of $T = 34$ observations:

(3) :

$$\begin{aligned} \text{Log(Subscription Numbers)}_t = & \\ & \beta_0 + \beta_1 * \text{Original content}_t + \beta_2 * \text{Original content}_{t-1} + \beta_3 * \text{Max IMDB score}_t \\ & + \beta_4 * \text{Price Increase}_t + \delta_t * \text{time dummy variables}_t + \varepsilon_t \end{aligned}$$

6. Results

This chapter presents the empirical results from our data analysis. The regressions are conducted by using programming in R-studio for both the Pooled Ordinary Least Squares (POLS) and the Fixed Effects (FE) methods. Due to the nature of our panel data, we will first introduce the POLS method in our analysis, and then compare it with the results from the FE method. This will give us an indication on how the results change if we allow for the platform effect (α_i) to be correlated with our main variable of interest in the POLS method.

6.1 Main model analysis

	POLS (1)	POLS (2)	POLS (3)	POLS (4)	FE (1)	FE (2)	FE (3)	FE (4)
(Intercept)	17.731***	17.751***	15.698***	15.686***				
	(0.283)	(0.273)	(0.833)	(0.843)				
Originals	0.012***	0.005	0.003	0.004	0.000	0.000	0.000	0.000
	(0.001)	(0.003)	(0.003)	(0.003)	(0.002)	(0.002)	(0.002)	(0.002)
Lag_Originals		0.008*	0.007*	0.007+		-0.002	-0.002	-0.002
		(0.003)	(0.003)	(0.004)		(0.002)	(0.002)	(0.002)
IMDB_Max			0.235*	0.235*			0.133**	0.134**
			(0.091)	(0.091)			(0.049)	(0.049)
Price				0.023				0.024
				(0.148)				(0.078)
Num.Obs.	75	75	75	75	75	75	75	75
R2	0.685	0.712	0.740	0.740	0.814	0.816	0.836	0.837

+ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001

Standard errors in parentheses.

Table 6-1: Regression result for all N Platforms

The results of regression model 1 and model 2 from chapter 5.2.1 are presented in Table 6-1. First, we introduce a simple model for both methods and then add on additional variables step by step. Regression 1 contains only new originals as an independent variable, while regression 4 includes all variables equivalent to the main models 1 and 2 presented in chapter 5.2.1. The time dummies are not shown in the table, because while they are valuable to control for the time trends, the value of the coefficients themselves is not of particular interest to us.

Our main interest point in this analysis is to investigate whether there is a link between the release of new original content and the increase in subscriber base. The coefficient for release of new original content has a small value, but overall it indicates a positive association between original content and subscription numbers. For instance, regression 4 for the POLS method shows that an increase in new original content released is associated with a 0.4% increase in subscription numbers, which seems like a reasonable estimate. Although the lack of significant values means that we cannot claim to have sufficient evidence of a causal relation between growth in subscription numbers and releasing original content, we have also not found evidence that would clearly reject the hypothesis. As discussed earlier and presented in Figure 4-2, the industry has seen an overall rising trend in the number of subscribers throughout our entire sample period, seemingly regardless of external influences. Thus, there appears to be an aggregated trend that could be overshadowing the picture. In general, we can say that we find weak support for the hypothesis suggesting that the release of original content increases subscription numbers.

The lagged value seems to grasp some of the effect of the “Original” variable when we compare the results of regression 1 to the regressions that include the lagged variable. The lagged effect is significant and positive in the Pooled OLS method, whilst insignificant and negative with the FE method. In general, it can be difficult to justify the value of the lagged value, since it is based on quarterly data, meaning we lose information on precise timing of the release. Sometimes the release can be at the end of one quarter, leaving new subscribers without time to react until the beginning of the next. Still, despite our mixed results, it is plausible that it takes time before the consumers respond to changes in original content, for example due to an information delay. Thus, it takes time before they hear the news or get new content recommended, either through word of mouth or direct marketing, and signs up for the platform.

The max IMDB score appears to be significant and positive over all regressions where it is included. It is not unexpected that a higher IMDB score will have a positive effect on subscription numbers, and that megahits will attract new subscribers. This could indicate that the quality of the content produced is important in order to attract new subscribers, while the quantity of content might not be.

The dummy variable for price increase is positive but insignificant. We would expect that an increase in the price would have a negative association with new subscribers, thus that subscription numbers would decrease either caused by existing consumers rejecting the subscription repurchase or because a platform gets less attractive for new subscribers when the price increases. However, most of the price increases throughout our observation period are minor, ranging between \$1 and \$3. Also, this must be seen in context with the price level. With the average price of the basic tier being about \$11 a month, as illustrated in Figure 4-3, an increase of \$1 dollar makes a relatively small change. Thus, while these price increases may influence some decisions on an individual level, the impact on an aggregated level is likely to be minimal.

The differences between the POLS and FE method can indicate that there are individual differences across the platforms, since this is accounted for in the FE method. Thus, it implies that the POLS method suffers from omitted variable bias. In addition, there is only a small number of platforms represented in our data, and ideally, we would have wanted more data from more streaming platforms to strengthen our analysis. Overall, none of the methods appear to be ideal, and both appears to suffer from time variant unobservable (idiosyncratic error).

6.2 Isolated Netflix analysis

	OLS (1)	OLS (2)	OLS (3)	OLS (4)
(Intercept)	17.770***	17.770***	17.685***	17.699***
	(0.031)	(0.031)	(0.249)	(0.251)
Originals	0.002***	0.002***	0.002**	0.001*
	(0.000)	(0.000)	(0.000)	(0.001)
Lag_Originals		0.000	0.000	0.001
		(0.001)	(0.001)	(0.001)
IMDB_Max			0.010	0.010
			(0.028)	(0.028)
Price				-0.023
				(0.027)
Num.Obs.	34	34	34	34
R2	0.994	0.994	0.994	0.994

+ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001
Standard errors in parentheses.

Table 6-2: Regression results for Netflix

The regression results from the isolated Netflix analysis are presented in Table 6-2. Like before, the OLS regression 1 is the simplest, while regression 4 includes all variables equivalent to regression model 3 presented in chapter 5.2.2. Again we have chosen not to include the time dummies in the table.

There are some important aspects that differs in the interpretation of the Netflix results compared to in the one including several platforms in a panel data. When we regress for a single platform, as in this example with Netflix, we are abstracting from competition between the platforms. This means for instance that the fixed effects of Netflix, like their long-term strategy, is not incorporated as a factor which may influence subscription numbers.

The “Originals” variable is significant and positive in all regression models for Netflix. That is, an increase in released new original content is associated with a 0.2 or 0.1 percent increase

in subscribers. The lagged value appears to have a smaller effect, and no significant values, hence we do not have evidence that consumers respond later to the timing of the release. However, our reasonings from the main model still apply. Since we do not have the exact date of release in our data, we find it hard to draw any definite conclusions from the results.

The IMDB value is positive but insignificant in this case. The positive association indicates that a higher IMDB score might increase subscription numbers. This is in line with the results we found for the industry in general above, but this time with a smaller impact. The combination of a positive and significant value for the number of originals and a lower effect of the IMDB score mirrors the competitive strategy of Netflix which we have discussed earlier. It could indicate that Netflix's subscribers might care more about the number of releases, thus appreciates variety, rather than the highest IMDB score. From this we can draw the inference that the high share of original content is indeed a competitive advantage for Netflix.

Finally, the price coefficient is negative but insignificant. Netflix have a total of 6 price increases throughout our sample period, each time increasing their subscription fee by \$1 or \$2. The more frequent price increases might explain why we get the expected negative sign for the coefficient in this case, which we did not for the regression of the general industry. We can still not draw any definite conclusions regarding the correlation between price and the number of subscribers, as we do not detect statistical significance.

7. Discussion

In this chapter we will discuss the results of our analysis further, along with some of the implications of our findings. This will include discussing the impact of SVOD platforms having original content as a part of their content strategy, using our industry analysis from chapter 3 as a baseline. We will also discuss some of the limitations related to our data and research, and make some suggestions for further research.

7.1 Implications of results

As we have seen, despite giving indications of a positive association, our results are not providing sufficient evidence of causality between the release of original content and subscriber growth. While there is, for the most part, an increasing trend in subscription numbers, we are more inclined to credit this to aggregated industry trends and underlying competitive factors, rather than original content. Thus, we are encouraged to explore alternative reasons as to why the biggest SVOD platforms continue to increase their original content budgets.

It is reasonable to view this in the context of a possible shift in the industry, and that our results indicate that the SVOD industry is reaching a mature state. The decline in overall market growth supports this assumption (Shaw, 2023). With the recent entries of several big players, such as Disney+ and HBO Max, the market is getting increasingly more saturated. Considering how consumers only have a certain amount of hours in the day to engage with entertainment platforms, the industry shift will inevitably involve a transition from the main focus being attracting entirely new subscribers to it being retaining existing subscribers or winning them over from their competitors.

Based on our industry analysis and knowledge about the market, we can identify several reasons as to why the platforms view production of original content as an important part of their continued growth strategies. Firstly, original content appears to have become crucial for branding, with most of the big SVOD platforms being more or less automatically associated with their most successful shows. We previously presented Anthony Palomba's (2022) study on how genres and characteristics of original content can impact the users' perception of an OTT platform. This supports the notion that original content can contribute to building brand loyalty, thus will it also be important for subscriber retention. Original content remains named

as one of the top reasons for users to subscribe to an SVOD service, according to a 2020 US survey (Statista, 2022, p. 22). This gives us additional grounds to assume that original content could be as important for subscriber retention as it is for subscriber growth, and particularly at this stage in the industry life cycle.

We have also seen that shows and movies produced by the companies behind the SVOD platforms have received significant amounts of nominations and awards in well-respected award ceremonies such as the Oscars and the Emmys. Such recognition will get people talking and potentially increase the expectations for upcoming productions. This suggests that production of original content could be valuable for word-of-mouth marketing as well as increasing the reputation and credibility of the platform.

Furthermore, Palomba (2022) argues how increasing brand loyalty will make consumers have an inelastic response to price increases, thus they will be more inclined to keep their subscription regardless of smaller price increases. As shown in our results we find some support for this in our research, although not on a significant level. It is still an interesting outtake because while most industry surveys highlight price as an important decision factor for SVOD, research suggests that it might not be such a determining factor after all.

As explained in chapter 3.2.5 the SVOD industry is characterised by low switching costs, which increases flexibility for the users while making subscriber retention more challenging for the providers. This could contribute to the platforms being forced to keep up a continuous flow of new content, in order to maintain the subscribers' attention. While the big releases are important, they can also be few and far between. Subscribers do not have to stick around and wait for the release. Instead they can cancel their subscription, go somewhere else, and then return in time for the next big drop. That is, unless they find new content that captures their interest in the meantime.

On the other hand, the shift in the SVOD industry and the content strategies of the platforms carries another aspect, which brings us back to the significance of original content. In the early days of the SVOD platforms, library size was seen as a competitive advantage in itself and companies would race each other for the rights to the most popular acquired content. Today, most platforms have adopted a "quality over quantity" approach, and with original titles being a central competitive element. Platforms are also well aware that subscribers will not necessarily want to browse for hours to find something to watch. Therefore, instead of

constantly adding new titles a just as rewarding focus moving forward could be working on improving their algorithms for recommendations and personalization of the platforms. This will allow for subscribers to discover content to their liking even more seamlessly, thus have even more of the content available on the platform be consumed by the subscribers.

Ultimately, the key aspect in the SVOD business model is that the subscribers are the main generator of revenue for a platform. In a maturing market, the SVOD platforms will be forced to find new and improved ways to increase revenue despite a potential stagnation in or loss of subscribers. Palomba (2022) highlights how retention is challenging in the SVOD industry, and how this focus forces the use of alternative metrics for success, mainly the average revenue per user instead of subscription numbers. We identify several means that are being taken in order to meet these challenges. Netflix putting millions of dollars into producing local content to diversify themselves, the shift towards producing more quality original content instead of extensive licensing, and introducing ad-supported tiers are only some of those. The introduction of ad-supported tiers is also just as much a means to deal with the matured market as it is a response to the weakened economy. It allows for the platforms to appeal to new customer groups while also providing new ways to increase average revenue per subscriber.

7.2 Limitations

One of the main limitations of our research is linked to the quality of the data. Firstly, we are working with a very small sample, containing relatively few observations over time. Also, a lot of our data was collected manually, which will always come with the risk of human error. In our panel data we have paired our library data and data on original content based purely on the title variable. Any spelling discrepancies will lead to errors in the pairing, and while some of these errors were caught through manual checking others will surely have been missed.

We also acknowledge that we are drawing our conclusions based on aggregated data, presented quarterly, and that this makes it harder to spot abrupt changes or to say anything about individual customer choices. Some of the latter have however been accounted for by connecting our findings to surveys and insights from larger industry studies. Still, as we have seen, subscribers of SVOD services tend to be disloyal and jump between platforms to access specific content to their liking. Our methods are not designed to account for churn, for example if a subscriber signs up and cancels within the same quarter.

Another central limitation is that we are trying to explain a very complex situation by accounting for one or a very limited selection of variables. The SVOD industry is highly competitive, and it is reasonable to believe that there are other competitive strategic moves which affects the results, thus the variable accounting for release of originals in our analysis is not fully exogenous. Also, factors such as the changes in consumer behavior during the Covid-19 pandemic, which was ongoing for large parts of the lifetime of several of the platforms, or the intensified competitive situation, are not particularly accounted for. We acknowledge that there are several other considerations we could have made in order to strengthen our research even further. Regardless, and especially with how the market is behaving upon getting closer to maturity, it will be hard to give any definite explanations for changes in subscriber numbers without accounting for more complexity.

Lastly, it has proven to be harder than anticipated to analyze the SVOD industry on a global scale when there are big differences in how the companies operate, content libraries, distribution rights and pricing models, as well as reported insights, across different countries or regions. We ended up relying on data collected from the US market to a higher extent than we initially expected, simply because the differences were substantial and this information was the most accessible to us. Considering that there are cultural differences between geographical markets, and that the platforms do not offer the exact same value everywhere, it can be hard to draw conclusions that are globally valid based on data from one or a few selected countries. We do however believe that our research has provided some interesting insights, which can be transferable to the industry as a whole.

7.2.1 Suggestions for further research

As disclosed, there are several other aspects we could have considered to improve this analysis. Our analysis examines how the growth in subscription numbers is affected by a selection of factors, but mainly focuses on quantity and quality of new original content. As an extension of the in-depth industry analysis and results from this thesis, we would like to suggest some potential topics for further research.

Since our research points to certain advantages of the different content strategies pursued by the platforms, an interesting extension could be to explore this in more detail. One possible take could be to compare the impact of the high-quality and the high-quantity strategies. It could also be interesting to incorporate factors such as library composition by genres or

investment in niche content in an analysis, to explore if certain elements or strategies appear to enhance competitive advantages. This could also contribute to an analysis of market potential, to explore ways for the platforms to expand their offering to exploit new niches or unsaturated market segments.

Another potential topic for future research could be to explore the effects of mergers and industry consolidations as a response to changes in the competitive environment. As mentioned in chapter 3.3.2, HBO Max will merge with Discovery+ in the second quarter of 2023, launching the new platform Max. These horizontal integrations are expected to occur more often in the time to come. Through platform mergers or industry consolidations, companies can expand their platform libraries and strengthen their competitive position against the dominating platforms like Netflix and Amazon. We have highlighted the state of vertical integration throughout our thesis as well as in our literature review. However, the effect horizontal integration is yet to be accounted for.

8. Conclusion

In this thesis we have examined how the release of new original content affects subscriber base for subscription-funded streaming platforms (SVOD). To answer our research question, we have performed an in-depth industry analysis and a descriptive analysis, as well as a regression analysis utilizing two different regression methods. In addition to the release of new originals, we have incorporated variables accounting for some of the factors that could potentially impact subscription counts, such as time trends, content quality and price increases. Lastly, we performed a time series regression solely on Netflix.

Our main variable of interest is the release of new original content. While our findings show weak support for a positive relationship between new releases and subscriber growth, we acknowledge that there appears to be an aggregated trend that is not sufficiently captured by the control variables. When the overall market trend is that the numbers of subscribers are increasing, it can be difficult to credit this growth to isolated variables.

Our main model also shows a significant positive relationship between the quality score of original content and subscriber counts, which was anticipated. When isolating Netflix, the coefficient is still positive, although no longer significant. We see this in relation to how Netflix has chosen a different content strategy than their competitors, favouring a high quantity of releases over costly individual productions.

Furthermore, our results indicate that the SVOD industry is entering a mature state, with a decline in subscriber growth. In a competitive environment characterized by low switching costs, thus the consumers being in high power, it is becoming increasingly more important for platforms to find new ways to retain their subscribers. Despite our slightly inconclusive regression results, we have identified several reasons why original content production can be beneficial for platforms in order to stay competitive.

By producing original content, platforms become less dependent on major production studios. Original content is considered exclusive by nature since it is normally only showcased on its platform of origin. Also, since the platforms are in possession of rich data on consumer behaviour and preferences, they are empowered to curate and produce content that is more aligned with their subscribers' taste and preferences. Finally, exclusive productions allow the

platforms to differentiate from their competitors, which we consider to be a significant competitive advantage in the SVOD industry.

Previous research on the field, highlights the effect of original content on brand loyalty and brand equity. We rely on research by Anthony Palomba when we state that SVOD platforms can utilize original content to influence the consumers' perception of their brand, as well as to build long-lasting subscriber relationships. In the current competitive environment a steady growth in subscriber counts might not be realistic, and a platform could be just as successful for managing to retain their subscribers over time. As a result, other performance measures have been introduced to supplement subscription numbers, such as average revenue per user.

To conclude our research, we believe it to be plausible that dedicating high budgets to the production of original content does provide competitive advantages for the SVOD platforms. We may not be able to credit the increasing subscription numbers to the production of original content alone. However, according to our collected industry statistics and our own industry analysis it is evident that original content brings great value to the big global platforms and plays an important part in them managing to maintain their competitive positions.

Lastly, we acknowledge that there are limitations related to our data, as well as the restrictions we have set for our thesis. Some suggestions for further research in this field would be to go even deeper in terms of different content strategies and genres, to see if there are detectable differences that can be exploited by the SVOD platforms going forward. It could also be interesting to investigate the effects of mergers and industry consolidations on the competitive environment, as this is expected to be an increasing trend in the future.

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