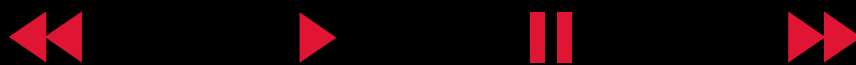


The Economic Impact of the Screen Industries **Latin America**



Netflix joined the Inter-American Development Bank's 21st Century Skills Coalition in 2021 to support the development of film and entertainment skills in Latin America and the Caribbean, with the ultimate goal of these industries acting as an engine of economic growth in the region. As part of the collaboration, Netflix and the Inter-American Development Bank continue to explore different ways to support the audiovisual sector and this report quantifies the economic impact of the screen industries in Latin American countries. The report draws on findings from numerous case studies of innovative developments in the sector; a growing body of sector and regional research; and a study commissioned by Netflix, in consultation with the Creativity and Culture Unit of the Inter-American Development Bank, from Deloitte which estimates the economic contribution of increased spending in the screen sectors in Argentina, Brazil, Colombia and Mexico.

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Foreword

BY ALEJANDRA LUZARDO
SECTOR LEADER IN INNOVATION AND CREATIVITY
IN THE IDB GROUP

One hundred and twenty seven ago, brothers Auguste and Louis Lumière screened their first films. A century later, cinema continues to surprise and enchant us, and it has become an industry that employs thousands of people. Despite the fact that movies can be watched on practically any screen, thanks to the advances of the Fourth Industrial Revolution associated with digitization, we still know very little about the industry's economic impact in Latin America and the Caribbean today.

This report aims to quantify the impact of the film and TV industry (movies, videos and television) on the economy and visualize the effects it has, directly and indirectly, throughout its entire value chain. This methodology allows us to see how spending on TV and film production ripples through the economy, generating additional spending, gross value added (GVA), and creating jobs. It shows that for every \$10 USD invested into the film and TV industry, between \$6 and \$9 USD are generated throughout the rest of the value chain (pre-production, production, post-production, and distribution). Moreover, for every 100 people who are directly employed by the film and TV sector, another 50 to 70 people are indirectly employed in other sectors. Watching the economic benefits of the film and TV industry as they spread is truly thrilling. In Argentina, Brazil, Colombia and Mexico, more than two-thirds of the total spending in the sector is destined for other sectors within its supply chain, such as professional services, construction, textiles and marketing.

A more detailed and exact understanding of the film and TV industry is essential in order to craft public policy that will facilitate the development of an industry that is constantly gaining ground due to the explosion of video content across new platforms. Collecting and analyzing data has long been an Achilles' heel for the creative sector in general. Despite the fact that some Latin

American countries have made meaningful efforts in that direction, they have not been sufficient to convince most governments of the opportunity offered by the creative economy. The absence of rigorous tracking, outdated regulatory frameworks, high inflation, a lack of coordination between ministries when managing local and international productions, and the paucity of qualified individuals for the most in-demand jobs in the industry can all be added to a long list of factors that we need to work on so that we can benefit from the opportunities associated with a sector that, in 2019 alone, spent \$5.7 billion dollars, creating more than 1.6 million jobs.¹

Latin America and the Caribbean have extensive, incomparable competitive advantages. Within just a few kilometers, you can find mountains, deserts, rainforests, snow, beaches, volcanoes and ancient cities, as well as countless stories that reflect our cultural diversity. A few years ago, perhaps, the Spanish language was a challenge to our entry into global markets, but that's no longer the case. Today, we can name shows made in the region that have topped the viewing charts in faraway nations. On the other hand, Spanish is a relevant language when we talk about markets, since there are currently 559 million Spanish speakers, and it has the second largest population of native speakers in the world, surpassed only by Mandarin.² In a recent study, "Behind the Camera: Creativity and Investment in Latin America and the Caribbean,"³ which was performed by the Inter-American Development Bank and supported by Netflix, we highlight the fact that the major producers of video on demand (VOD) are looking to work with local production companies throughout Latin America to develop original content. This creates a singular opportunity which will help us position ourselves as competitive places to establish production services as well as film and TV hubs.

¹ Olsberg SPI, Global Screen Production - The Impact of Film and Television Production on Economic Recovery from COVID-19 (25 de junio de 2020), 5. <https://www.o-spi.com/projects/economic-impact-studies-research-and-evaluation-ly9lh>

² Forbes, 2021. "The U.S. has the second-largest population of Spanish speaker" - <https://www.forbes.com/sites/soniathompson/2021/05/27/the-us-has-the-second-largest-population-of-spanish-speakers-how-to-equip-your-brand-to-serve-them/?sh=1b25f111793a>

³ Inter-American Development Bank (IDB), 2021. "Behind the Camera: Creativity and Investment for Latin America and the Caribbean: Learnings from Conversations with Key Players in the Audiovisual Sector" - <https://publications.iadb.org/en/behind-camera-creativity-and-investment-latin-america-and-caribbean-learnings-conversations-key>

Now more than ever, we must create a transformative strategy which establishes better local and international cooperation, provides better access to funding with an understanding of local conditions for productions, a cutting-edge infrastructure, regulations that support the industry's growth, and an educational model that invests in human capital to fill existing gaps. Experience has shown us that having laws that stimulate the film and TV industry is one important factor. But it's not the only one, and governments in the region have the opportunity to benefit from the potential economic impact in other ways. For example, a country's brand may be enhanced by tourism, which promotes certain places as potential destinations for tourists and investors.

This document is a meaningful step. It will serve to support the film and TV sector and permit the creation of agile public policy that aims to generate economic growth and new jobs, while addressing local challenges and targeting highly trained, prestigious professionals. We must not forget that the first Latin American movie produced for a streaming platform was made only 8 years ago. According to Digital TV research⁴ there were more than 1 billion SVOD households globally in 2021. Our stories have never been so widely heard by more than 100 million subscribers, all hungry for magical Latin American content in our language and with our accents. Let's not miss out on the opportunity to create, star in, and produce these stories.

⁴ Digital TV Research, 2021. "SVOD subscriptions to reach 1.5 billion by 2026" - https://digitaltvresearch.com/wp-content/uploads/2021/09/Global-SVOD-Forecasts-2021-TOC_toc_322.pdf

EXECUTIVE SUMMARY



Screen industries are a driver for growth

Governments around the world recognise the importance of the screen industries to their economies. The screen industries, which include the TV and film making industry, are recovering from the COVID-19 pandemic, and major industry players are focusing on regional expansion and distribution partnerships. These industries are a key component of the global film and entertainment market, which is projected to reach around US\$170bn by 2030, growing at a yearly rate of 7.2% from 2022 to 2030.⁵

Argentina, Brazil and Mexico have the largest screen industries in Latin America. Sector revenue in these three countries was approximately US\$20bn in 2021⁶, US\$3bn of which came from film making.⁷ In recent years there has been growth in Latin American countries with emerging screen industries, such as Colombia. Between 2009 and 2019, Colombia's screen industries revenue has increased by 15% and reached US\$2.3bn in 2021.^{8,9}

Greater internet access and global demand for content are driving the recent sector growth in Latin America

Greater access to the internet and devices has driven the rapid growth of Video-on-Demand (VoD) providers in the region and global consumer demand is encouraging the production of high-quality local content. Research by the Inter-American Development Bank (IDB) found that major VoD providers are seeking collaborations with local production companies across Latin America to produce original content, creating the opportunity for Latin America to become an important exporter of audiovisual content.¹⁰ The global increase in high-quality production has further accelerated growth in the animation and visual effects (VFX) industries in the region, which could potentially become an economic driver in the coming years.¹¹

⁵ Research and Markets, 2022. "Global Movies and Entertainment Market (2022-2030) – Size, Share & Trends Analysis Report" - <https://www.prnewswire.com/news-releases/global-movies-and-entertainment-market-2022-to-2030---size-share--trends-analysis-report-301590021.html>

⁶ The revenue also includes radio. Given the nature of the data, it is not possible to provide the revenue of the screen industries excluding radio. However, it is assumed that radio accounts for a small share of the total revenue figure. National statistical authorities use different classifications systems of economic sectors. While these classification systems are comparable overall, the classification of sub-sectors may differ. This could lead to the allocation of production revenues to other sectors such as telecommunications.

⁷ Passport – Euromonitor international, 2022. "Production turnover (US\$ Dollars)"

⁸ Passport – Euromonitor international, 2022. "Production turnover (US\$ Dollars) – Colombia"

⁹ The report focuses on these four Latin American countries as Argentina, Brazil, and Mexico have the biggest and most mature screen industries in the region while Colombia is experiencing growth in the sector.

¹⁰ Inter-American Development Bank (IDB), 2021. "Behind the Camera: Creativity and Investment for Latin America and the Caribbean: Learnings from Conversations with Key Players in the Audiovisual Sector" - <https://publications.iadb.org/en/behind-camera-creativity-and-investment-latin-america-and-caribbean-learnings-conversations-key>

¹¹ Digital.vector, 2022. "Latin America Animation, VFX & Video Games: Strategies, Trends & Opportunities (2022 – 26)" - <http://www.digital-vector.com/images/Latin%20America%20Animation,%20VFX%20&%20Video%20Games%20-%20Sample%20Pages.pdf>

Latin America has opportunities to capitalise on global trends to grow its screen industries

Given these recent trends, there are opportunities for the Latin American screen industries to grow further:

- **Supporting specialisation in VFX:** Increased digitalisation makes the screen industries less dependent on traditional hubs for some activities, such as VFX. Argentina and Mexico already have growing VFX industries and Latin America's proximity to the US, its overlap with US time zones, and its cost advantage in VFX production make it attractive for US and global production companies to outsource VFX to the region.¹²
- **Leveraging the language advantage and the shift towards VoD:** Streaming services are enabling the distribution of Spanish language content to nearly 560m¹³ Spanish speakers worldwide as well as to non-Spanish speaking markets. Latin American households, which have previously mainly watched TV, are moving quickly to streaming providers. Digital TV Research have forecasted that the number of SVOD subscriptions in Latin America will grow from 53 million at the end of 2020 to 116 million by 2025.¹⁴ Outside of the Latin American region, Comscore, a market research company, found that the number of Hispanic households in the USA with a streaming subscription increased by 41% between 2019 and 2022, reaching nearly 14m homes today.¹⁵ With this change in consumer habits, the demand for high-quality Spanish content is increasing.¹⁶ This opportunity could expand even further to non-Spanish speaking audiences as subtitling and dubbing become more popular with audiences.¹⁷

While the cultural importance of the industry is already appreciated, the wider economic impact of the screen industries is often underestimated

By telling the stories and history of Latin America the screen industries are a key source of entertainment and cultural representation. While the cultural and social importance of the screen industries is widely recognised, the wider economic impact is often less well understood, because much of the spending in the screen industries occurs in other sectors. Across Argentina, Brazil, Colombia and Mexico, over two-thirds¹⁸ of total expenditure occurs in other sectors within its supply chain, such as professional services, construction, textile and advertising.¹⁹

Understanding the full economic benefits can help policymakers and industry stakeholders to make policy and investment decisions to support the growth of the screen industries.

¹² LatinAmerican Post, 2019. "The reason why foreign animation companies are looking for Latin American talent" - The reasons why foreign animation companies are looking for Latin American talent - LatinAmerican Post

¹³ Forbes, 2021. "The U.S. has the second-largest population of Spanish speaker" - <https://www.forbes.com/sites/soniathompson/2021/05/27/the-us-has-the-second-largest-population-of-spanish-speakers-how-to-equip-your-brand-to-serve-them/?sh=1b25f111793a>

¹⁴ Digital TV, 2022. "Latin American SVOD market to double within five years"-<https://www.digitaltveurope.com/2021/03/08/latin-american-svod-market-to-double-within-five-years/>

¹⁵ Fierce Video, 2022: "Latinx streaming-only audiences grows to 38%, Spanish-language content options expand" - <https://www.fiercevideo.com/video/latinx-streaming-only-audience-grows-38-spanish-language-content-options-expand>

¹⁶ BELatina, 2022. "Latino streaming audience continues to grow, opening opportunities for Spanish-language content" - <https://belatina.com/latino-streaming-audience-spanish-language-content/>

¹⁷ The BBC, 2021. "Young viewers prefer TV subtitles, research suggests" - <https://www.bbc.co.uk/news/entertainment-arts-59259964>

¹⁸ Argentina: 68%, Colombia: 65% (based on distribution from Netflix productions), Brazil: 79%, Mexico: 88% (based on expenditure ratios from national IO tables).

¹⁹ Instituto Brasileiro de Geografia e Estatística (IBGE), 2015. "Brazil - Input-Output tables" - <https://www.ibge.gov.br/en/statistics/economic/national-accounts/16940-input-output-matrix.html>

The wider economic benefits of the screen industries are enhanced by the supplier value chain

Several industries are involved at different stages of the film and TV production value chain (i.e., pre-production, production, post-production, and distribution) such as set building, special effects, music composition, costume design, and legal services.

Example: Pedro Páramo

Pedro Páramo, based on the classic Mexican novel by Juan Rulfo, which was set to start production in Spring 2023, will be directed by award winning director Rodrigo Prieto. Produced by Redrum and Woo, the film's crew includes Oscar-nominated production designer Eugenio Caballero ("Roma," "Pan's Labyrinth") and costume designer Anna Terrazas.²⁰



²⁰ Variety, 2022. "Netflix Touts New Pics from Mexico's Rodrigo Prieto, Fernando Frias, Ernesto Contreras" - Netflix Touts New Pics from Mexico's Rodrigo Prieto, Fernando Frias, Ernesto Contreras | Variety

The screen industries can therefore play an important role in generating economic benefits as large amounts of spending support several other industries across the economy. Spending in the screen industries will not only increase demand for goods and services provided by suppliers to the screen industries, but also for the suppliers' own suppliers (this is known as the 'indirect effect'). For example, to produce costumes for a film production, the textile company supplying the costumes will require the manufacture of raw materials, spinning and dyeing. Increased economic activity in these industries should lead to higher wages for employees. While part of these higher wages will be saved or spent abroad, a substantial part will be spent in the local economy. For example, people may spend additional income in restaurants or on buying clothes or electrical equipment. This in turn will further increase the production of goods and services within the economy (this is known as the 'induced impact').

These wider economic impacts can be estimated using 'multipliers'

Multipliers calculated for Argentina, Brazil, Colombia and Mexico can be used by policymakers and industry stakeholders to quantify the total economic contribution (i.e., the direct, indirect and induced impacts)²¹ of spending in the screen industries. The multipliers that measure the amount of indirect spending in the supply chain vary between 1.6 and 1.9 across the four Latin American countries in this study. **This means that for every US\$10 spent in the screen industries another US\$6 to US\$9 is generated in the supply chain.** Furthermore, spending in the screen industries leads to the creation of additional jobs; for every 100 people employed in the screen industries, an additional 50-70 people are employed across the economy. Multipliers can be used to measure three types of economic contribution: total expenditure, Gross Value Added (GVA), and employment generated through additional spending.²²

- **Expenditure:** The gross value of goods and services produced by the screen industries measured by the prices paid to the producers. This is the broadest measure of economic impact. For example, suppose that a production company hires a **set company** to design and decorate a film set. If the **set company** purchases decoration material for US\$2,000 and adds value by creating the design and staging for which it charges US\$5,000, the (direct) expenditure impact would be US\$7,000.
- **Gross Value Added (GVA):** GVA is the value of goods or services that takes into account the cost of production (i.e., expenditure minus the costs of intermediate inputs). Using the example above of the **set company**, the generated GVA would be only US\$5,000 as the US\$2,000 cost of intermediate inputs is captured in the decoration material production industry.
- **Employment:** Measured in terms of full-time equivalents (FTEs). An FTE is equivalent to one person working full-time.²³

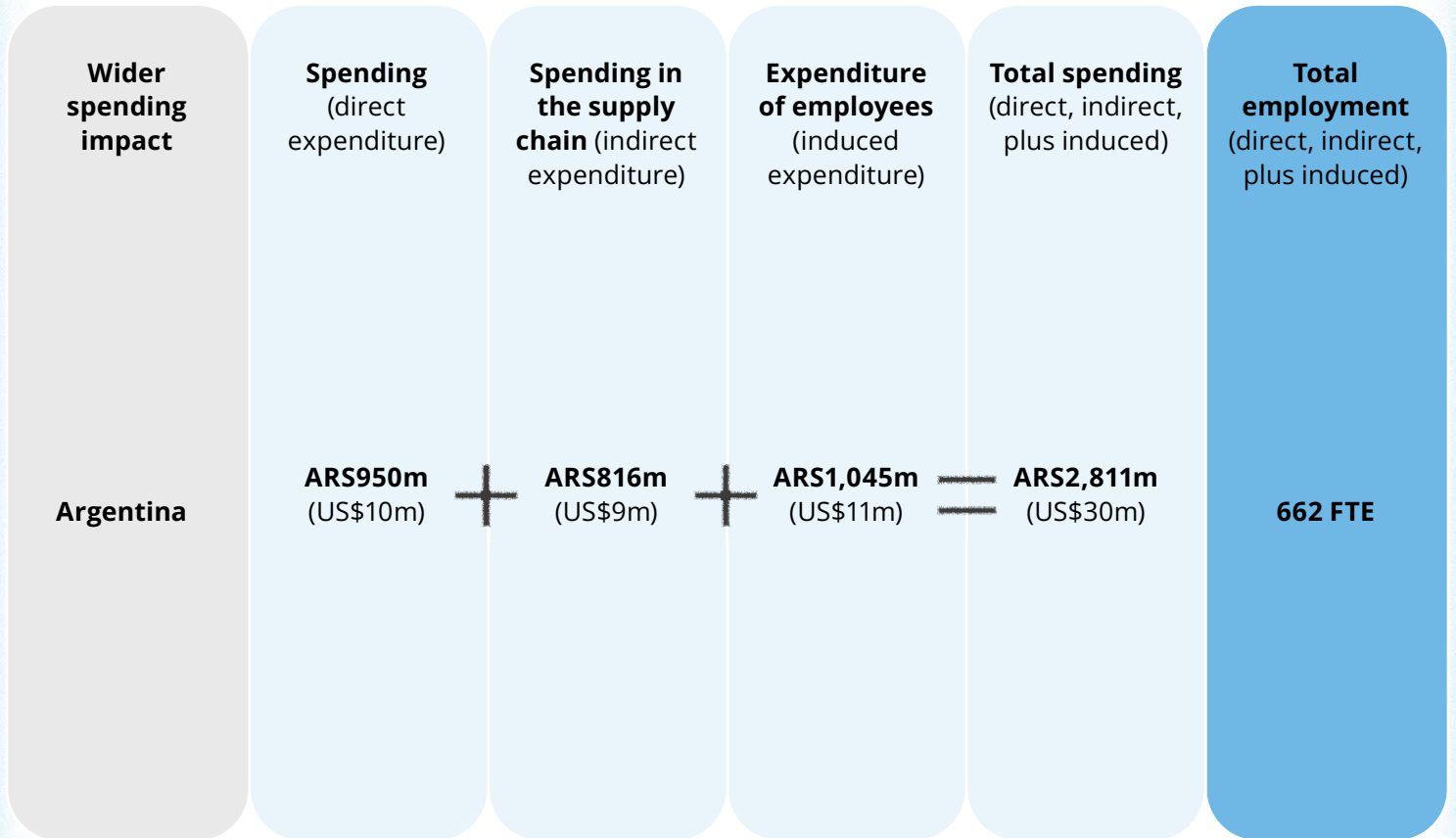
²¹ Direct impact: The production of the screen industries will be increased to meet the demand associated with additional spending in the screen industries (i.e., industry spending). Indirect impact: An increase in production in the screen industries will require additional production by its suppliers to provide more raw materials and associated services (i.e., supply chain implications). Induced impact: An increase in the activity of the screen industries and their suppliers will lead to increased wages which will partly be spent in the economy. The resulting increase in household expenditure will lead to a rise in domestic production of consumer goods and services.

²² The Motion Picture Association – Canada, 2019. "Economic Impact of Star Trek: Discovery" - <https://www.mpa-canada.org/wp-content/uploads/2019/10/MPA-Canada-Star-Trek-Discovery-FI.pdf>

²³ The economic model used to calculate multipliers converts part-time jobs into full-time jobs; therefore all outcomes are presented as full-time equivalents.

Using the estimated country multipliers for this study, Figure 1 shows the wider economic impact of an illustrative investment of US\$10m in a TV or film production in Argentina, where US\$10m reflects the approximate level of spending on a low to mid-budget production.²⁴

FIGURE 1: THE WIDER ECONOMIC IMPACT OF SPENDING ON A PRODUCTION WITH A BUDGET OF ARS950M (US\$10M), 2021 VALUES, IN ARGENTINA



While the magnitude of impacts will vary across countries (depending upon the size and structure of each country), the pattern of impacts for the other three countries included in this report will be similar to those shown for Argentina.

²⁴ Olsberg SPI, 2020. "Global Screen Production – The impact of film and television production on economic recovery from COVID-19" - Global-Screen-Production-and-COVID-19-Economic-Recovery-Final-2020-06-25.pdf (squarespace.com)

Spillover effects to other industries can have a significant further economic impact

In addition, the economic benefits of the screen industries are not limited to the impacts through the supply chain, as is the case with most other industries. Additional economic benefits from producing and viewing content can be generated from unique spillover effects, such as increased tourism to filming locations.²⁵

Spillover example: Increased tourism at filming locations

The animated film 'Coco' (2017), a children's film which tells the story of a young Mexican boy, may have had a positive effect on tourism in Mexico. Morelia, the capital of Michoacan and the starting point of Coco's route in the film, experienced a 50% increase in the number of tourists in the year after the film's release.²⁶

The Disney film 'Encanto' (2021), which tells the story of a young Colombian girl, was a success around the world. It features the landscape, biodiversity, music and culture of Colombia. The Colombian government is using Encanto's worldwide reach to promote tourism and investment in the country (e.g., Colombia's embassies have organised special screenings for tour operators and journalists).²⁷



Spillover example: Increased interest in books post film release

'The Wrath of God', a psychological thriller directed by the Argentine director Sebastián Schindel, is an adaptation of the Argentine book 'La ira de Dios' by Guillermo Martínez. The number of people showing an interest in the book spiked shortly after the film's release on Netflix on 15th June 2022. Searches peaked at 33 times higher in the week following the release compared to the average weekly searches in 2021. The increase in searches is likely to have resulted in increased book sales.²⁸



²⁵ World Tourism Organization in collaboration with Netflix, 2021. "Cultural Affinity and Screen Tourism – The Case of Internet Entertainment Services" - Cultural Affinity and Screen Tourism – The Case of Internet Entertainment Services | World Tourism Organization (e-unwto.org)

²⁶ OpenEdition Journals, 2021. "Travel-inspiring Skeletons in Spectre and Coco – Film Tourism and the Día de Muertos in Mexico" - <https://journals.openedition.org/inmedia/2985>

²⁷ The World, 2021. "Disney's 'Encanto' depicts Colombia as a magical place full of possibilities – a welcome change for local audiences" - Disney's 'Encanto' depicts Colombia as a magical place full of possibilities — a welcome change for local audiences | The World from PRX

²⁸ GoogleTrends, 2022. "The Book of Murder by Guillermo Martinez" - The Book of Murder - Explore - Google Trends

Policies and partnerships by government with the private sector aimed at improving infrastructure, incentives and skills could help to develop further the screen industries in Latin America

At the beginning of 2022 Latin America continued its recovery from COVID-19, with a year-on-year growth of 2.8% in the first quarter. However, according to the IMF, the region faces significant challenges, such as lower global economic growth, persistent inflation, low dynamism in job creation, and rising social tensions due to growing food and energy insecurity.²⁹

Given the economic challenges in the region, implementing policies and partnerships with industry stakeholders to support the screen industries could help to support economic growth by enabling the Latin American screen industries to take advantage of the opportunities available to them. The wider economic benefits and potential spillover effects to other industries suggest that the screen industries could have an important role to play in driving economic growth over the coming years.

Key measures to support the growth of the screen industries could include:

- **Encouraging investment in the expansion of infrastructure capacity**, such as studio space, through public-private partnerships and tax incentives (such as import tariff exemptions on production equipment) to overcome capacity constraints that could hinder industry growth.
- **Production incentives**, including cash rebates or credits to attract global producers to expand and develop the national industry. These incentives can come with requirements such as the location of production in a particular area and partnering with local firms.³⁰
- **Investing in training programmes** to develop the skills needed to grow the industry and to increase diversity in the workforce. This could be achieved in partnership with key stakeholders in the screen industries. Examples include:³¹
 - Training programmes to address skills gaps among technical workers, including reskilling and upskilling of existing talent.
 - Training that focuses on under-represented groups such as women, African descendants, indigenous communities, and LGBTQ+ people, to support diverse storytelling.
 - Training programmes to upskill young people and help reduce youth unemployment, which was on average 28.6% in 2021 across Argentina, Brazil, and Colombia.³²
- **Collaboration between industry and government to reduce piracy of digital content** in Latin America (estimated to cost the industry around US\$733m per year), by implementing measures to combat piracy such as research and development (R&D) in detection technologies.

²⁹ International Monetary Fund (IMF) Blog, 2022. "Shifting Global Winds Pose Challenges to Latin America" - <https://www.imf.org/en/Blogs/Articles/2022/07/27/blog-shifting-global-winds-pose-challenges-to-latin-america>

³⁰ Mincultura, 2018-2019. "Anuario estadístico del cine" - [AnuarioEstadisticoCine20182019.pdf](https://www.mincultura.gov.co/AnuarioEstadisticoCine20182019.pdf) (mincultura.gov.co)

³¹ Exibidor, 2021. "O ponto fraco na cadeia produtiva audiovisual: a capacitação de mão de obra técnica na América Latina" - Portal Exibidor - O ponto fraco na cadeia produtiva audiovisual: a capacitação de mão de obra técnica na América Latina

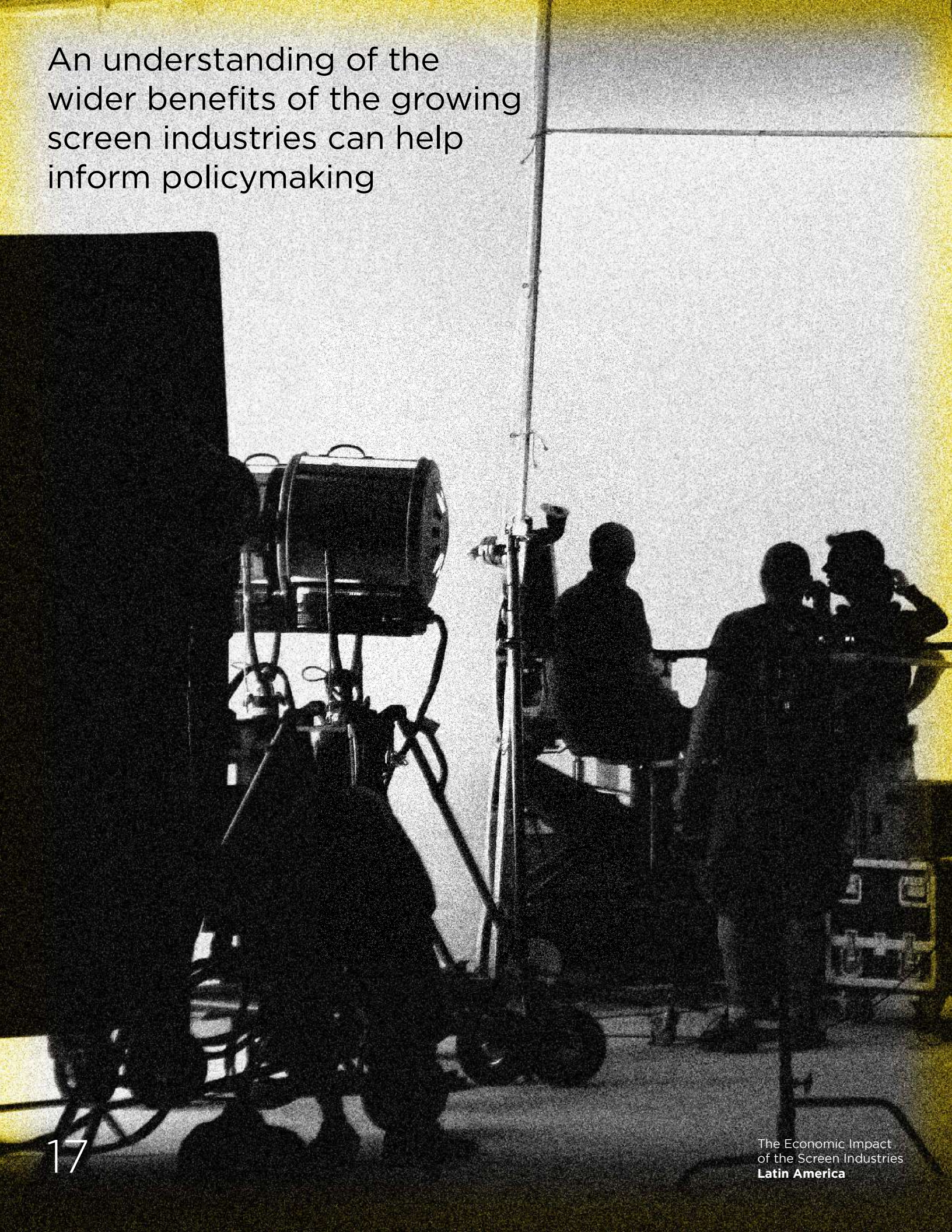
³² World Bank, 2021. "Unemployment, youth total (% of total labour force ages 15-24) (modelled ILO estimate)" - <https://data.worldbank.org/indicator/SL.UEM.1524.ZS>



CHAPTER 1

INTRODUCTION

An understanding of the wider benefits of the growing screen industries can help inform policymaking



1.1 Background

Governments around the world recognise the importance of the screen industries to their economies. The screen industries, which cover TV and film making, are recovering from the COVID-19 pandemic, and major industry players are focusing on regional expansion and distribution partnerships. These industries form a large part of the global film and entertainment market, which is projected to reach around US\$170bn by 2030, growing at a yearly rate of 7.2% from 2022 to 2030.³³

Across Latin America, the largest screen industries are concentrated in the biggest economies. Argentina, Brazil and Mexico have the largest screen industries in the region, with combined revenue in 2021 of approximately US\$20bn of, which US\$3bn was attributable to film making.³⁵ Moreover, there has been growth in Latin American countries with emerging screen industries, such as Colombia. Between 2009 and 2019, in Colombia revenue for the screen industries increased by 15% and reached US\$2.3bn in 2021.³⁶

However, while the cultural importance of the screen industries is already well appreciated, the economic importance of the screen industries can be underestimated because they also support activity in other industries. The screen industries play a role in generating wider economic benefits due to their extensive and diverse supply chains, and spending in the sector supports suppliers in many other industries (e.g., special effects suppliers, costume designers, manufacturers for set equipment). Additionally, the screen industries have the potential to create unique spillover effects that generate additional economic benefits, such as increased tourism to filming locations.

Understanding and quantifying the full economic benefits can help decision-making by policymakers, by setting out a clear business case for investment in the screen industries.

³³ Research and Markets, 2022. "Global Movies and Entertainment Market (2022-2030) – Size, Share & Trends Analysis Report" - <https://www.prnewswire.com/news-releases/global-movies-and-entertainment-market-2022-to-2030---size-share--trends-analysis-report-301590021.html>

³⁴ The revenue also includes radio. Given the nature of the data, it is not possible to provide the revenue for the screen industries excluding radio. However, it is assumed that radio only accounts for a small share of the total revenue figure. National statistical authorities use different classifications systems of economic sectors. While these classification systems are comparable overall, the classification of sub-sectors may differ. This could lead to the allocation of production revenues to other sectors such as telecommunications.

³⁵ Passport – Euromonitor international, 2022. "Production turnover (US\$ Dollars)"

³⁶ Passport – Euromonitor international, 2022. "Production turnover (US\$ Dollars) – Colombia"

1.2 This report

This report explains how the screen industries generate wider economic benefits through their supply chains and provides estimates of the benefits using multipliers based on the sector's interactions with other sectors through the screen industries' supply chain. These insights can be used by policymakers to develop business cases for investments and incentives, and to complement the cultural impact of policies. The report also identifies policy enablers that can help to develop and grow the sector further.

As part of this study, multipliers for the screen industries have been derived from official statistics combined with OECD Input-Output (IO) tables for Argentina, Brazil, Colombia and Mexico. These can be used to estimate the overall economic contribution from spending in the sector.

These four Latin American countries have been selected for this study as they are the largest economies in the region, measured by Gross Domestic Product (GDP). Argentina, Brazil and Mexico have the largest and most mature screen industries in the region while Colombia has experienced growth in this sector over the past decade. Additionally, global Video on Demand (VoD) providers are considering investments to produce content in these four countries.

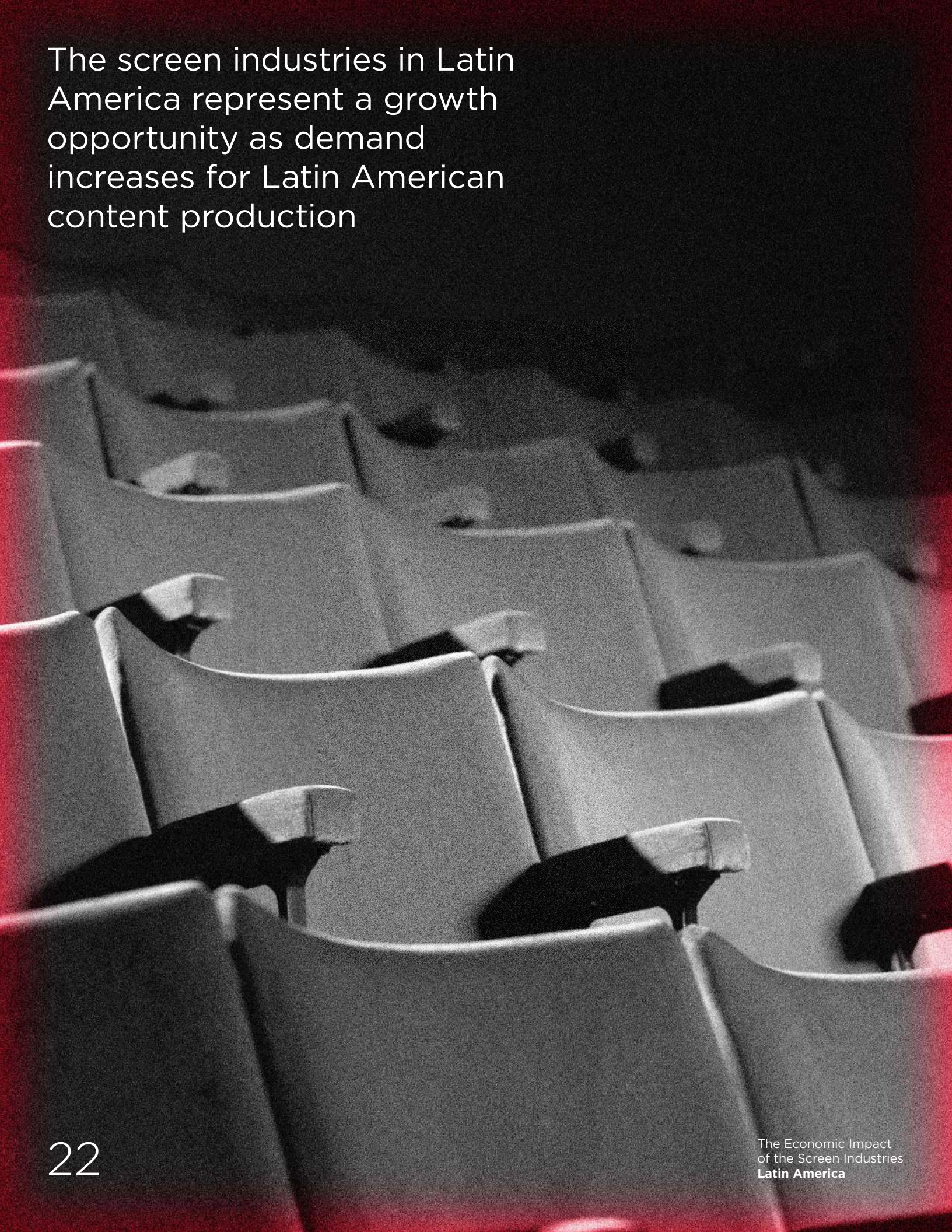
The remainder of the report is structured as follows:

- **The second section** provides an overview of the current trends in the screen industries across Latin America.
- **The third section** looks at the value chain of the screen industries and its interlinkages with other creative and non-creative sectors.
- **The fourth section** describes how the screen industries can contribute to the national economy and provides country estimates based on multipliers for the screen industries for Argentina, Brazil, Colombia and Mexico.
- **The fifth section** identifies key challenges for the screen industries in Latin America and potential key policy enablers to help overcome them.



CHAPTER 2

THE
SCREEN
INDUSTRIES
IN LATIN
AMERICA



The screen industries in Latin America represent a growth opportunity as demand increases for Latin American content production

2.1 What is the economic value of the screen industries?

Argentina, Brazil, Mexico and Colombia

Argentina, Brazil and Mexico have the largest and most mature screen industries in Latin America. In 2021, their combined revenue for the screen industries³⁷ was around US\$20bn, of which US\$3bn was attributable to film making.

Additionally, the consumer market in Colombia has grown over the past decade. The Colombian film industry has grown with it over the last ten years, due to the implementation of holistic policies to support the creative industries. Moreover, new supportive laws and the introduction of production incentives have attracted international companies to the country and helped strengthen its local film industry. Between 2013 and 2018, exports for Colombia's audiovisual industry grew by 20%, reaching US\$48m in 2018.³⁸ In 2021, total revenue for the screen industries in Colombia amounted to US\$2.3bn, of which around US\$220m was attributable to film making.³⁹

To date, the screen industries have been largely concentrated in the capital cities of the four countries due to the better infrastructure and skill levels compared to other locations.



³⁷ This revenue value also includes radio; however, it is assumed that radio accounts for only a small proportion of the total.

³⁸ Cámara de Comercio de Bogotá, 2019. "Colombia exporta más de 80% de su producción cinematográfica a EE.UU." - Clúster de Industrias Creativas y Contenidos, Cámara de Comercio de Bogotá (ccb.org.co)

³⁹ Passport - Euromonitor international, 2022. "Production turnover (US\$ Dollars)"

2.2 What are the current industry trends?

Changes in the screen industries in Latin America are driven largely by three trends:



2.2.1 THE EMERGENCE OF VIDEO-ON-DEMAND (VOD)

Latin America has experienced high growth in Video-on-Demand (VoD) services over recent years, driven partly by greater internet access. Whilst TV continues to be the predominant choice in Latin America for viewing content, the rise of VoD represents a promising opportunity to expand the screen industries in the region. According to the Inter-American Development Bank (IDB), streaming services are currently accessed in one out of every five homes in Latin America.⁴⁰

The expansion of VoD services has impacted the entire value chain of the screen industries. On the supply side, it represents a new way of distributing and producing content. On the demand side, VoD has led to changes in consumer habits and preferences about what, when, and where to watch content.⁴¹ Following the success of global VoD service providers, local private and public broadcasters have also started to show content via their own online offerings or through third-party VoD services.⁴²

Global and regional VoD services, such as Apple TV+, Amazon Prime, Claro Video, Disney+, Globoplay, HBO Max, Movistar, Netflix, Paramount+ and Televisa-Univision, are aiming to meet the growing demand for high-quality local content across all genres.⁴³ Most of these services have recently announced investment in Latin American content production. For example Globoplay, a Brazilian VoD provider, announced plans to increase its investment in content by 50% and to release 30 original productions in 2022.^{44,45} In 2023, Globo also announced investments of BRL 5 billion in content production.⁴⁶ Netflix has also announced several local original productions across Latin America, including 50 original productions and an investment of US\$300m in Mexico in 2021.⁴⁷

⁴⁰ Inter-American Development Bank (IDB), 2021. "Behind the Camera: Creativity and Investment for Latin America and the Caribbean: Learnings from Conversations with Key Players in the Audiovisual Sector" - <https://publications.iadb.org/en/behind-camera-creativity-and-investment-latin-america-and-caribbean-learnings-conversations-key>

⁴¹ Motion Picture Association America Latina, 2016. "O Impacto Econômico do Setor Audiovisual Brasileiro" - <http://spcine.com.br/wp-content/uploads/MPA-Estudo-Setor-Audiovisual-Brasil-e-LATAM.pdf>

⁴² Comisión de Regulación de Comunicaciones Republica de Colombia, 2021. "Estudio sobre la Industria de Contenidos Audiovisuales y Pluralismo informativo en Colombia"-13-informe_ejecutivo_industria_contenidos_av.pdf (crcom.gov.co)

⁴³ Inter-American Development Bank (IDB), 2021. "Behind the Camera: Creativity and Investment for Latin America and the Caribbean: Learnings from Conversations with Key Players in the Audiovisual Sector" - <https://publications.iadb.org/en/behind-camera-creativity-and-investment-latin-america-and-caribbean-learnings-conversations-key>

⁴⁴ NextvNews, International, 2021. "Globo will invest 50% more in content by 2022" - <https://nextvnews.com/globo-will-invest-50-more-in-content-by-2022/>

⁴⁵ Television Business International (TBI), 2022. "Exclusive: Globoplay's head of content to step down at Brazilian giant" - <https://tbivision.com/2022/08/30/exclusive-globoplays-head-of-content-to-step-down-at-brazilian-giant/>

⁴⁶ Globo, 2023. "Na Rio2C, Globo anuncia novidades e debate o poder da comunicação na TV e na web" - <https://g1.globo.com/rj/rio-de-janeiro/o-que-fazer-no-rio-de-janeiro/noticia/2023/04/12/paineis-na-rio2c-debaterem-o-poder-da-comunicacao-da-tv-e-na-web.ghtml>

⁴⁷ Forbes México, 2021. "Netflix invertirá más de 300 millones de dólares en México para 2021" - <https://www.forbes.com.mx/exclusiva-netflix-invertira-mas-de-300-millones-de-dolares-enmexico-para-2021/>

2.2.2 THE PRODUCTION OF LOCAL CONTENT

Countries across Latin America are developing local content to satisfy both regional demand and global interest driven by VoD providers. This shows the potential of the region to become an important exporter of audiovisual content, and the opportunity to share **Latin American stories** with the rest of the world. For example:

- Netflix is creating a screen adaptation of the book 'One Hundred Years of Solitude' by Colombian author Gabriel García Márquez, which has sold around 47m copies. This Spanish language series will be filmed largely in Colombia, with the sons of García Márquez serving as executive producers.^{48, 49}
- HBO Max is producing an Aztec Mexican Batman animated film. It is partnering with Chatrone and Mexican animation studio Anima to produce the film in Mexico, featuring local talent. Included in the production team will be an expert on Mesoamerican studies, the ethnic history of Mexico and the Andean region, to ensure the accurate representation of indigenous culture.⁵⁰

In addition to investments by VoD providers in local content production, many countries have implemented public policies to support the growth of the local audiovisual industry and provide funding for local productions:

- Colombia's Audiovisual Heritage Management grants, part of the National Incentive Portfolios since 2006, aim to preserve the country's audiovisual heritage and increase interest in it. From 2006 to 2020, the scheme benefited 181 projects with a total investment of COP3,115m (around US\$1.2m). In 2020, grants to support indigenous people and Afro-Colombian communities have promoted representation of minority groups and diversity on-screen. This funding benefited five audiovisual productions that showcased these values.⁵²
- In August 2022, the Mexican government announced a project to promote the relocation of film production to Mexico. This will encourage further development of film infrastructure and increase the number of films and shows produced in the country. As part of this strategy, the national government is planning to collaborate with local governments, industry stakeholders, and national and international production companies.⁵³

⁴⁸ The Guardian, 2022. "Netflix to adapt One Hundred Years of Solitude by Gabriel García Márquez" - Netflix to adapt One Hundred Years of Solitude by Gabriel García Márquez | Gabriel García Márquez | The Guardian

⁴⁹ What's on Netflix, 2022. "Netflix Series 'One Hundred Years of Solitude': What We Know so Far" - Netflix Series 'One Hundred Years of Solitude': What We Know So Far - What's on Netflix (whats-on-netflix.com)

⁵⁰ Deadline, 2022. "Batman Azteca": HBO Max Orders Animated Feature Set in Mexico" - <https://deadline.com/2022/06/batman-azteca-hbo-max-orders-animated-feature-mexico-1235044624/>

⁵¹ The average exchange rate between 2006 and 2020 was used to estimate the US\$ value.

⁵² Mincultura, 2018-2019. "Anuario Estadístico del Cine" - AnuarioEstadisticoCine20182019.pdf (mincultura.gov.co)

⁵³ El Economista, 2022. "Contenido audiovisual, los pendientes" - Contenido audiovisual, los pendientes (eleconomista.com.mx)

2.2.3 THE RAPID GROWTH OF ANIMATION AND VISUAL EFFECTS (VFX)

The Latin American animation and visual effects (VFX) industries have the potential to emerge as a new driver of growth for the region. Technological advancements have boosted VFX in both big-budget and independent films across the region. The growing presence of global VoD players has also helped accelerate the development of animation software to meet the demand for VFX in high-quality productions.⁵⁴

In Mexico and Argentina, the animation and VFX industries have progressed from production of predominantly short films and advertisements to working on series, films and other original content.⁵⁵ For example, output by the Argentinian screen industries of 3D productions is increasing; it was worth around US\$19.6m in 2020 and is projected to reach US\$35.7m by 2028.⁵⁶

The Mexican animation industry has also grown in recent years as studios have consolidated and have received positive recognition at international film festivals. At the Pixelatl Festival in 2021, a Latin American animation and film festival, 33 of the 60 companies presented were consolidated Mexican studios (up from ten Mexican studios when the festival was first established in 2011).⁵⁷



⁵⁴ Digital.vector, 2022. "Latin America Animation, VFX & Video Games: Strategies, Trends & Opportunities (2022 – 26)" - <http://www.digital-vector.com/images/Latin%20America%20Animation,%20VFX%20&%20Video%20Games%20-%20Sample%20Pages.pdf>

⁵⁵ Especial México, 2021. "La industria de la animación mexicana está bien representada internacionalmente" - La industria de la animación mexicana está bien representada internacionalmente (produ.com)

⁵⁶ The Insight Partners, 2022. "South America 3D Animation Software Market: Forecast to 2028 – COVID-19 Impact Analysis"

⁵⁷ Especial México, 2021. "La industria de la animación mexicana está bien representada internacionalmente" - La industria de la animación mexicana está bien representada internacionalmente (produ.com)

2.3 How did COVID-19 affect the screen industries?

The COVID-19 pandemic disrupted the screen industries across Latin America, and around the world productions were put on hold due to health risks and budget cuts.⁵⁸ However, global demand for streaming content increased during the pandemic to around 1.1bn online VoD users globally and according to a Motion Pictures Association report is expected to reach 2bn users in 2023.⁵⁹ Latin American screen industries are now recovering rapidly from COVID-19 and are starting to reach pre-pandemic levels of activity.

For example in Mexico, revenue from film making fell by around 25% in 2020 to US\$650m,⁶⁰ but recovered to US\$738m in 2021⁶¹ and is expected to grow at a yearly rate of 6.6% until 2025 and reach pre-pandemic levels by 2023.⁶²

The screen industries may be well positioned to help stimulate economic recovery, as demand for audiovisual content continues to grow and content production can quickly generate economic benefits. The screen industries rely on many other industries to produce a film or TV show and support for the sector could drive growth in the economy as a whole.⁶³

⁵⁸ World Intellectual Property Organization, 2022. "The impact of the COVID-19 pandemic on creative industries, cultural institutions, education and research" - https://www.wipo.int/edocs/mdocs/copyright/en/wipo_cr_COVID_19_ge_22/wipo_cr_COVID_19_ge_22_study.pdf

⁵⁹ Motion Pictures Association, 2020. "Theme Report – A comprehensive analysis and survey of the theatrical and home/mobile entertainment market environment for 2020." - <https://www.motionpictures.org/wp-content/uploads/2021/03/MPA-2020-THEME-Report.pdf>

⁶⁰ Passport – Euromonitor international, 2022. "Production turnover (US\$ Dollars)"

⁶¹ While film making has grown in real terms, the screen industries overall did not grow significantly between 2021 and 2022.

⁶² Passport – Euromonitor international, 2021. "Radio and TV in Mexico: ISIC 9213"

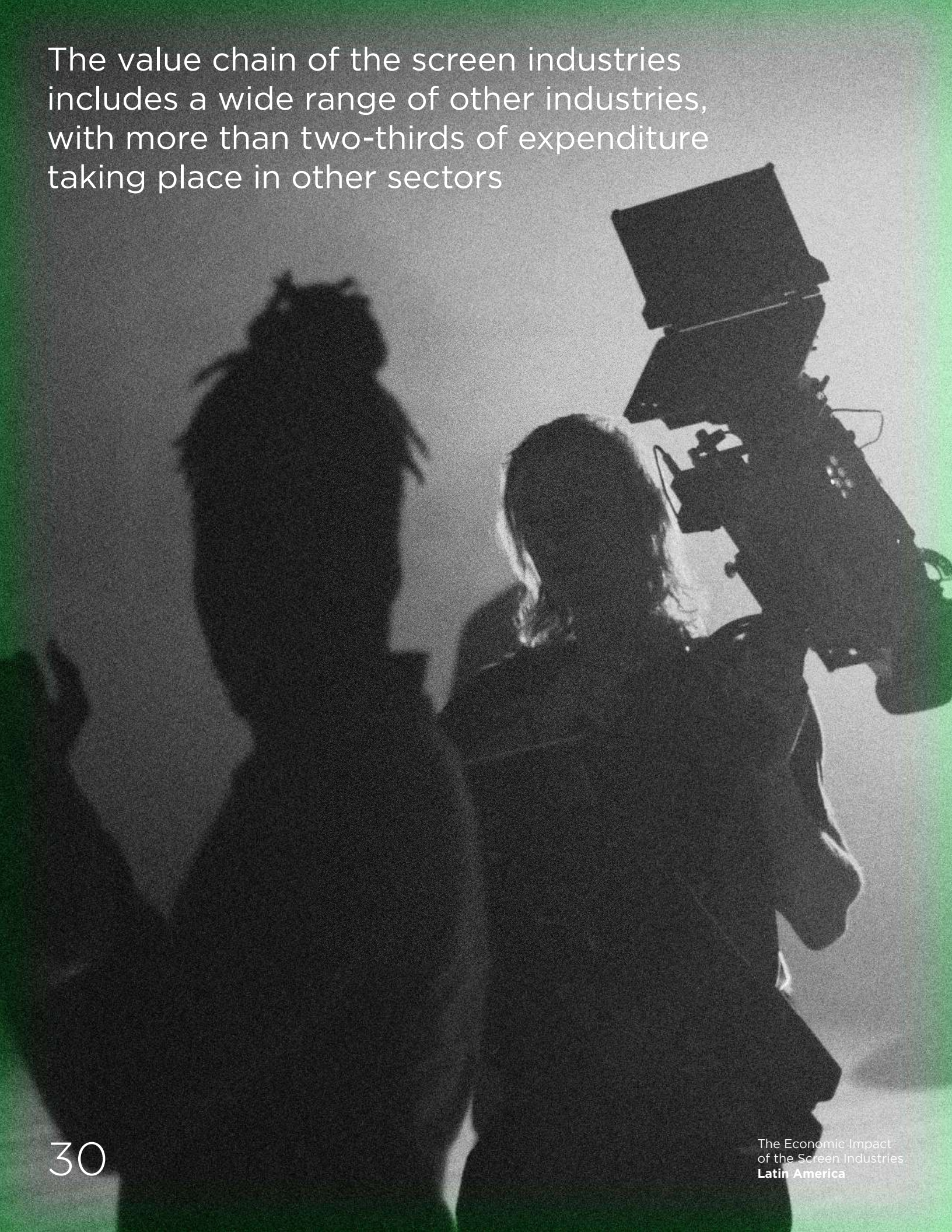
⁶³ Olsberg SPI, 2020. "Production audiovisual global: el impacto de la producción de cine y television en la recuperacion económica tras la COVID-19" - Global Screen Prod Report_Esp_revised - LATAM Presentation 2020-07-24 (canacine.org.mx)



CHAPTER 3

THE VALUE CHAIN OF THE SCREEN INDUSTRIES

The value chain of the screen industries includes a wide range of other industries, with more than two-thirds of expenditure taking place in other sectors



3.1 What is the value chain of the screen industries?

The screen industries can be described as a value chain with four main activities: pre-production (creative development), production, post-production, and distribution and consumption:

- The **pre-production** stage focuses on preparing to shoot a film or TV series. At this stage, decisions are made about the script, production companies, and talent. These are often time-consuming activities to ensure that the right talent and script have been found. However, it is usually a relatively inexpensive stage for medium to large productions.
- **The production** stage focuses on shooting the scenes. While this is not the lengthiest stage, it is usually the most expensive, with costs around 60-70%⁶⁴ of the total cost of production.
- The **post-production** stage takes footage recorded at the production stage and turns it into the films and programmes that people watch through editing, visual effects, colour correction, sound mixing and other processes. This can often be the lengthiest stage of production.
- The **distribution** stage involves advertising the content and distributing it to the consumer. Traditionally, this would be at a cinema or on TV; however, productions are increasingly launched directly to consumers via VoD service providers.

The four main value chain activities require inputs from other industries across the economy, such as legal services to create intellectual property (IP) rights, manufacturing to build equipment for the film set, and technical activities for sound and image editing. These wide supply chain linkages mean that much of the economic activity to support production occurs outside the direct supply chain of the screen industries. In fact, over two-thirds of expenditure by businesses in the screen industries across Argentina, Brazil, Colombia and Mexico occurs outside the sector.^{65,66} Additionally, many activities in the supply chain are dependent on human capital and support jobs in both creative and non-creative industries. For example, Netflix's Brazilian series 'Conquest' created directly around 2,000 local jobs in 2019.⁶⁷

⁶⁴ Olsberg SPI, 2020. "Global Screen Production – The impact of film and television production on economic recovery from COVID-19" - Global-Screen-Production-and-COVID-19-Economic-Recovery-Final-2020-06-25.pdf (squarespace.com)

⁶⁵ Argentina: 68%, Colombia: 65% (based on distribution from Netflix productions), Brazil: 79%, Mexico: 88% (based on expenditure ratios from national IO tables).

⁶⁶ Instituto Brasileiro de Geografia e Estatística (IBGE), 2015. "Brazil – Input-Output tables" - <https://www.ibge.gov.br/en/statistics/economic/national-accounts/16940-input-output-matrix.html>

⁶⁷ Motion Picture Association (MPA), 2019. "Economic Impact of Motion Picture Association Member Companies | Brazil."

Example: Guillermo del Toro's Pinocchio

Several local companies were involved in the production of Netflix's 'Pinocchio' (2022) directed by Award-winning Mexican film director and screenwriter Guillermo del Toro. This included del Toro's own International Animation Centre known as 'El Taller de Chucho', the first film studio in Latin America to undertake 'stop motion' cinematic projects. The afterlife sequences and the end credits were animated by the studio.⁶⁸ Furthermore, sound designer Scott Martin Gershin acquired unique handcrafted Brazilian wood to recreate Pinocchio's wooden sounds in the film. Paul Reed Smith's guitars provided the scraps from manufacturing wooden guitars that Gershin used to create emotional sounds for Pinocchio which helped to formulate his personality.⁶⁹



⁶⁸ The Fresno Bee, 2022. "Guillermo del Toro brings magic of stop motion filming to Mexico" - Guillermo del Toro brings magic of "stop motion" filming to México | The Fresno Bee

⁶⁹ The Credits, 2022. "Bringing Stop-Motion Puppets to Life through sound in Guillermo del Toro's Pinocchio" - Bringing Stop-Motion Puppets to Life Through Sound in "Guillermo del Toro's Pinocchio" - The Credits (motionpictures.org)

FIGURE 3: STAGES OF PRODUCTION AND THE EXTERNAL INDUSTRY SECTORS NEEDED TO MAKE A PRODUCTION⁷⁰

Pre-Production *Writing and planning*



Selecting the story to be told: writing the original script and creating IP rights

Finding the talent: casting actors and actresses, and finding costume designers, hair and makeup artists, etc.

Planning the shoot: designing each scene of the production (wardrobe, make-up, props)

Supporting the pre-production: providing insurance, publicity, accountancy and legal services

Production *Shooting the scenes*



Finding the Location: renting the studio space

Setting the scene: designing, constructing, and decoration of the film set

Recording the scene: renting or buying camera, sound and lighting equipment

Supporting those on location: transporting equipment and people as well as catering at the location

Animating production: developing animation with computer software

Post-production *Editing and VFX*



Turning the clips into a show: selecting the recorded footage for the production

Adding music to the clips: overlaying of music that has been written, recorded and published for the production

Adding special effects: adding computer graphics and special effects to the scenes

Making it accessible: adding subtitle and dubbing to the production

Distribution *Getting it to the viewers*



Increasing awareness: advertising and creating trailers for the film

Content viewing: distributing the production (cinema, TV, and VoD)

Secondary distribution: manufacturing and distributing DVDs and Blu-rays and Blu-rays

EXAMPLE INDUSTRIES

- Professional
- Arts
- Administrative & Support
- Textile & footwear
- Wholesale & retail trade
- Finance & insurance

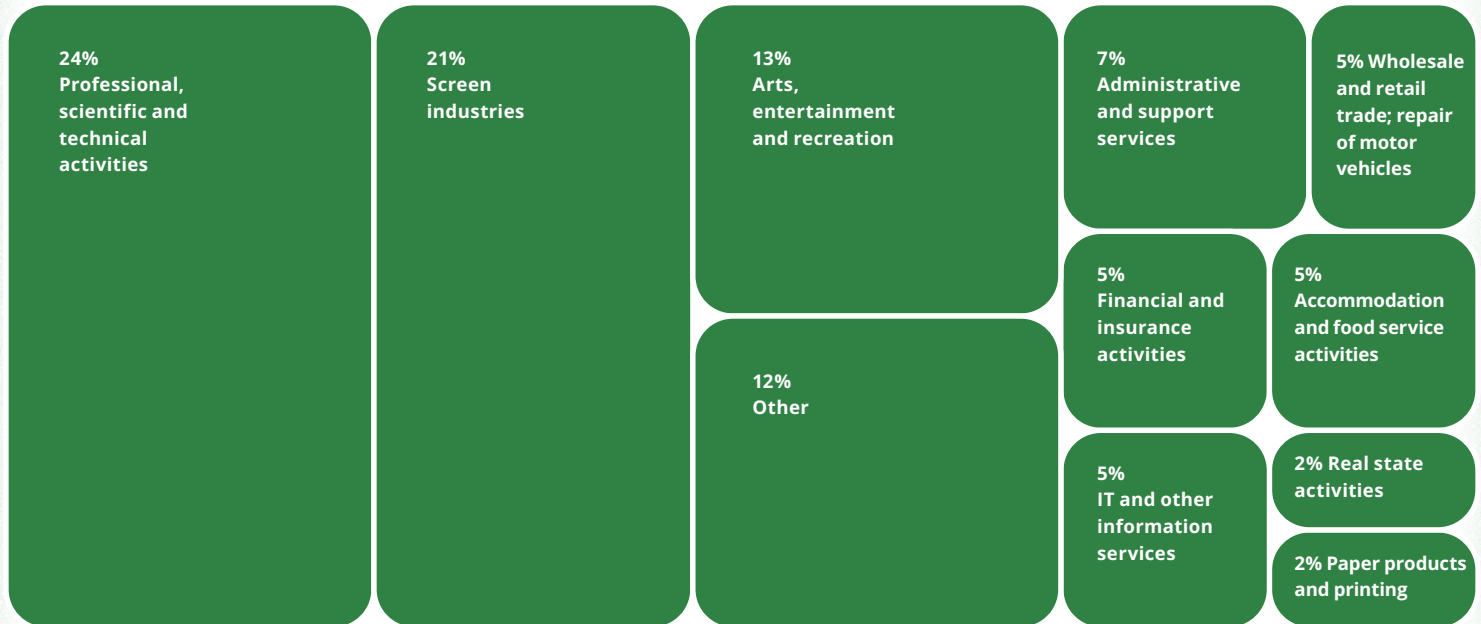
- Construction
- Wood production
- IT
- Electrical equipment
- Transport
- Food and beverages
- Accommodation & real estate

- IT
- Arts & entertainment
- Electrical equipment
- Professional & technical

- Advertising
- Retail Trade

TAKING BRAZIL AS AN EXAMPLE, ALMOST 80% OF EXPENDITURE IN THE INDUSTRY IS OUTSIDE THE SCREEN INDUSTRIES.


Television, radio, film, sound and image recording/editing spend by sector in Brazil (2015) ↓



⁷⁰ Television, radio, film sound and image recording / editing spend by sector in Brazil (2015) based on Brazil Input-Output table provided by the Instituto Brasileiro de Geografia e Estatística (IBGE).



ESTIMATING THE ECONOMIC IMPACT OF THE SCREEN INDUSTRIES

A person wearing a white lab coat is leaning over a table, examining a document. The scene is lit with a strong blue light, creating a professional and clinical atmosphere. The person's hands are visible as they hold the document, and the table surface is also illuminated. The background is dark, making the white lab coat and the document stand out.

Multipliers can be used
to estimate the economic
contribution of the screen
industries along their
value chain

4.1 How do the screen industries generate wider economic benefits?

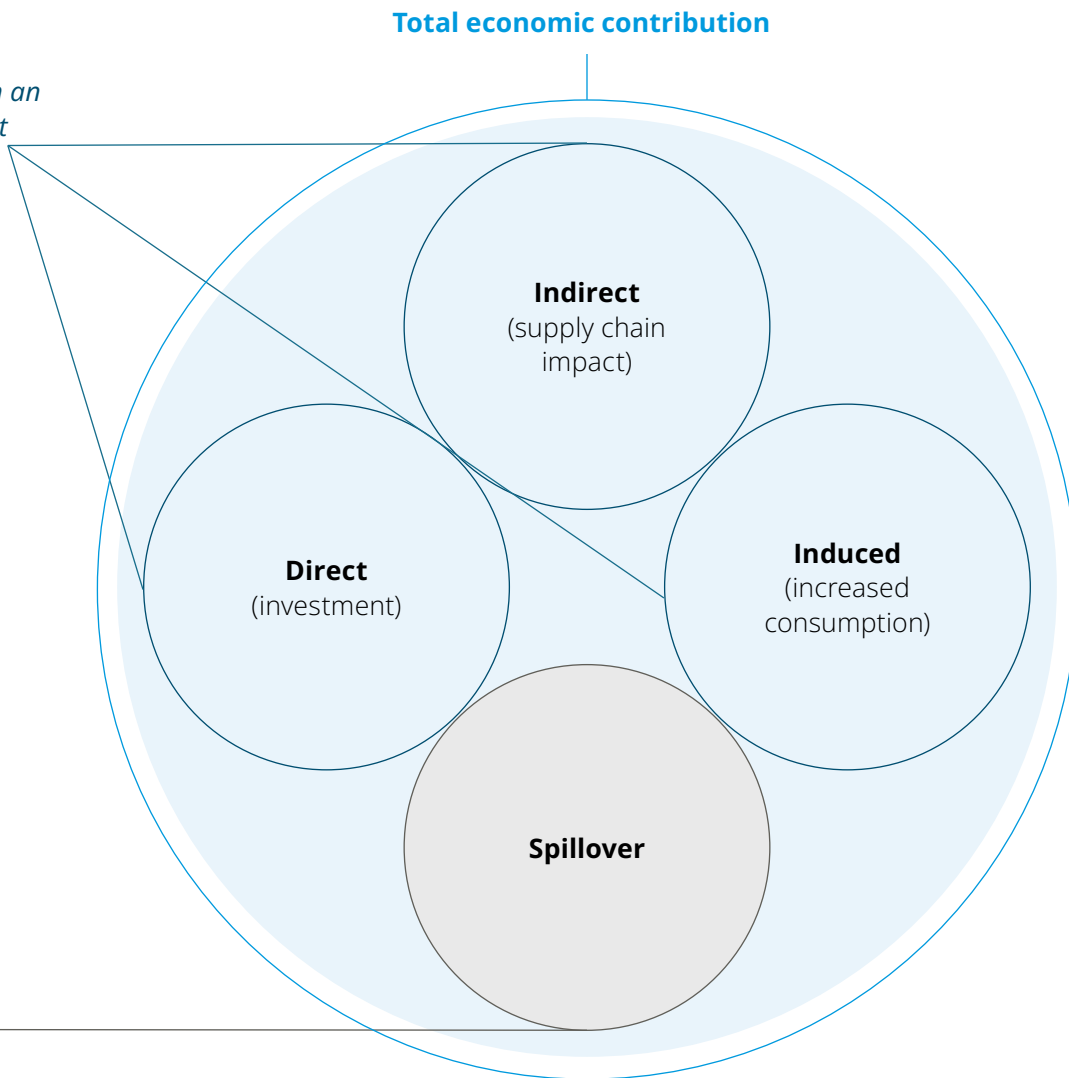
The supply chains for the screen industries include many other creative and non-creative industries. Spending by companies in the screen industries will therefore create ripple effects in the wider economy and the overall economic effect will be greater than the amount of the initial spending.

The total economic contribution consists of the direct impact of the spending by companies in the sector, the indirect impact on suppliers, the induced impact generated through higher wages, and spillover effects.

The ripple effects of spending by the screen industries should inform the development of government policies for the screen industries, for example the provision of investment incentives.

FIGURE 3: TOTAL ECONOMIC CONTRIBUTION OF THE SCREEN INDUSTRIES

Quantifiable using multipliers derived from an Input-Output model



Hard to quantify but can be significant

4.1.1 DIRECT, INDIRECT AND INDUCED IMPACTS

Direct spending by companies in the screen industries has a direct impact on the economy as it increases the output of the sector. However, it also benefits companies in other industries across the economy, for example in transport, textiles and advertising. Spending by the screen industries not only increases demand for goods and services provided by suppliers to the screen industries, but also for those provided by each supplier's own suppliers (this is known as the indirect effect). For example, to make costumes for a film production, a textile company will require the manufacture of raw materials, such as fabric and dye. Increased economic activity along these value chains should lead to higher wages for employees. While some of these higher wages will be saved or spent abroad, a substantial proportion will be spent in the local economy (this is known as the induced impact). For example, consumers may spend additional income on going to restaurants or on buying clothes or electrical equipment. In turn, this will increase the demand for and production of consumer goods and services within the economy.

FIGURE 4: DESCRIPTION OF DIRECT, INDIRECT AND INDUCED IMPACTS

Direct impact	Additional spending, for example by companies, in the screen industries will lead to an increase in economic output in these industries.
Indirect impact	An output increase in the screen industries will lead to an increase in the demand for goods and services from their suppliers (e.g., costume designers, special effects suppliers) and from suppliers to these suppliers.
Induced impact	Increased economic output from the screen industries and its suppliers should lead to an increase in wages, some of which will be spent on goods and services within the economy (for example, people spend more income on buying cloths or going to a restaurant).

4.1.2 SPILLOVER EFFECTS

Spillover effects to other industries may also have a significant economic impact. Spillover effects are additional benefits to the economy that are not a direct result of additional spending on production and its supply chains. They are generally more difficult to quantify, but may be substantial. For example, a location shown on film can attract tourism to a country, or a film that is based on a book can generate increased book sales after the film's release.^{71,72} Examples of spillover effects include changes in the following that arise because of output by the screen industries:

- Music streaming
- Magazine / book sales
- Video game sales
- Merchandise sales
- Demand for connectivity
- Demand for devices



Whilst all industries have some supply chain impacts, the screen industries can generate spillover effects unlike many other sectors.

In addition to economic spillover effects, the screen industries can also create cultural and social benefits by telling local stories that bring people together. When considering investments in the industry, it is important not only to quantify the economic contribution of the increased direct and indirect impacts of spending but also to understand the potential spillover effects that can be realised.

⁷¹ Deloitte, 2021. "The Future of the Creative Economy" - <https://www2.deloitte.com/uk/en/pages/technology-media-and-telecommunications/articles/the-future-of-the-creative-economy.html>

⁷² World Tourism Organization in collaboration with Netflix, 2021. "Cultural Affinity and Screen Tourism – The Case of Internet Entertainment Services" - Cultural Affinity and Screen Tourism – The Case of Internet Entertainment Services | World Tourism Organization (e-unwto.org)

4.2 What are multipliers?

The wider economic benefits of an initial increase in spending in the screen industries can be quantified using multipliers. A multiplier is a measure of the ratio of the total increase in spending in the economy to the amount of an initial increase in spending. For example, if the multiplier is 2.0, an initial increase in spending of US\$1 in the screen industries will result in an overall increase of US\$2 in spending. The multipliers are derived from an Input-Output (IO) model, a well-established macroeconomic model that captures the relationship between different economic industries within an economy.

Multipliers can be used to quantify the direct, indirect and induced impact of spending in the screen industries:⁷³

- Indirect impact multipliers (called 'Type I multipliers') can be applied to the initial spending in the screen industries to estimate the additional direct plus indirect economic contribution (i.e., the supply chain implications).
- Induced impact multipliers (called 'Type II multipliers') can be applied to the initial spending in the screen industries to estimate the direct, indirect and induced economic contribution (i.e., the supply chain implications and increased consumption due to higher wages).

The multipliers can be used to measure three types of economic contribution: the total expenditure, Gross Value Added (GVA), and employment that are generated through additional spending:⁷⁴

- **Expenditure:** The gross value of goods and services produced by the screen industries measured by the price paid to the producers. This is the broadest measure of economic impact. For example, suppose that a production company hires a set company to design and decorate the film set. If the set company buys decoration material for US\$2,000 and adds-value by creating the design and staging for which it charges US\$5,000, the total expenditure impact would be US\$7,000.
- **Gross Value Added (GVA):** GVA is the value of goods or services that takes into account the cost of producing the goods or services (i.e., expenditure minus the costs of intermediate inputs). The GVA contribution of all industries equals the Gross Domestic Product (GDP) of a country (plus taxes minus subsidies on products).⁷⁵ Using the above example of the set company, the generated GVA would only be US\$5,000 as the cost of intermediate inputs of US\$2,000 is captured in the decoration material industry.
- **Employment:** Measured in terms of full-time equivalents (FTEs), an FTE is equivalent to one person working full-time for a year⁷⁶

⁷³ International Industry Standard Classification code (ISIC) 59.1 'Motion picture (i.e., film making), video, and television programme production activities' was used for the modelling. This is defined by the OECD as: 'the production of theatrical and non-theatrical motion pictures whether on film, videotape, DVD, or other media, including the digital distribution, for direct projection in theatres or for broadcasting on television; supporting activities such as film editing, cutting, dubbing etc. Buying and selling of motion picture or any other film production distribution rights is also included.' The revenue also includes radio. Given the nature of the data, it is not possible to provide the revenue of the screen industries excluding radio. However, it is assumed that radio accounts for only a small proportion of the total revenue figure.

⁷⁴ The Motion Picture Association – Canada, 2019. "Economic Impact of Star Trek: Discovery" - <https://www.mpa-canada.org/wp-content/uploads/2019/10/MPA-Canada-Star-Trek-Discovery-FI.pdf>

⁷⁵ Office for National Statistics, 2022. "A guide to interpreting monthly gross domestic product" - <https://www.ons.gov.uk/economy/grossdomesticproductgdp/methodologies/aguidetointerpretingmonthlygrossdomesticproduct>

⁷⁶ These FTE numbers are likely to be lower than those reported by specific productions as the production period may last for less than a year. For example, two full time jobs on a six-month production would equal one FTE.

4.3 Using multipliers to calculate economic contribution

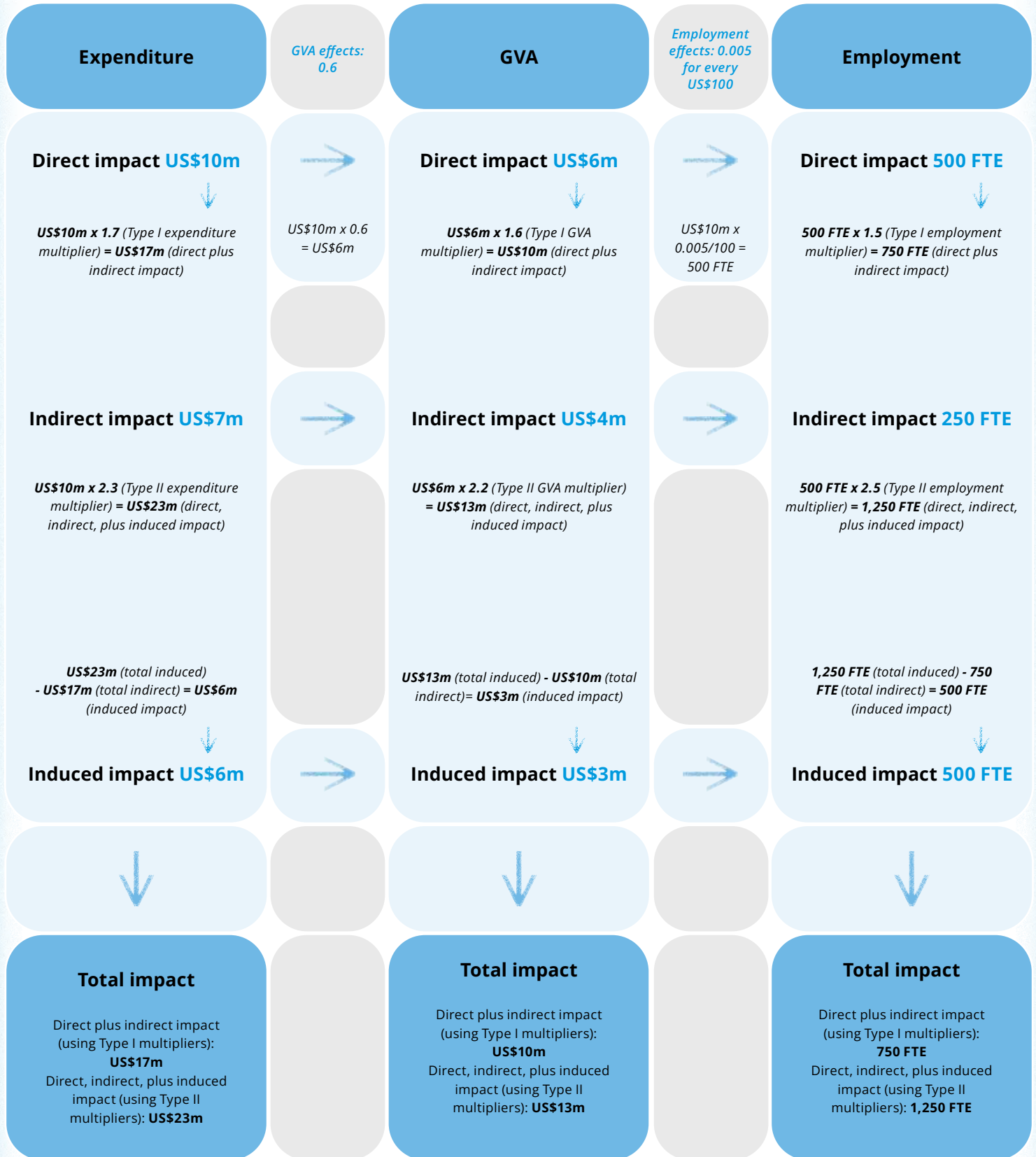
According to a study from Olsberg SPI (2020), a low to mid-budget film costs around US\$6m to US\$20m, and a mid-budget TV series around US\$13m.⁷⁷ The following is an illustrative example of how multipliers can be used to calculate the economic contribution generated by an investment of US\$10m in a low to mid-budget TV or film production:

- The screen industries increase their spending by US\$10m. This is the direct expenditure impact.
- Multiplying the spending of US\$10m with the indirect impact multiplier ('Type I expenditure multiplier') of 1.7 gives a total expenditure of US\$17m. This is the direct impact of US\$10m plus an indirect impact on the supply chain of US\$7m.
- Taking into account the illustrative cost of intermediate inputs of US\$4m, the increased spending of US\$10m in the screen industries generates around US\$6m in GVA (i.e., the direct GVA impact). Multiplying the US\$6m with the indirect GVA multiplier of 1.6 ('Type I GVA multiplier') gives a total GVA contribution of US\$10m (i.e., the direct GVA impact of US\$6m plus the indirect GVA impact of US\$4m).
- The increased spending of US\$10m in the screen industries further generates around 500 full-time equivalent (FTE) jobs (i.e., the direct employment impact). Multiplying the 500 jobs with the indirect employment multiplier ('Type I employment multiplier') gives a total of 750 jobs (i.e., the direct employment impact of 500 jobs plus the indirect employment impact of 250 jobs).

⁷⁷ Olsberg SPI, 2020. "Global Screen Production – The impact of film and television production on economic recovery from COVID-19" - Global-Screen-Production-and-COVID-19-Economic-Recovery-Final-2020-06-25.pdf (squarespace.com)

FIGURE 5: ILLUSTRATIVE EXAMPLE OF THE WIDER ECONOMIC IMPACT OF SPENDING ON A TYPICAL LOW TO MID-BUDGET PRODUCTION.

AN INVESTMENT IN THE SCREEN INDUSTRIES OF US\$10M TO PRODUCE A NEW MOVIE: ⌚



4.4 Screen industries multipliers for Argentina, Brazil, Colombia and Mexico

The calculation of the multipliers for the screen industries for Argentina, Brazil, Colombia and Mexico are based on the most recent publicly-available data and can be used by policymakers to quantify the total economic contribution of additional spending in the screen industries. The illustrative analysis below looks at the impact of an increase in spending in the screen industries of US\$10m, which is an approximate level of spending on a low to mid-budget production:

Summary findings:

- Indirect impact multipliers ('Type I expenditure multipliers') for the screen industries for the four countries range between around 1.6 and 1.9 (i.e., supply chain implications).
- Induced impact multipliers ('Type II expenditure multipliers') for the screen industries for the four countries range between 2.1 and 3.0 (i.e., supply chain implications and increased consumption due to higher wages).

These multipliers suggest that:

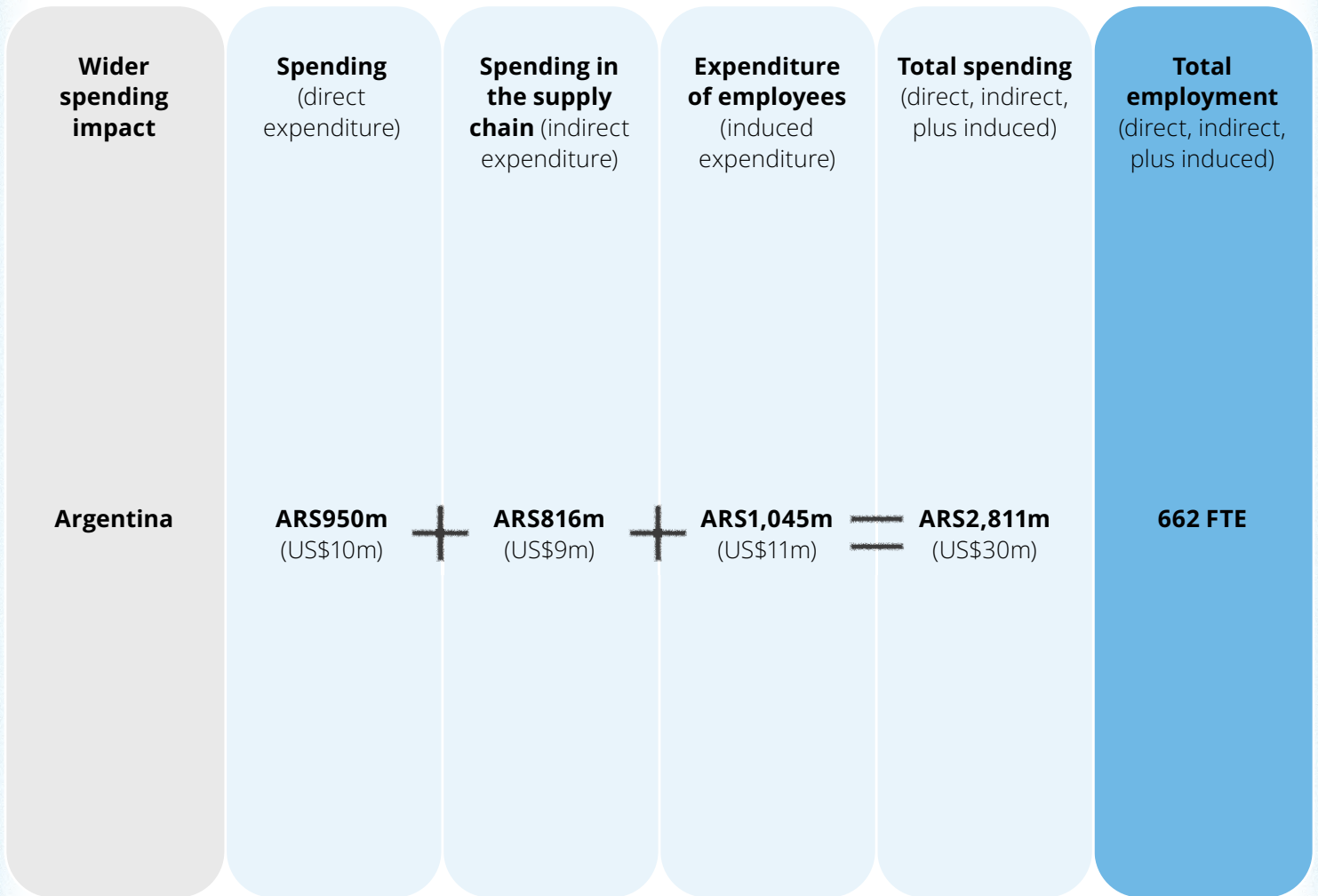
- An increased spending of US\$10m in the screen industries (i.e., direct expenditure) would support a further US\$6m to US\$9m of expenditure further down the supply chain and through the payment of wages (indirect expenditure impact).⁷⁸
- Additional spending in the screen industries leads to the creation of additional jobs – for every 100 people employed on a production, a further 50-70 people would be employed across the wider economy.

The figures would be even higher when taking into account the impact of increased household consumption due to higher wages – which increase consumer demand and therefore lead to an increase in the production of goods and services across the economy (induced expenditure impact).

Figure 6 highlights the wider economic impact of spending on a production with a budget of US\$10m in 2021 in Argentina.

⁷⁸ An illustrative increase in spending of US\$10m was chosen as this reflects the cost of a low to mid-budget film or TV production. According to a study by Olsberg SPI (2020), a low to mid-budget film costs around US\$6 to US\$20m, and mid-budget TV series around US\$13m.

FIGURE 6: THE WIDER ECONOMIC IMPACT OF SPENDING ON A PRODUCTION WITH A BUDGET OF ARS950M (US\$10M), 2021 VALUES, IN ARGENTINA



As the figure shows an increase in spending of ARS950m (US\$10m) (direct expenditure) would generate:

- **An increase in spending in the supply chain (indirect expenditure) of ARS816m (US\$9m)**, - Multiplying the spending of ARS950m (US\$10m) the indirect impact multiplier ('Type I expenditure multiplier') of 1.859 gives an expenditure of ARS1,766m (US\$19m). This can be broken down into the direct spending impact of ARS950m (US\$10m) plus an indirect expenditure impact on the supply chain of ARS816m (US\$9m). So, the increase in spending in the supply chain is ARS816m (US\$9m) – i.e., ARS1,766m (US\$19m) minus the direct spending impact of ARS950m (US\$10m).
- **An increase in expenditure by employees (induced expenditure) of ARS1,045m (US\$11m)**, - Multiplying the spending of ARS950m (US\$10m) by the induced impact multiplier ('Type II expenditure multiplier') of 2.959 gives a total expenditure of ARS2,811m (US\$30m). This can be broken down into the direct impact of ARS950m (US\$10m) plus an indirect impact on the supply chain of ARS816m (US\$9m) plus expenditure of employees (induced expenditure) in the supply chain of ARS1,045m (US\$11m). So, the additional expenditure of employees is ARS1,045m (US\$11m) – i.e., total expenditure of ARS2,811m (US\$30m) minus direct spending of ARS950m (US\$10m) minus spending in the supply chain (indirect expenditure) of ARS 816m (US\$9m).
- **Total employment (direct, indirect and induced) of 662 FTE** - The increased spending of ARS950m (US\$10m) by companies in the screen industries creates 231 FTE jobs. Multiplying the 231 jobs by the indirect employment multiplier ('Type 1 employment multiplier') gives a total of 400 jobs (i.e., the direct employment impact of 231 jobs plus the indirect employment impact of 169 jobs). Total employment is even higher once the induced impact of increased consumption is included, 622 jobs - i.e., 2.869 ('Type II employment multiplier') x 231 FTEs.

While the magnitude of impacts will vary across countries (depending upon the size and structure of each country), the pattern of impacts for the other three countries included in this report will be similar to those shown for Argentina. (See the Appendix for detailed results).



OPPORTUNITIES FOR THE SCREEN INDUSTRIES AND KEY POLICY ENABLERS

Growth potential could be realised by increasing infrastructure capacity, and through fostering skills, additional funding, and regulations that are fit-for-purpose



5.1 Opportunities for the screen industries

POTENTIAL KEY OPPORTUNITIES FOR THE LATIN AMERICAN SCREEN INDUSTRIES COMPARED TO THE GLOBAL MARKET INCLUDE:

Policymakers and industry stakeholders can work together to identify and exploit opportunities as well as leverage comparative advantages to develop and grow the screen industries in Latin America.

Supporting specialisation in VFX: Increased digitalisation makes the industry less dependent on traditional hubs for certain activities, such as VFX. With the rapid advances in digital technologies, animation and VFX are some of the fastest growing segments of the global media and entertainment market. Production work has become global, and film companies are looking for facilities in regions that can provide high-quality VFX and also offer subsidies, production incentives and lower production costs.^{79, 80}

Argentina and Mexico already have growing VFX industries. Latin America's proximity to the US, its overlap with US time zones, and its likely cost advantage in producing VFX can make it attractive for US and global production companies to outsource VFX to the region.

Leveraging the language advantage and local storytelling: Streaming services provide a new way to distribute Spanish language series and films to nearly 560m⁸¹ Spanish speakers worldwide as well as to non-Spanish speaking markets. Latin American households which have previously watched mainly TV are moving increasingly to streaming providers. Digital TV Research have forecasted that the number of SVOD subscriptions in Latin America will grow from 53 million at the end of 2020 to 116 million by 2025.⁸² Outside of the Latin American region, Comscore, a market research company, found that the number of Hispanic households in the USA with a streaming subscription increased by 41% between 2019 and 2022, reaching nearly 14m homes today.⁸³ With this change in consumer habits, the demand for high-quality Spanish content is increasing.⁸⁴ Research by Horowitz, a consumer research company, found that around 45% of Latin American content viewers think that the quality of available Spanish content is not as good as the quality of English content.⁸⁵ Latin American countries could therefore take this opportunity to create and provide high-quality Spanish content to meet the growing demand for high-quality content in the Spanish language market.

This opportunity could extend even further to non-Spanish speaking audiences as subtitling and dubbing become more popular with audiences that are likely to be less familiar with Latin American stories.⁸⁶ For example, the series 'Money Heist' ('La casa de papel') was dubbed from Spanish. It attracted a modest audience when it was originally aired on Spanish TV but reached global success after it was released on Netflix.⁸⁷

⁷⁹ Research and Markets, 2022. "Latin America Animation, VFX & Video Games Market Strategies, Trends & Opportunities Report 2022-2026" - <https://www.globenewswire.com/en/news-release/2022/05/05/2436423/28124/en/Latin-America-Animation-VFX-Video-Games-Market-Strategies-Trends-Opportunities-Report-2022-2026.html>

⁸⁰ LatinAmerican Post, 2019. "The reason why foreign animation companies are looking for Latin American talent" - The reasons why foreign animation companies are looking for Latin American talent - LatinAmerican Post

⁸¹ Forbes, 2021. "The U.S. has the second-largest population of Spanish speaker" - <https://www.forbes.com/sites/soniathompson/2021/05/27/the-us-has-the-second-largest-population-of-spanish-speakers-how-to-equip-your-brand-to-serve-them/?sh=1b25f111793a>

⁸² Digital TV, 2022. "Latin American SVOD market to double within five years" - <https://www.digitaltveurope.com/2021/03/08/latin-american-svod-market-to-double-within-five-years/>

⁸³ Digital TV, 2022. "Latin American SVOD market to double within five years" - <https://www.digitaltveurope.com/2021/03/08/latin-american-svod-market-to-double-within-five-years/>

⁸⁴ BELatina, 2022. "Latino streaming audience continues to grow, opening opportunities for Spanish-language content" - <https://belatina.com/latino-streaming-audience-spanish-language-content/>

⁸⁵ Horowitz, 2022. "Media companies expanding Spanish-language content for growing Latinx Audiences" - <https://www.horowitzresearch.com/press/media-companies-expanding-spanish-language-content-for-growing-latinx-audiences/>

⁸⁶ The BBC, 2021. "Young viewers prefer TV subtitles, research suggests" - <https://www.bbc.co.uk/news/entertainment-arts-59259964>

⁸⁷ Los Angeles Times, 2021. "Spanish-speaking audiences are a huge streaming market. Do media companies understand it?" - <https://www.latimes.com/entertainment-arts/business/newsletter/2021-05-04/spanish-language-tv-streaming-audiences-hollywood-netflix-the-wide-shot>

5.2 Challenges for the screen industries in Latin America

Despite the growth of the screen industries in Latin American markets and the potential opportunities for the sector, reports by the Inter-American Development Bank (IDB) and TicTac, the ICT Analysis and Creativity Think Tank in Colombia,⁸⁸ have identified some common challenges facing the industry across the region. Overcoming these challenges may require further support from policymakers and industry stakeholders.

Additionally, a recent report by the International Monetary Fund (IMF) found that Latin America faces significant challenges such as lower global economic growth, persistent inflation, low dynamism in job creation, and growing social tensions due to increased food and energy insecurity.⁸⁹ Given the economic challenges in the region, implementing policies to support the screen industries could help to foster economic growth.

KEY CHALLENGES IN THE INDUSTRY INCLUDE:



Workforce size and skills

With the fast-changing nature of the global screen industries, production companies must constantly innovate and digitalise. The growing demand for content production by VoD providers and broadcasters, as well as the rise of the animation and VFX industries in Latin America, has increased demand for qualified technical workers, especially in post-production.

The IDB has identified a lack of technical workers, referred to as 'below-the-line' (BTL) jobs, in the audiovisual industry to meet rising demand. This includes a shortage across Latin America of production designers, special effects managers, VFX specialists, and stunt coordinators, amongst others.⁹⁰ In a survey conducted by the IDB, 58% of more than 400 producers in the region indicated that Latin America did not currently have talent with the necessary technical skills to work on new productions.⁹¹ To stay competitive and help the local screen industries to grow and develop further, Latin America would need to increase its numbers of BTL workers. In addition, digital skills and increased diversity in the audiovisual labour force will become crucial to compete successfully in the global market. TicTac has further found that workers in the Colombian audiovisual industry often have limited English language skills, which limits opportunities for co-production projects with international players.⁹²

⁸⁸ Tic Tac. On Think Tanks | Tanque de análisis y creatividad de las tic – tictac

⁸⁹ International Monetary Fund (IMF) Blog, 2022. "Shifting Global Winds Pose Challenges to Latin America" - <https://www.imf.org/en/Blogs/Articles/2022/07/27/blog-shifting-global-winds-pose-challenges-to-latin-america>

⁹⁰ Deloitte, 2022. "O future do video no Brasil – Cenários e tendências para o mercado de streaming broadcasting"

⁹¹ Inter-American Development Bank (IDB), 2021. "Behind the Camera: Creativity and Investment for Latin America and the Caribbean: Learnings from Conversations with Key Players in the Audiovisual Sector" - <https://publications.iadb.org/en/behind-camera-creativity-and-investment-latin-america-and-caribbean-learnings-conversations-key>

⁹² Tictac, 2021. "Colombia Audiovisual: Audiovisual content production in Colombia" - [diagramacion-colombia-audiovisual-ingles.pdf \(ccit.org.co\)](https://www.tictac.org.co/diagramacion-colombia-audiovisual-ingles.pdf)

Infrastructure



The availability of high-quality infrastructure, such as studios and post-production facilities, has been identified by Olsberg SPI, a creative industry consultancy, as one of the key enablers for attracting international production companies. Continuing growth in content production leads to an increase in demand for production capacity, such as studio spaces and filming locations. For example, a study by Olsberg SPI found that Sao Paulo, one of the production hubs in Brazil, has only medium to low capacity for purpose-built sound stages.⁹³ Limitations in capacity will prevent the industry from growing to its full potential, and additional investment in studio infrastructure will therefore be needed.

In addition, investing in cloud-based tools can help Latin America strengthen its specialisation in VFX. VFX and animation studios in recent years have started to move towards virtual workstations and cloud-based tools. Deploying a virtual workstation usually requires only a connected device and an internet connection, but can be used for intensive tasks such as 3D animation or particle simulation. Virtual workstations have a cost advantage compared to physical studios (i.e. they are cheaper) and do not require as much physical space. They can also be easily adjusted to the requirements for individual projects and updated with new software.⁹⁴

Piracy



Piracy, the illegal distribution of films and series over the internet, is another major challenge for the screen industries. For example in Mexico, websites with pirated content attract 1,114 million visits per year compared to only 545 million visits to legal sites.⁹⁵ Piracy costs the industry and governments millions of dollars each year due to lost sales and tax revenues. It has been estimated that sites distributing pirated content cause losses of US\$733m per year for legal platform operators in Latin America.⁹⁶ Moreover, account sharing of VoD platforms has increased in recent years; and although this is not necessarily considered piracy, it is a big challenge for the industry.

Lower returns on production investments caused by piracy could lead to lower production budgets. This can be a particular problem for content that is expected to be watched and distributed predominantly within Latin America. Currently, it is difficult to track the origin of pirated content, and it is also possible for websites to implement technical measures to avoid detection.⁹⁷

⁹³ Olsberg SPI, 2022. "Production Infrastructure and Capacity Audit (PICA) for Greater Sao Paulo" - <http://spcine.com.br/wp-content/uploads/SPI-Spcine-Study-Final-Report-1.pdf>

⁹⁴ "Before & afters, 2022. "How VFX and animation studios are using virtual workstations today"- <https://beforeandafters.com/2020/07/22/how-vfx-and-animation-studios-are-using-virtual-workstations-today/>

⁹⁵ El Universal, 2020. "Mexicanos prefieren sitios piratas de contenidos digitales"- Mexicanos prefieren sitios piratas de contenidos digitales (eluniversal.com.mx)

⁹⁶ El Universal, 2020. "Mexicanos prefieren sitios piratas de contenidos digitales"- Mexicanos prefieren sitios piratas de contenidos digitales (eluniversal.com.mx)

⁹⁷ Tictac, 2021. "Colombia Audiovisual: Audiovisual content production in Colombia" - <diagramacion-colombia-audiovisual-ingles.pdf> (ccit.org.co)



Regulatory environment

Latin America offers several advantages for foreign production companies to produce in the region, such as relatively low costs and varied landscapes ranging from beaches and mountains to rainforests and cities. It is also geographically close to the US, the world's primary audiovisual market. However, Latin America faces economic challenges that make it less stable and secure compared to other locations. For example, a high-inflation environment and regulatory uncertainty may deter foreign productions.

In some Latin American countries, regulatory frameworks may be outdated, hindering production companies and VoD providers from expanding operations in the region. For example, Brazil introduced an SeAC law in 2011⁹⁸ with the objective of opening the market to new competitors and stimulating local production. However, the industry has changed substantially since the law was introduced and with the emergence of VoD providers it is no longer fit for purpose. The prohibition of cross-ownership between TV operators and producers, the obligation for distributors to comply with national quotas and for producers to meet these quotas, as well as taxes that apply only to operators, make collaboration between operators and streaming providers difficult.⁹⁹

Furthermore, administrative burdens can be high in some Latin American countries. Work permit applications for actors and for technical workers from co-production companies can be time-consuming, and processing differences across the region can lead to production delays.

5.3 Key policy enablers

Policymakers, in collaboration with industry stakeholders, could help to overcome these challenges by developing policies and initiatives to support the growth of the industry. A coordinated strategic approach by national governments, focussing on a package of policies targeting multiple challenge areas, to promoting its development may be more successful than policies targeting specific issues in the screen industries. Additionally, this approach would send a strong signal to national and international companies that governments want to promote and develop the sector.

Colombia is among the OECD countries with the highest share of spending on culture. Its government has policies to support the growth of the creative sector, such as a five-year exemption from income tax for creative economy actors (introduced in 2018) and tax incentives aimed at investors.

⁹⁸ Lexology, 2020. "In brief: media law and regulation in Brazil" - <https://www.lexology.com/library/detail.aspx?g=4331d9b4-0d13-4f74-88d5-fb0de753b00f>

⁹⁹ Deloitte, 2022. "O future do video no Brasil – Cenários e tendencias para o mercado de streaming broadcasting"

Colombia: Holistic policy approach

Colombia's National Development Plan (PND) 2018-2022 included the creative economy within broader development objectives. The Plan recognises the value of the sector in job creation, income and wealth generation, and in fostering local development. It is structured around seven pillars:¹⁰⁰

1

Information: strategies to generate sectoral information, data and knowledge, as well as strengthening dialogue between culture, creativity, the economy, and sustainable development to increase policy precision at national and local levels.

2

Institutions: strategies to create new financial instruments and coordination tools to facilitate access to financial opportunities.

3

Infrastructure: strategies to create new and existing public goods and infrastructure for culture drawing upon funding from different sources and using inter-ministerial partnerships.

4

Industry: strategies to reinforcing entrepreneurship and the creative economy ecosystem through policy support.

5

Integration: strategies to increase the integration of value chains and the circulation of creative and cultural goods and services through platforms for networking, export assistance, and tourism.

6

Inclusion: strategies to develop skills and capacity through skills policies which have the needs of creative economy workers integrated (e.g., the National Training Service (SENA) adapts its programmes extensively to culture).

7

Inspiration: strategies to raise the production and support of innovation within cultural and creative goods and services by supporting audience development, intellectual property, and reinforcing grant-based programmes for cultural producers.

¹⁰⁰OECD, 2017. "Culture and the Creative Economy in Colombia – Leveraging the Orange Economy" - Culture and the Creative Economy in Colombia : Leveraging the Orange Economy | Local Economic and Employment Development (LEED) | OECD iLibrary (oecd-ilibrary.org)

While the policy enablers in this section target specific challenges discussed in section 5.1, these are likely to be more effective in developing the sector if they are combined with other policies targeting other challenges.

THE FOLLOWING SHOWS SOME OF THE KEY POLICY ENABLERS THAT HAVE BEEN IDENTIFIED:



Workforce and skills

Investment in education: Investment in high-quality educational programmes and vocational technical training programmes can help to overcome skills gaps and meet the growing global demand for technical workers.¹⁰¹ It can further help to increase diversity in the workforce. Investments could include:

- Providing learning opportunities for young people to help reduce youth unemployment, which in 2021 was on average 28.6% across Argentina, Brazil, and Colombia.¹⁰²
- Initiatives that support under-represented groups such as women, people of African descent, indigenous communities, and LGBTQ+ people, to support more diverse storytelling.
- Financial support, for example scholarships, for people from vulnerable social backgrounds to further increase diversity in the industry.
- The creation of technical courses related to productions (for example, film, TV, animation and VFX) to increase the number of BTL workers in the industry, and also English language courses to overcome language barriers to increase employment opportunities with international production companies.
- Upskilling or re-skilling experienced professionals by providing technical training courses and workshops that encourage continued learning.

Public-private partnerships are a way to fund training initiatives and ensure that educational programmes provide individuals with the necessary skills to compete in the global market. Professional learning initiatives could help people build a career in the industry, with a potential focus on young people from vulnerable social backgrounds or under-represented groups, such as internships, apprenticeships, or part-time work opportunities.

¹⁰¹ Exibidor, 2021. "O ponto fraco na cadeia produtiva audiovisual: a capacitação de mão de obra técnica na América Latina" - Portal Exibidor - O ponto fraco na cadeia produtiva audiovisual: a capacitação de mão de obra técnica na América Latina

¹⁰² World Bank, 2021. "Unemployment, youth total (% of total labour force ages 15-24) (modelled ILO estimate)" - <https://data.worldbank.org/indicator/SL.UEM.1524.ZS>



Potrero Digital in Argentina

Potrero Digital, a training initiative founded in 2018, aims to educate and support people from vulnerable social backgrounds. The programme provides local people with digital skills to address the lack of local talent to create animations for films. Since 2018, the programme has produced 1,300 certified individuals and 500 of its graduates are employed in the industry.¹⁰³

The Latin American Training Centre

The Latin American Training Centre (LATC), in partnership with the Interstate Union of Workers in the audiovisual industry, ABC film courses and local industry, organised a training initiative to provide remote courses for professionals in Latin American countries such as Brazil, Argentina, Colombia and Mexico. The programme covered topics such as art direction, digital challenges on film sets, and visual effects.¹⁰⁴



¹⁰³The Index Project, 2021. "Potrero Digital – Fostering digital skills in youth in a digital way" - Potrero Digital - The Index Project

¹⁰⁴Latin American Training Center, 2022. - <https://latamtrainingcenter.com/>

Incentives and Infrastructure



Production incentives: Film or production incentives (i.e. discounts and credits granted to production companies by the state, city, or local government to film within a certain country) can help both to attract global producers to Latin America and to promote the growth of national screen industries. Production companies must usually meet certain requirements or conditions in order to receive cash rebates (i.e. money refunded) which can help to promote different industry goals.¹⁰⁵ Examples of such requirements are:

- Filming in a certain territory, for example a city or region, which could help to create creative clusters and production hubs within a country.
- Partnering with a local production company, which could help to develop and grow the local screen industries.
- Providing training and education initiatives, which could help to develop skills among the local workforce.

Business case for infrastructure investment: Investment to expand existing technologies and infrastructure capabilities, such as studios and virtual workstations, will be required to meet the growing global demand for content production. Investment by the government or companies in infrastructure could be encouraged by providing an evidence-based business case that sets out the potential economic and social benefits from further spending.

Business cases can also be developed to help with formulating policies to support creative districts outside capital cities, such as providing affordable housing, subsidising rents on workshop space, tax incentives, and support for start-ups and business development services. For example, the federal Mexican government developed a policy for the creation of Digital Creative City districts (CCD), which benefitted the city of Guadalajara, as part of broader policy efforts to promote the audiovisual industry as a driver of sustainable urban development.¹⁰⁶

¹⁰⁵ Mincultura, 2018-2019. "Anuario estadístico del cine" - AnuarioEstadisticoCine20182019.pdf (mincultura.gov.co)

¹⁰⁶ OECD, 2021. "Culture and the Creative Economy in Colombia: Leveraging the Orange Economy – 3. Creative district policy - 3. Creative district policy in Colombia | Culture and the Creative Economy in Colombia : Leveraging

Colombia: Production incentives

Colombia offers production incentives in the form of transferable tax credits and cash rebates (i.e. the government provides a credits or money refund to foreign production companies to film in Colombia) which attracted international production companies in recent years. This was one of the drivers of its recent growth in the screen industries. In 2012 the country established Law No. 1556 which offers reimbursement of up to 40% on film services related to pre-production, production or post-production. In addition, film logistics services such as catering and transport are entitled to a 20% reimbursement of their costs. To be eligible for the incentives, production companies are required to work with a Colombian partner.¹⁰⁷



Brazil: City of São Paulo

In 2021, São Paulo, the capital of Brazil and a production hub, established a cash rebate programme to attract production to the city. The programme offers a 30% reimbursement of production costs by the city to production companies if the filming location is in Sao Paulo. The production of two TV series and a film benefited from the first cash rebate in 2021 which generated around 14,000 jobs in the city.¹⁰⁸



¹⁰⁷ La cultura es de todos, Mincultura, 2018-19. "Anuario Estadístico del cine" - AnuarioEstadisticoCine20182019.pdf (mincultura.gov.co)

¹⁰⁸ Kemps Film TV Video (KFTV), 2022. "Sao Paulo extends 30% incentives for another year" - São Paulo extends 30% incentive for another year | KFTV

Piracy



Combating piracy: Collaboration between the industry and the government on measures to combat piracy would increase returns on investment and increase the amount of funding available for expansion. This could include:

- Increased research and development (R&D) in detection technologies, including the use of blockchain as a way to reduce content piracy.¹⁰⁹
- Well-designed regulations that enable operators to use technologies such as administrative blocking or blockchain to identify immediately the violation of intellectual property.

Regulatory environment



Regulation: The regulatory framework needs to be fit for purpose and aligned with technological advances and fast-changing requirements of the screen industries. It should be reviewed and updated on a regular basis, and designed in a way that benefits all players in the market. Given the dynamics of the market, principles-based regulations may be more suitable than rules-based regulations, as they provide greater flexibility. Rules-based regulation are often at risk of becoming outdated in fast-changing markets, whilst principles-based regulation can respond better to industry changes.¹¹⁰ A well-designed regulatory framework can help in the following areas:

- **Incentivizing the development of an efficient production ecosystem:** as mentioned above, production, infrastructure and other industry needs can be the object of government programs aiming at developing an efficient local production companies ecosystem.
- **Reducing barriers:** Reducing barriers to cooperation between broadcasters and VoD providers that restrict market growth such as laws to comply with national quotas and those that prohibit the cross-ownership of content between TV operators and producers.
- **Reducing administrative burden:** Simplifying the processes to facilitate the movement of people and goods necessary for production (approving work permits for actors and technical workers from production companies, as well as making the process of obtaining film equipment more flexible).

¹⁰⁹SMPTE, 2020. "Blockchain: A comprehensive solution for film production and distribution" - <https://www.smpete.org/blog/blockchain-comprehensive-solution-film-production-and-distribution>

¹¹⁰Ofcom, 2022. "Rule-based versus principle-based regulation – is there a clear front-runner?" - <https://www.kftv.com/news/2022/05/18/sao-paulos-film-and-av-company-spcone-announces-second-edition-of-cash-rebate>



CONCLUSION

Policymakers should consider the wider economic impact of the screen industries when considering policy interventions to support growth



Conclusion

The screen industries can be a key driver of economic growth in Latin America given the increasing global demand for high-quality local content. While the cultural importance of the screen industries is widely recognised, the wider economic impact is often less well understood because much of the spending by companies in the screen industries occurs in other industries. Across Argentina, Brazil, Colombia and Mexico, over two-thirds of total expenditure by the screen industries goes to other sectors within their supply chain, such as technical and artistic as well as administrative and financial activities.

Spending by companies in the screen industries can generate wider economic benefits along their diverse supply chains and also through increased household income. Additionally, many activities in the supply chain are dependent on human capital and support jobs inside and outside the creative industries. The screen industries also have the potential to create unique spillover effects that generate additional economic value, such as increased tourism to film locations.

The quantification of these wider economic benefits can help decision-making by policymakers, by complementing their understanding of the cultural impact of policies in the sector. This report has described how multipliers can be used to quantify the direct, indirect and induced impacts of increased spending in the screen industries. On average across the four countries (Argentina, Brazil, Mexico, Colombia) the report found that:

- An increase in spending of US\$10m by companies in the screen industries (i.e. direct expenditure) supports a further US\$6m – US\$9m of expenditure further along the supply chain and through the payment of higher wages (indirect expenditure impact).
- Additional spending in the screen industries leads to the creation of additional jobs – for every 100 people employed on a production, a further 50 - 70 people would be employed across the economy.
- The economic benefits would be even greater when taking into account the impact of higher household consumption due to increased wages, which would increase demand for and the production of goods and services across industries (induced expenditure impact).

Moreover, well-designed public policies and private sector support can help the screen industries overcome some of the most pressing challenges, such as skills shortages, infrastructure capacity limits, and piracy:

- **Investment in education:** To expand high-quality education programmes and vocational technical training programmes and support diversity in the industry.
- **Public-private partnerships:** To identify the skills gaps within the industry and design training programmes to close the gaps.
- **Production incentives:** To attract global producers to the region and/or to promote the growth of the national screen industries by providing discounts to production companies.
- **Business cases for infrastructure investments:** To modernise and expand existing production infrastructure.
- **Regulation:** To enhance cooperation between market players, reduce administrative burdens, and combat piracy by designing regulatory frameworks that are aligned with technological advances and the fast-changing nature of the screen industries.



APPENDIX

The following appendix provides a summary of the key figures for each of the countries included in this report.

The report draws on data from a number of sources including:

- Data from publically available online sources e.g. press reports and company records.
- Passport International EuroMonitor.
- The OECD Input Output tables.
- National statistical agencies, including (Instituto Brasileiro de Geografia e Estatística (IBGE) and National Institute of Statistics and Geography (INEGI).

The revenue estimates include radio and exclude theatrical distribution. Given the nature of the data, it is not possible to provide the revenue for the screen industries excluding radio. However, it is assumed that radio only accounts for a small share of the total revenue figure.

National statistical authorities use different classifications systems of economic sectors. While these classification systems are comparable overall, the classification of sub-sectors may differ. This could lead to the allocation of production revenues to sectors other than the audiovisual sector such as telecommunications.

Further details of the methodology used to estimate the multipliers are available at:

<https://www2.deloitte.com/mx/es/MultiplicadoresEconomicos.html>

www.deloitte.com/br/multiplicadoresaudiovisuais

www.deloitte.com/br/screenindustrymultipliers

Argentina

The size of the screen industries

- In 2021, Argentina's screen industries¹¹¹ generated total revenue of **ARS406bn** (US\$4,274m).
- Film making accounted for **ARS81,896m** (US\$861m) of revenue in 2021.¹¹²
- In 2021, Argentina spent around **ARS288bn** (US\$3,034m) on production content.¹¹³
- In 2018, the screen industries¹¹⁴ employed around **90,000** workers, equivalent to **0.45%** of the national labour force.¹¹⁵

SCREEN INDUSTRY REVENUE AND CONTENT SPEND, ARS MILLION (REAL TERMS BASED 2021 PRICES)

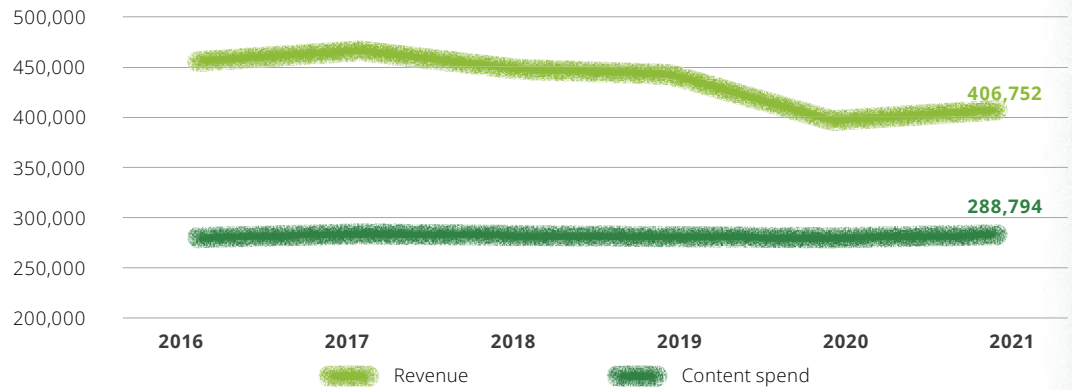


FIGURE 7: ECONOMIC MULTIPLIERS FOR THE SCREEN INDUSTRIES IN ARGENTINA

Country	Expenditure multiplier		GVA effect	GVA multiplier		Employment effect	Employment multiplier	
	Type I (indirect)	Type II (induced)	GVA per unit of local currency	Type I (indirect)	Type II (induced)	Per X of local currency units	Type I (indirect)	Type II (induced)
Argentina	1.859	2.959	0.495	1.888	3.027	0.00002 per ARS100	1.731	2.869

¹¹¹ Data point refers to the film, radio and TV industry.

¹¹² Passport – Euromonitor international, 2022. “Production turnover (US\$ Dollars) – Argentina”

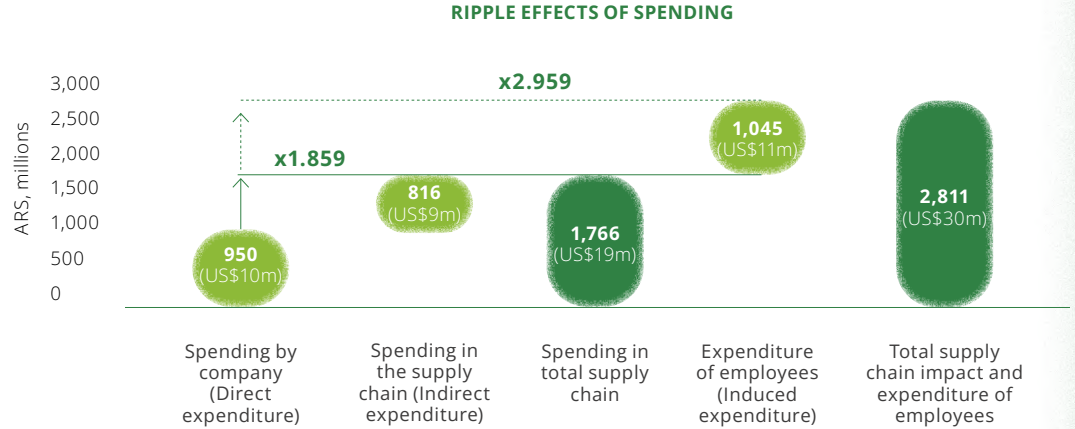
¹¹³ Content spend was estimated using the average profit margin of Brazil and Mexico which was then applied to Argentina's screen industries revenue.

¹¹⁴ Data point refers to the audiovisual, broadcasting and publishing industry. More recent data was not available.

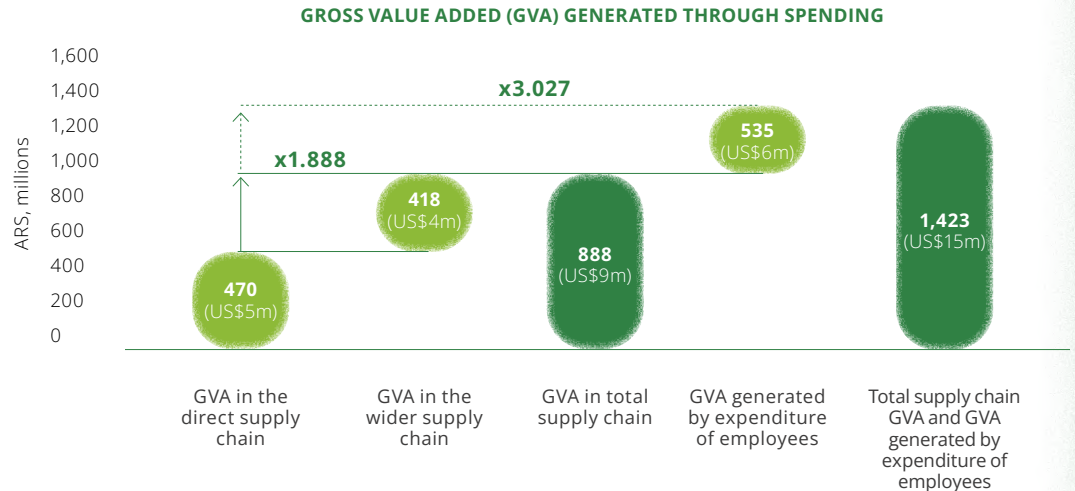
¹¹⁵ OECD, 2018. “Trade in employment (TiM) 2021 ed.” - Input-Output Tables (IOTs) 2021 ed. (oecd.org)

Argentina

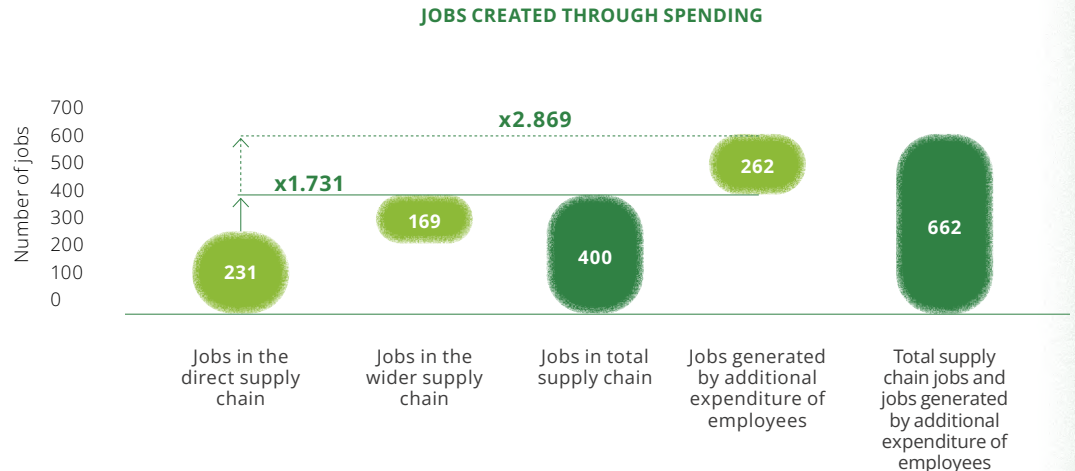
Expenditure: An increase in spending of **ARS950m** (US\$10m) in the screen industries (i.e. direct expenditure) generates a total expenditure of **ARS1,766m** (US\$19m) once the indirect impact on the supply chain (indirect expenditure) of **ARS816m** (US\$9m) is taken into account, based on a Type I multiplier. Total expenditure is even higher once the expenditure of employees (induced expenditure) based on a Type II multiplier - **ARS1,045m** (US\$11m) - is included. Total spending (direct, indirect plus induced) is **ARS2,811m** (US\$30m).



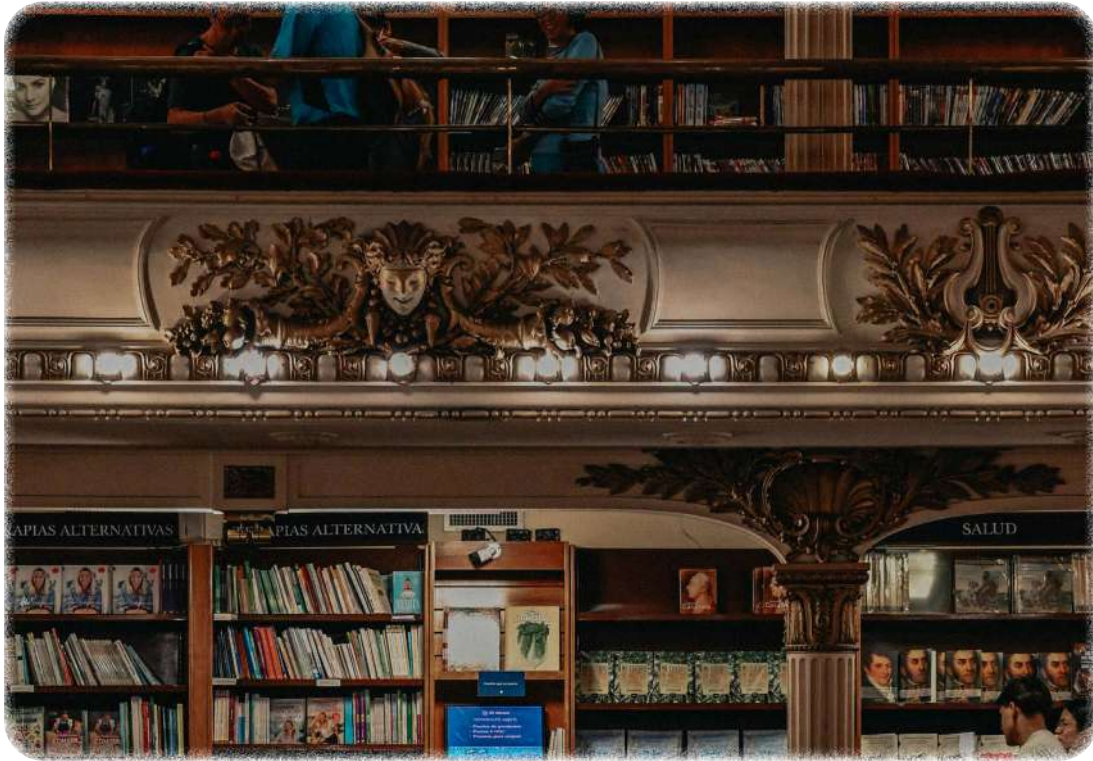
GVA: spending of **ARS950m** (US\$10m) in the screen industries generates **ARS470m** (US\$5m) of added value in the supply chain - i.e., $0.495 \times \text{ARS950m}$ ($0.495 \times \text{US\$10m}$). This in turn leads to **ARS418m** (US\$4m) of indirect GVA - i.e., 0.888 of ARS470m ($0.888 \times \text{US\$5m}$) or total GVA of **ARS888m** (US\$9m) - i.e., $1.888 \times \text{ARS470m}$ ($1.888 \times \text{US\$5m}$) once the indirect impact on the supply chain is taken into account. Total GVA is even higher once the induced impact on increased consumption due to the expenditure of employees (induced expenditure) is included, **ARS1,423m** (US\$15m) - i.e., $3.027 \times \text{ARS470m}$ (US\$5m).



Employment: Spending of **ARS950m** (US\$10m) in the screen industries creates **231 jobs** in the supply chain - i.e. $(0.243 / \text{ARS1m}) \times \text{ARS950m}$. This in turn leads to **169 additional jobs** - i.e., 0.731×231 FTEs, or a total of **400 jobs** - i.e., 1.731×231 FTEs once the indirect impact on the supply chain is taken into account. Total employment is even higher once the induced impact of increased consumption due to expenditure by employees (induced expenditure) is included, **662 jobs** - i.e., 2.869×231 FTEs.



Example of spillover effects



INCREASED INTEREST IN BOOKS POST FILM RELEASE

'The Wrath of God', a psychological thriller directed by the Argentine director Sebastián Schindel, is a film adaptation of the Argentine book 'La ira de Dios' by Guillermo Martínez. There was a spike in the number of people showing interest in the book shortly after the film was released on Netflix on 15th June 2022. Searches peaked at 33 times higher in the week after the release compared to the average number of weekly searches in 2021.¹¹⁶ Based on research by Lehmann (2016) into search trends, the increase in search activity probably led to an increase in sales of the book.¹¹⁷

¹¹⁶ GoogleTrends, 2022. "The Book of Murder by Guillermo Martinez" - The Book of Murder - Explore - Google Trends

¹¹⁷ University of Twente Student theses, 2016. "Predicting the sales figures of TVs using data from Google Trends" - Predicting the sales figures of TVs using data from Google Trends - University of Twente Student Theses (utwente.nl)

Brazil

The size of the screen industries

- In 2021, Brazil's screen industries¹¹⁸ generated total revenue of **BRL56,937m** (US\$10,554m).¹¹⁹
- Film making accounted for **BRL6,182m** (US\$1,146m) of revenue in 2021.¹²⁰
- In 2021, Brazil spent around **BRL52,180m** (US\$9,672m) on production content.^{121, 122}
- In 2020, the screen industries employed around **111,331** workers, equivalent to **0.12%** of the total national labour force.¹²³

SCREEN INDUSTRY REVENUE AND CONTENT SPEND, BRL MILLION (REAL TERMS BASED 2021 PRICES)

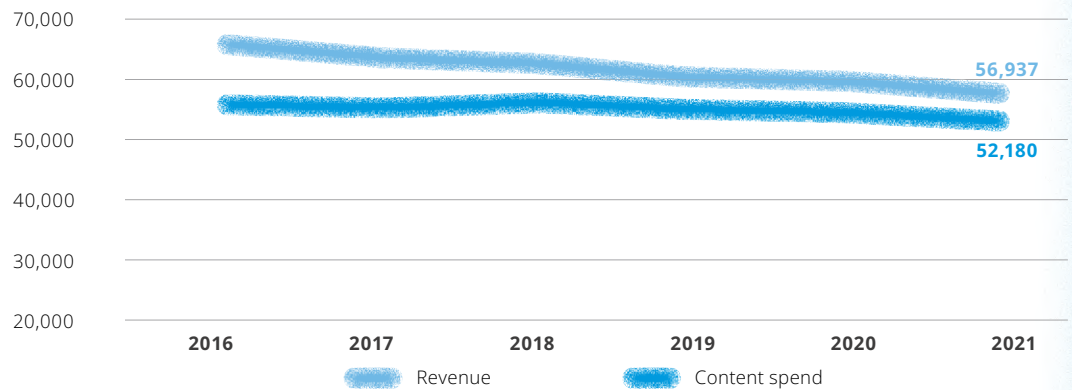


FIGURE 8: ECONOMIC MULTIPLIERS FOR THE SCREEN INDUSTRIES IN BRAZIL

Country	Expenditure multiplier		GVA effect	GVA multiplier		Employment effect	Employment multiplier	
	Type I (indirect)	Type II (induced)	GVA per unit of local currency	Type I (indirect)	Type II (induced)	Per X of local currency units	Type I (indirect)	Type II (induced)
Brazil	1.769	2.935	0.547	1.702	2.742	0.0009 per BRL100	1.538	2.492

¹¹⁸ Data point refers to the 'Film making, Radio, and TV' industry.

¹¹⁹ The decline of the Brazilian screen industries over the past year was driven mainly by reductions in pay TV subscribers, public investment, and box office revenues due to COVID-19.

¹²⁰ Passport – Euromonitor international, 2022. "Production turnover (US\$ Dollars) – Brazil"

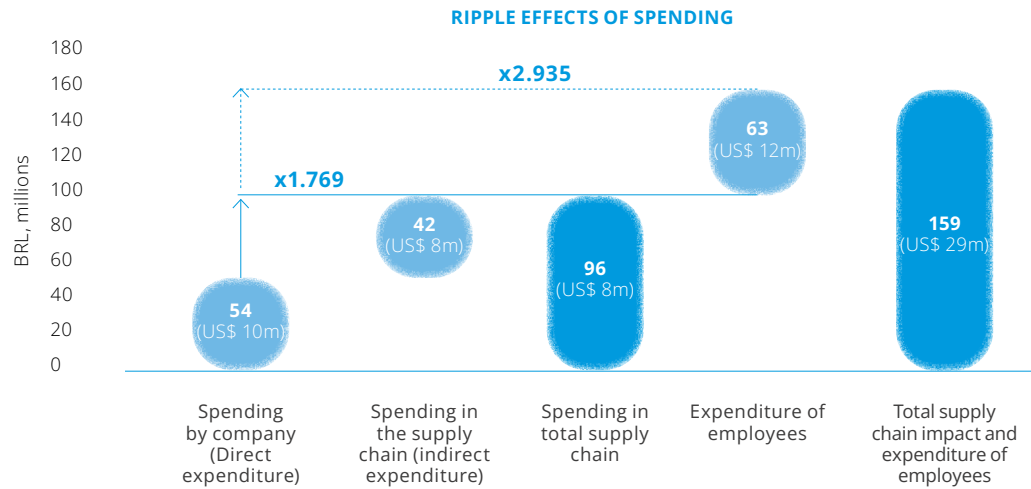
¹²¹ Passport Euromonitor international, 2022 "Total cost (US\$ Dollar) and profit margin (%) of the Filmmaking, Radio and TV industry – Brazil"

¹²² Production spend data is based on total cost of the 'Film making, Radio and TV' industry.

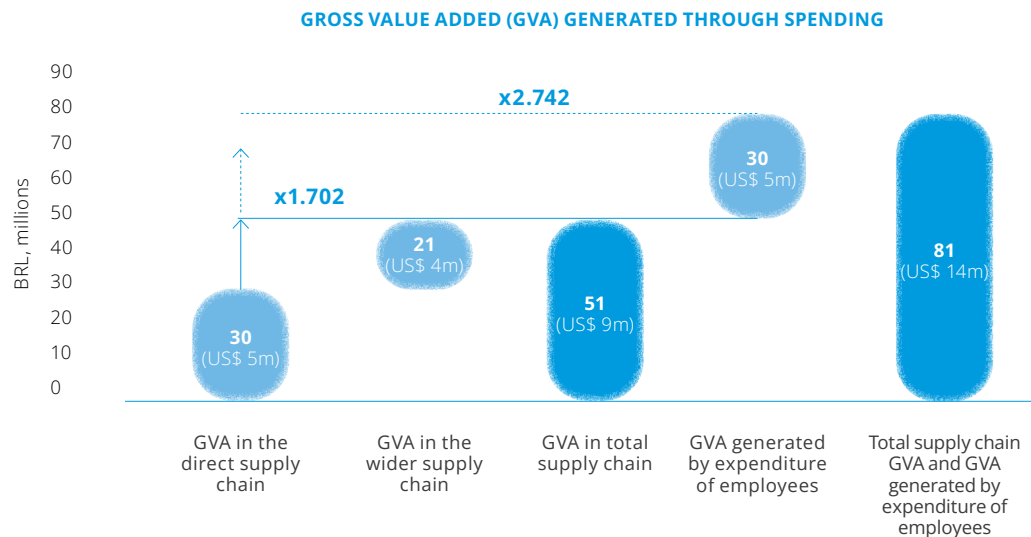
¹²³ Instituto Brasileiro de Geografia e Estatística (IBGE), 2020. "Pesquisa Anual de Servicos" <https://www.ibge.gov.br/en/ibge-search.html?searchword=unemployment&searchphrase=all&Itemid=7695>

Brazil

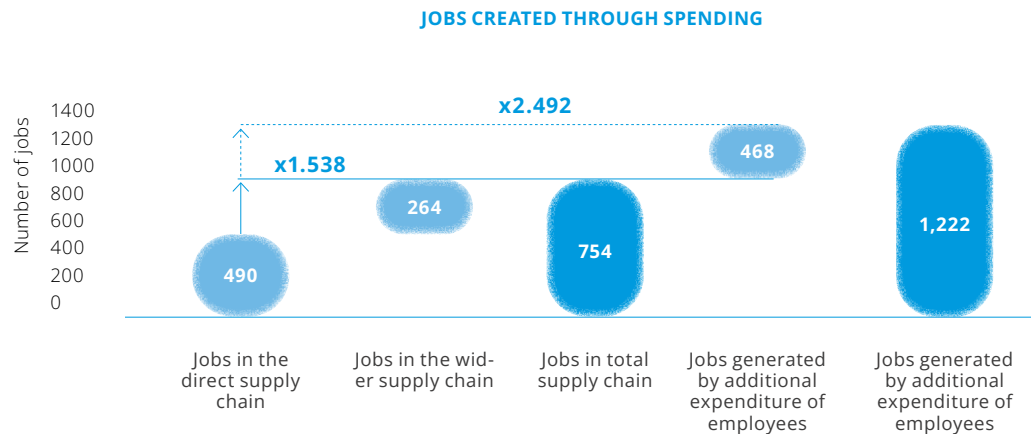
Expenditure: An increase in spending of **BRL54m** (US\$10m) in the screen industries (i.e. direct expenditure) generates a total expenditure of **BRL96m** (US\$18m) once the impact on the supply chain (indirect expenditure) of **BRL42m** (US\$8m) is taken into account, based on a Type I multiplier. Total expenditure is even higher once the expenditure of employees (induced expenditure) based on a Type II multiplier - **BRL63m** (US\$12m) - is included. Total spending (direct, indirect plus induced) is **BRL159m** (US\$29m).



GVA: Additional spending of **BRL54m** (US\$10m) in the screen industries generates **BRL30m** (US\$5m) of added value in the supply chain - i.e., $0.547 \times \text{BRL54m}$ ($0.547 \times \text{US\$10m}$). This in turn leads to an increase of **BRL21m** (US\$4m) in indirect GVA - i.e., $0.702 \times \text{BRL30m}$ ($0.702 \times \text{US\$5m}$) and in total GVA of **BRL51m** (US\$9m) - i.e., $1.702 \times \text{BRL30m}$ ($1.702 \times \text{US\$5m}$) once the indirect impact on the supply chain is taken into account. Total GVA is even higher once the induced impact on increased consumption due to the expenditure of employees (induced expenditure) is included, **BRL81m** (US\$14m) - i.e., $2.742 \times \text{BRL30m}$ ($2.742 \times \text{US\$5m}$).



Employment: An increase in spending of **BRL54m** (US\$10m) in the screen industries creates **490 jobs** in the supply chain - i.e., $(0.908 / \text{BRL100,000}) \times \text{BRL54m}$. This in turn leads to **264 additional jobs** - i.e., 0.538×490 FTEs, or a total of **754 jobs** - i.e., 1.538×490 FTEs once the indirect impact on the supply chain is taken into account. Total employment is even higher once the induced impact of increased consumption due to the expenditure of employees (induced expenditure) is included, **1,222 jobs** - i.e., 2.492×490 FTEs.



Example of spillover effects



SOAP OPERAS INCREASE TOURISM IN WEST BRAZIL

The soap opera 'Pantanal', set in the wetland area of the same name, was first released in 1990 and was associated with an increase in the numbers of Brazilian tourists to the region. A remake of the soap opera was launched in March 2022 and, according to data from the Mato Grosso do Sul Tourism Foundation, tourist demand has increased by 100% since the show was launched.¹²⁴ Similarly, research by Kayak found that searches for the Tocantins region increased by 80% following the launch of the soap opera 'O Outro Lado do Paraíso'.¹²⁵

¹²⁴ Glamour Viagem, 2022. "Pantanal, além da novela: como a trama impacta o turismo na região?" - Pantanal, além da novela: como a trama impacta o turismo na região? | Viagem | Glamour (globo.com)

¹²⁵ Statista, 2018. "Leading soap operas in Brazil as of 2018, based on travel destination online search growth rate" - <https://www.statista.com/statistics/978686/brazil-online-search-travel-destinations-soap-operas/>

Colombia

The size of the screen industries

- In 2021, Colombia's screen industries¹²² generated total revenue of **COP8,633bn** (US\$2,307m).¹²³
- Film making accounted for **COP822bn** (US\$220m) of revenue in 2021.
- In 2021, Colombia spent around **COP7,001m** (US\$1,870m) on production content.^{124, 125}
- In 2021, the screen industries employed around **47,724** workers, equivalent to **0.18%** of the total national labour force.¹²⁶

SCREEN INDUSTRY REVENUE AND CONTENT SPEND, COP BILLION (REAL TERMS BASED 2021 PRICES)

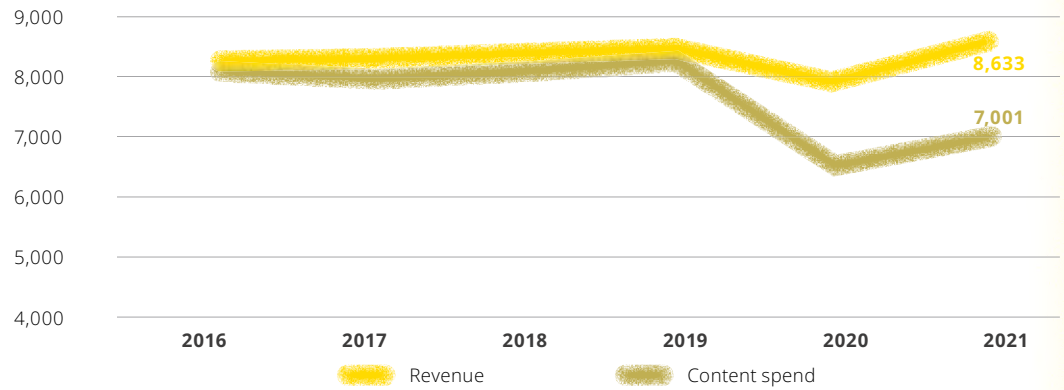


FIGURE 9: ECONOMIC MULTIPLIERS FOR THE SCREEN INDUSTRIES IN COLOMBIA

Country	Expenditure multiplier		GVA effect	GVA multiplier		Employment effect	Employment multiplier	
	Type I (indirect)	Type II (induced)	GVA per unit of local currency	Type I (indirect)	Type II (induced)	Per X of local currency units	Type I (indirect)	Type II (induced)
Colombia	1.734	2.747	0.576	1.700	2.621	0.018 per COP1m	1.489	2.227

¹²² Data point refers to the 'Film making, Radio, and TV' industry.

¹²³ Passport – Euromonitor international, 2022. "Production turnover (US\$ Dollars) – Colombia"

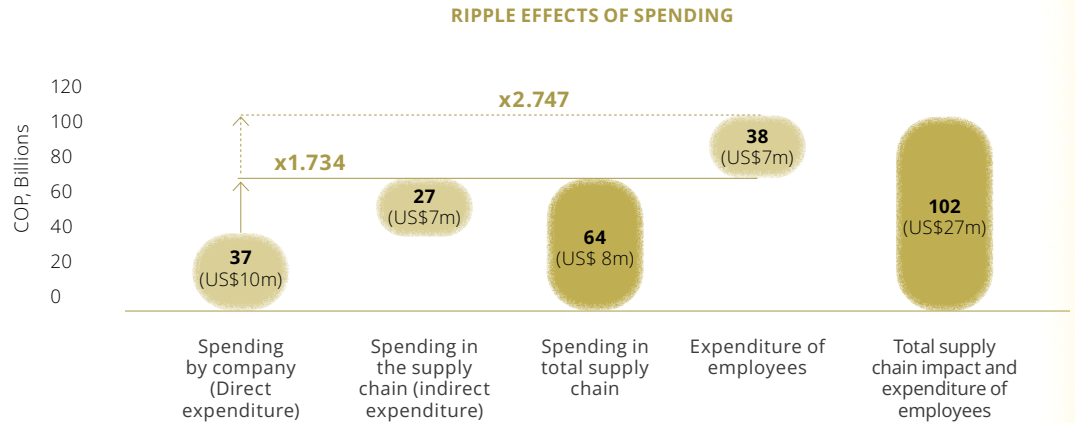
¹²⁴ DANE Información para todos, 2021. "Cuadro 15 - Cuenta de producción y generación del ingreso" - <https://www.dane.gov.co/index.php/138-espanol/307-dane-para-todos>

¹²⁵ Production spend data refers to the audiovisual sector which covers film making, video, TV programmes and TV commercials.

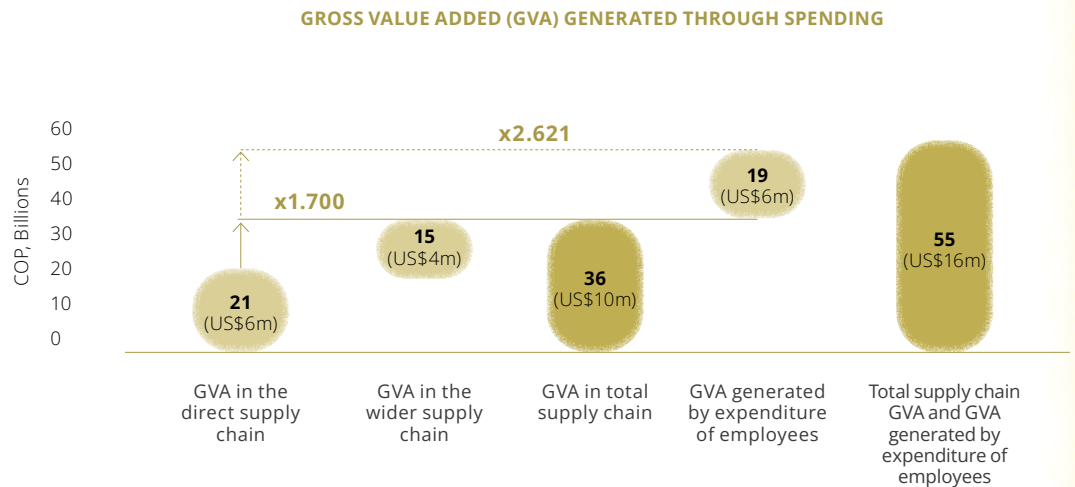
¹²⁶ DANE Información para todos, 2021. "Cuentas nacionales" - <https://www.dane.gov.co/index.php/138-espanol/307-dane-para-todos>

Colombia

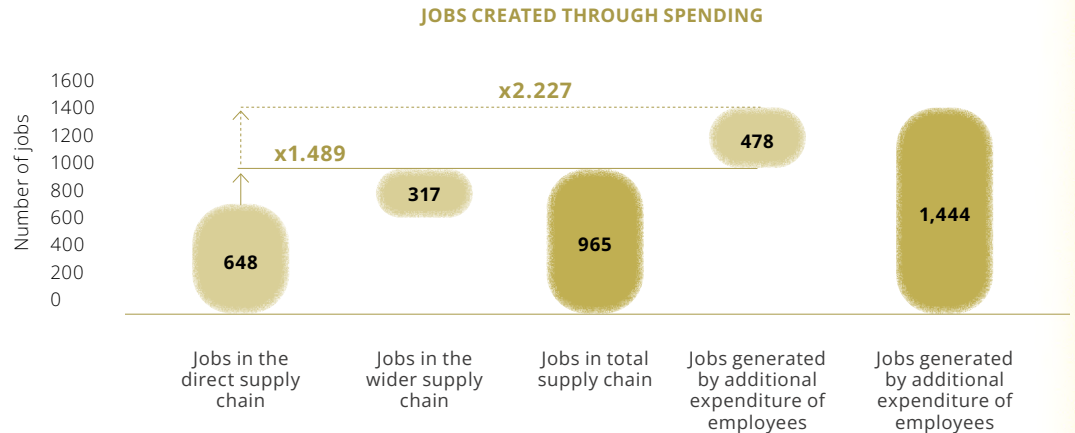
Expenditure: An increase in spending of **COP37bn** (US\$10m) in the screen industries (i.e. direct expenditure) generates a total expenditure of **COP64bn** (US\$17m) once the impact on the supply chain (indirect expenditure) of **COP27bn** (US\$7m) is taken into account, based on a Type 1 multiplier. Total expenditure is even higher once the expenditure of employees (induced expenditure) based on a Type II multiplier - **COP38bn** (US\$10m) - is included. Total spending (direct, indirect plus induced) is **COP102bn** (US\$27m).



GVA: An increase in spending of **COP37bn** (US\$10m) in the screen industries generates **COP21bn** (US\$6m) of added value in the supply chain - i.e., $0.576 \times \text{COP37bn}$ ($0.576 \times \text{US\$10m}$). This in turn leads to **COP15bn** (US\$4m) of additional indirect GVA - i.e., 0.700 of **COP21bn** ($0.700 \times \text{US\$6m}$) or total GVA of **COP36bn** (US\$10m) - i.e., $1.700 \times \text{COP21bn}$ ($1.700 \times \text{US\$6m}$) once the indirect impact on the supply chain is taken into account. Total GVA is even higher once the induced impact on increased consumption due to the expenditure of employees (induced expenditure) is included, **COP55bn** (US\$16m) - i.e., $2.621 \times \text{COP21bn}$ (US\$6m).



Employment: An increase in spending of **COP37bn** (US\$10m) in the screen industries creates **648 jobs** in the supply chain - i.e., $(0.175 / \text{COP10m}) \times \text{COP37bn}$. This in turn leads to **317 additional jobs** - i.e., 0.489×648 FTEs, or a total of **965 jobs** - i.e., 1.489×648 FTEs once the indirect impact on the supply chain is taken into account. Total employment is even higher once the induced impact of increased consumption due to the expenditure of employees (induced expenditure) is included, **1,444 jobs** - i.e., 2.227×648 FTEs.



Example of spillover effects



‘ENCANTO’ HAS THE POTENTIAL TO BOOST TOURISM IN COLOMBIA

The Disney film ‘Encanto’ (2021), which tells the story of a young Colombian girl, was a success both in Colombia and around the world. It features the landscape, biodiversity, festive music and culture that Colombia has to offer. The Colombian government is using Encanto’s worldwide reach to promote tourism and investment in the country.¹³¹ For example, Colombia’s embassies in other countries have organised special screenings of the film for tour operators and journalists. Moreover, Encanto-themed cruise ships are arriving in Cartagena, a Colombian port city. Around 2,400 transit passengers arrive per cruise ship, which could generate an economic impact of around COP1.2bn (US\$300,000) in Cartagena and further translate into more opportunities for local tourism.¹³²

¹³¹ The World, 2021. “Disney’s ‘Encanto’ depicts Colombia as magical place full of possibilities – a welcome change for local audiences” - Disney’s ‘Encanto’ depicts Colombia as a magical place full of possibilities — a welcome change for local audiences | The World from PRX

¹³² Porthole Cruise and Travel, 2022. “Ruby princess calls on Cartagena for the first time” - Ruby Princess Calls on Cartagena for the First Time | Porthole Cruise and Travel News

Mexico

The size of the screen industries

- In 2021, Mexico's screen industries¹³³ generated total revenue of **MXN61,690m** (US\$3,041m).¹³⁴
- Film making accounted for **MXN14,769m** (US\$728m) of revenue and is **forecast to grow by about 6-7% each year until 2025**.¹³⁵
- In 2021, Mexico spent about **MXN 31,070m** (US\$1,532m) on production content.^{136, 137}
- In 2021, the screen industries employed about **31,600** workers, equivalent to **0.06%** of the total national labour force.¹³⁸

SCREEN INDUSTRY REVENUE AND CONTENT SPEND, MXN MILLION (REAL TERMS BASED 2021 PRICES)

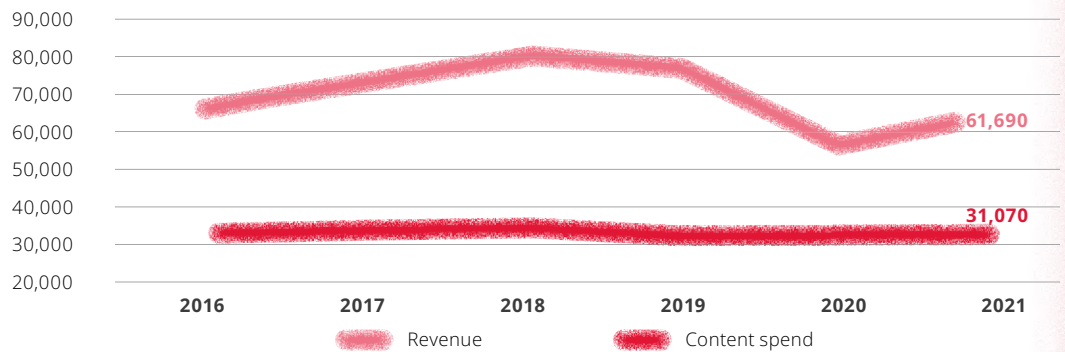


FIGURE 10: ECONOMIC MULTIPLIERS FOR THE SCREEN INDUSTRIES IN MEXICO

Country	Expenditure multiplier		GVA effect	GVA multiplier		Employment effect	Employment multiplier	
	Type I (indirect)	Type II (induced)	GVA per unit of local currency	Type I (indirect)	Type II (induced)	Per X of local currency units	Type I (indirect)	Type II (induced)
Mexico	1.635	2.188	0.618	1.599	2.109	0.0001 per MXN100	1.661	2.120

¹³³ Data point refers to film, radio, and TV industry.

¹³⁴ Passport – Euromonitor international, 2022. "Production turnover (US\$ Dollars) – Mexico"

¹³⁵ Passport – Euromonitor international, 2021. "Radio and TV in Mexico: ISIC 9213"

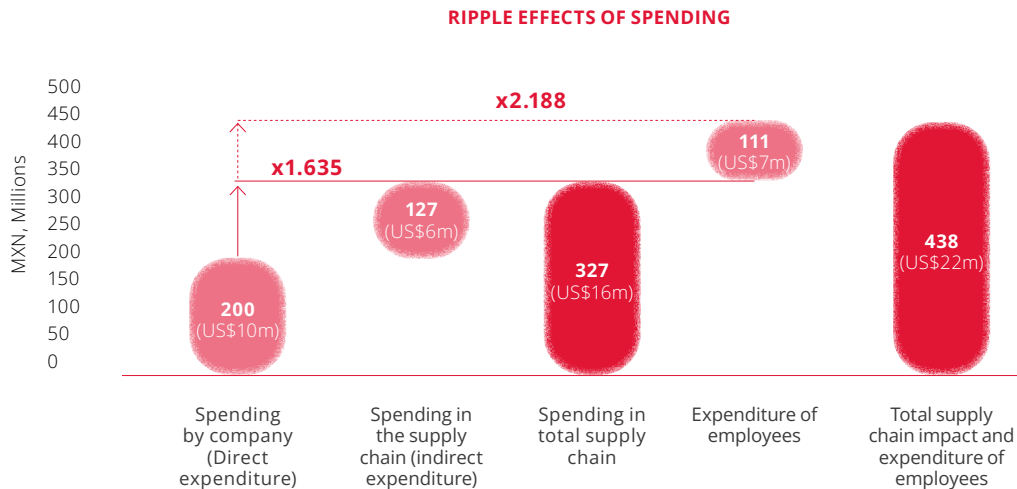
¹³⁶ Passport – Euromonitor international, 2021. "Total cost (US\$ Dollar) and profit margin (%) of the Filmmaking, Radio and TV industry – Mexico"

¹³⁷ Production spend data is based on total cost of the 'Filmmaking, Radio and TV' industry.

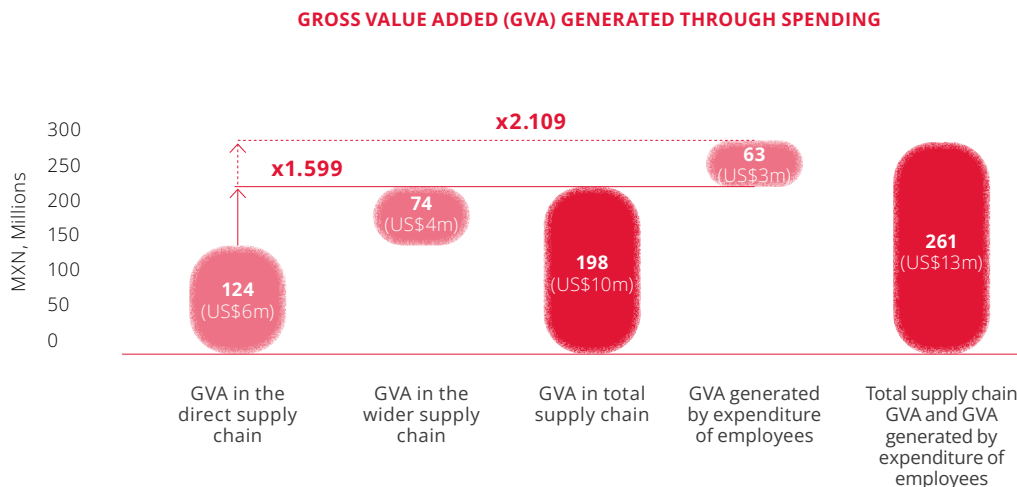
¹³⁸ Passport – Euromonitor international, 2021. "Film, radio, and TV – Employment in Mexico"

Mexico

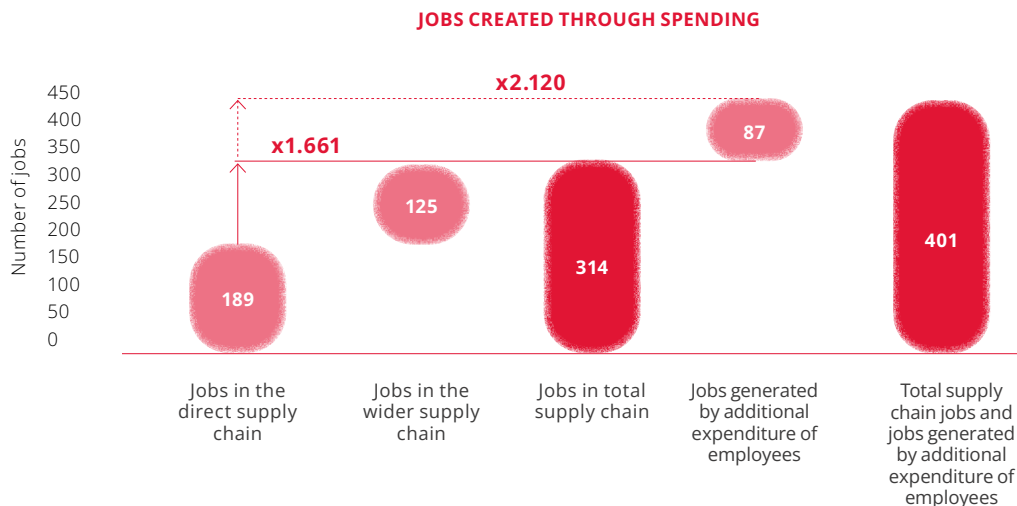
Expenditure: An increase in spending of **MXN200m** (US\$10m) in the screen industries (i.e. direct expenditure) generates a total expenditure of **MXN327m** (US\$16m) once the impact on the supply chain (indirect expenditure) of **MXN127m** (US\$6m) is taken into account, based on a Type I multiplier. Total expenditure is even higher once the expenditure of employees (induced expenditure) based on a Type II multiplier - **MXN111m** (US\$6m) - is included. Total spending (direct, indirect plus induced) is **MXN438m** (US\$22m).



GVA: An increase in spending of **MXN200m** (US\$10m) in the screen industries generates **MXN124m** (US\$6m) of added value in the supply chain - i.e., $0.618 \times \text{MXN}200\text{m}$ ($0.618 \times \text{US}\$10\text{m}$). This in turn leads to **MXN74m** (US\$4m) of indirect GVA - i.e., $0.599 \times \text{MXN}124\text{m}$ ($0.599 \times \text{US}\$6\text{m}$), or total GVA of **MXN198m** (US\$10m) - i.e., $1.599 \times \text{MXN}124\text{m}$ ($1.599 \times \text{US}\$6\text{m}$) once the indirect impact on the supply chain is taken into account. Total GVA is even higher once the induced impact on increased consumption is included, **MXN261m** (US\$13m) - i.e., $2.109 \times \text{MXN}124\text{m}$ ($2.109 \times \text{US}\$6\text{m}$).



Employment: An increase in spending of **MXN200m** (US\$10m) in the screen industries creates **189 jobs** in the supply chain - i.e., $(0.947 / \text{MXN}1\text{m}) \times \text{MXN}200\text{m}$. This in turn leads to **125 additional jobs** - i.e., 0.661×189 FTEs, or a total of **314 jobs** - i.e., 1.661×189 FTEs once the indirect impact on the supply chain is taken into account. Total employment is even higher once the induced impact of increased consumption is included, **401 jobs** - i.e., 2.120×189 FTEs.



Example of spillover effects



INCREASED TOURISM IN MEXICO

The opening sequence of the James Bond film 'Spectre' (2015) was filmed in Mexico City. In the first scene, James Bond makes his way through the Day of the Dead parade. The Day of the Dead is one of the most important traditional festivities in Mexico, but the parade showcased in the film was a fictional event.¹³⁹ However, after the success of the film and heightened public interest in the Day of the Dead, Mexico City's local government set up an annual parade similar to the one in 'Spectre'. In 2016 a total of around 1,000 people, including costumed actors, dancers and acrobats, were involved in staging the real-life parade. In the year following the film release and the creation of the Day of the Dead parade, Mexico City experienced a 9.4% increase in international tourists, which may have been partly attributable to the film.¹⁴⁰

¹³⁹El Horizonte, 2021. "James Bond y su influencia en el Desfile de Día de Muertos" - James Bond y su influencia en el Desfile de Día de Muertos (elhorizonte.mx)

¹⁴⁰OpenEdition Journals, 2021. "Travel-inspiring Skeletons in Spectre and Coco – Film Tourism and the Día de Muertos in Mexico" - Travel-inspiring Skeletons in Spectre and Coco – Film Tourism and the Día de Muertos in Mexico (openedition.org)



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- Pag. 34** Guillermo del Toro speaking at the 2013 WonderCon at the Anaheim Convention Center in Anaheim, California. Gage Skidmore. Wikimedia Commons. [https://commons.wikimedia.org/wiki/File:Guillermo_del_Toro_\(8609587706\).jpg](https://commons.wikimedia.org/wiki/File:Guillermo_del_Toro_(8609587706).jpg)
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Born as a DVD rental company in 1997, today, Netflix is the world's leading online entertainment service. It is available to millions of members in over 190 countries around the world, offering TV series, feature films, and documentaries and mobile games across a wide variety of genres, languages, and devices. Subtitles, dubbing, and audio descriptions are available in 35 languages for the vast majority of the titles on the service. Members can watch as much as they want, anytime, anywhere, on any internet-connected device. They can play, pause, and resume watching with the option to cancel at any time.

Editors: Alejandra Luzardo, Najma Rajah

Designers: Felicidad Pública

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