

# THE ECONOMIC IMPACT OF ONLINE CURATED CONTENT SERVICES IN INDONESIA



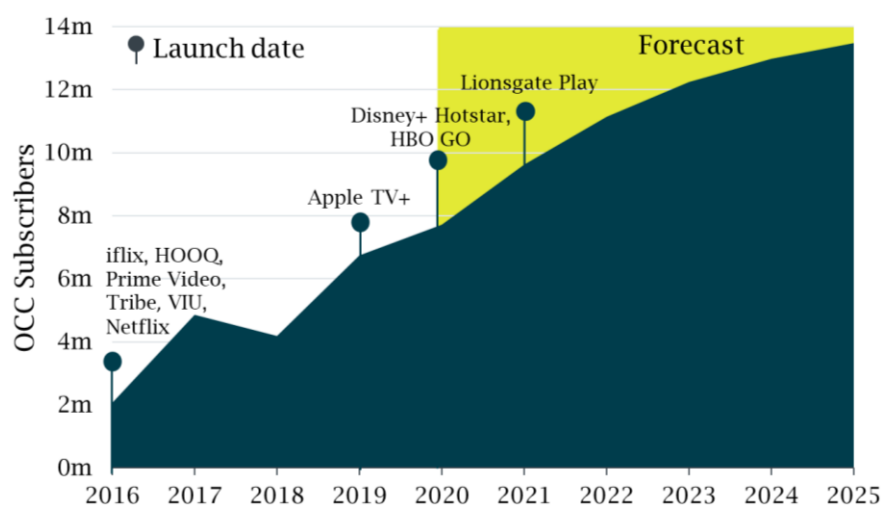
2021

# THE ECONOMIC IMPACT OF ONLINE CURATED CONTENT SERVICES IN INDONESIA

## 1. OCC takes off in Indonesia

Indonesia supports a vibrant Online Curated Content (OCC)\* sector with consumers spoilt for choice of services. The popularity of the services, and the local content they offer, has been growing and there were nearly **8m** Indonesians subscribed to OCC services in 2020 (Figure 1).<sup>1</sup> In addition, **75%** of internet users in Indonesia use OCC at least once a week,<sup>2</sup> spending **50%** of their time on OCC services watching local content.<sup>3</sup>

**FIGURE 1 GROWTH OF OCC SUBSCRIBERS OVER TIME**



Source: Ampere

Note: OCC subscribers include any OCC subscription customers that pay a fee. Launch date is the year the service could be first used in Indonesia. Figures from 2021 are forecast

OCC related revenue is increasing. Revenue generated by Indonesia's broadcasting and online video sector grew by **44%** between 2016 and 2019 following the entry of OCC providers including local players such as Vidio, regional providers such as Viu and international providers including Netflix and AppleTV+.

\* The term Online Curated Content refers to professional and curated online video content and does not include user-generated platforms such as YouTube. Alternative terms can be used to describe Online Curated Content services, including direct-to-consumer services (DTC) and video on-demand (VOD).

## EXECUTIVE SUMMARY

This White Paper summarises research Frontier Economics has undertaken into the economic impact of protectionist policies in video content production. It also highlights the impact that OCC providers have in Indonesia, and the implications for policymakers who wish to encourage and reap the benefits of such investments.

**Online Curated Content (OCC) services have important direct and indirect economic effects on the country's audiovisual (AV) industry.** OCC providers make significant investments in Indonesian content and the AV industry, creating jobs and promoting local content. OCC services are in high demand from consumers, who especially prize domestic content. This drives investment by OCC providers in high-quality productions made in Indonesia, that they then showcase to global audiences.

**These investments bring benefits to the economy and society more broadly.** Investments in training or infrastructure spill over to the AV sector as a whole. They also spur tourism, enhance Indonesia's global reputation and support social goals.

**To promote made-in-Indonesia productions, policies should focus on increasing the supply of investment, not decreasing the incentives to create local content.** Some policies (e.g. tax incentives) can significantly boost investment, but others can act as deterrents.

We have found that tough policy restrictions *reduce* broadcasting exports and are associated with lower investment in content.

The sector has been further strengthened by the recent launches of Disney+ Hotstar, HBO GO and Gojek's GoPlay. Others, such as Starz's Lionsgate Play, are expected to be available soon. Since 2016, the revenue of OCC services has risen to **\$0.1bn (IDR1.4trn)<sup>4</sup>** and it is projected to rise to **\$0.5bn (IDR6.6trn)** by 2025.<sup>6</sup>

The popularity of OCC also helps fuel demand for the internet in terms of increased data usage, increased speeds<sup>7</sup> and more connections.<sup>8-9</sup> This brings additional benefits associated with better internet connection such as, higher productivity and increased connectivity. Indonesia is a mobile-first market and internet penetration is on the rise. This has benefitted OCC services, but OCC services are also encouraging people to use the internet more. Research has shown that the proportion of the population using the internet has almost doubled since the entry of OCC providers in 2016; **48%** of Indonesians now use the internet, up from **25%** in 2016.<sup>10</sup>

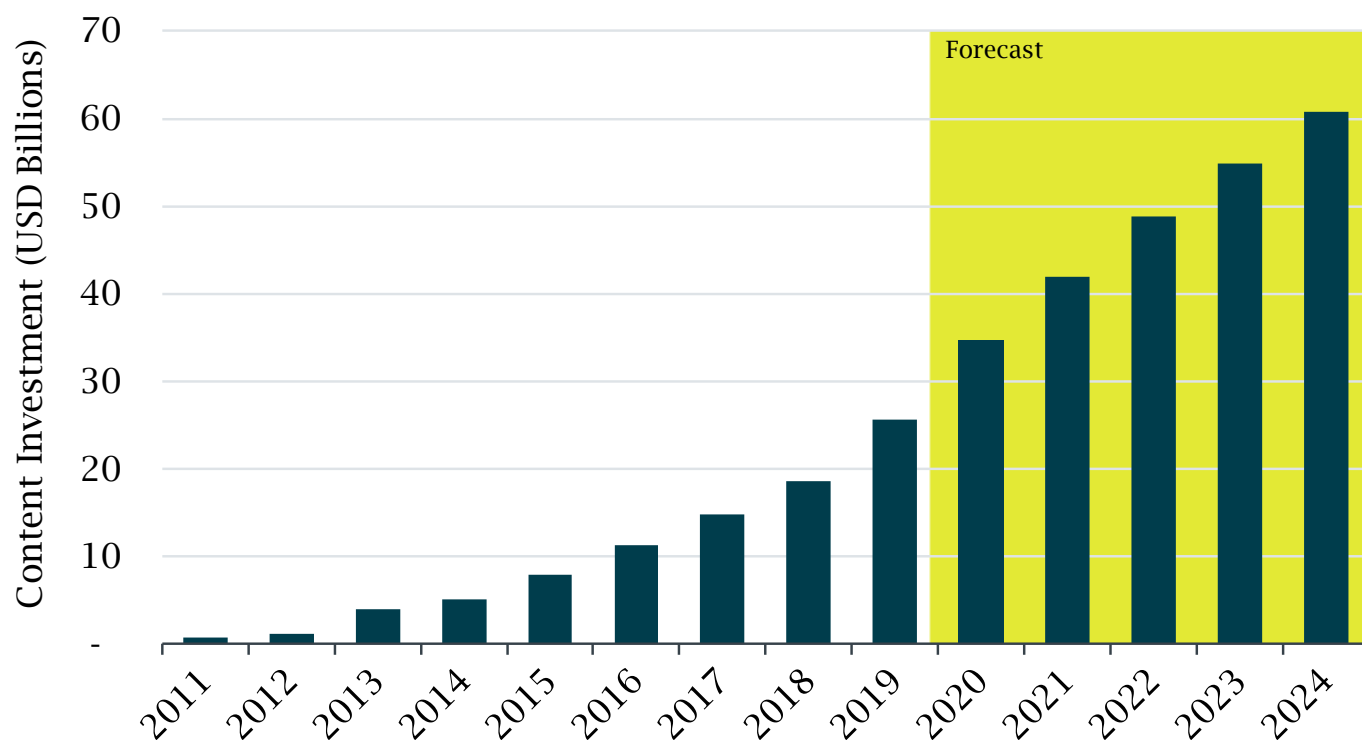


## GLOBAL INVESTMENT, LOCAL IMPACT

### 2. OCC services generate creative content boom

OCC providers invest heavily in content to support their services globally. In 2019, they directly invested **\$25.7bn (IDR364trn)** in OCC content worldwide, including original and licensed titles. This sum is likely to soar to **\$61bn (IDR863trn)** by 2024.

**FIGURE 2 GLOBAL OCC CONTENT INVESTMENT 2011 TO 2024**



Source: Ampere

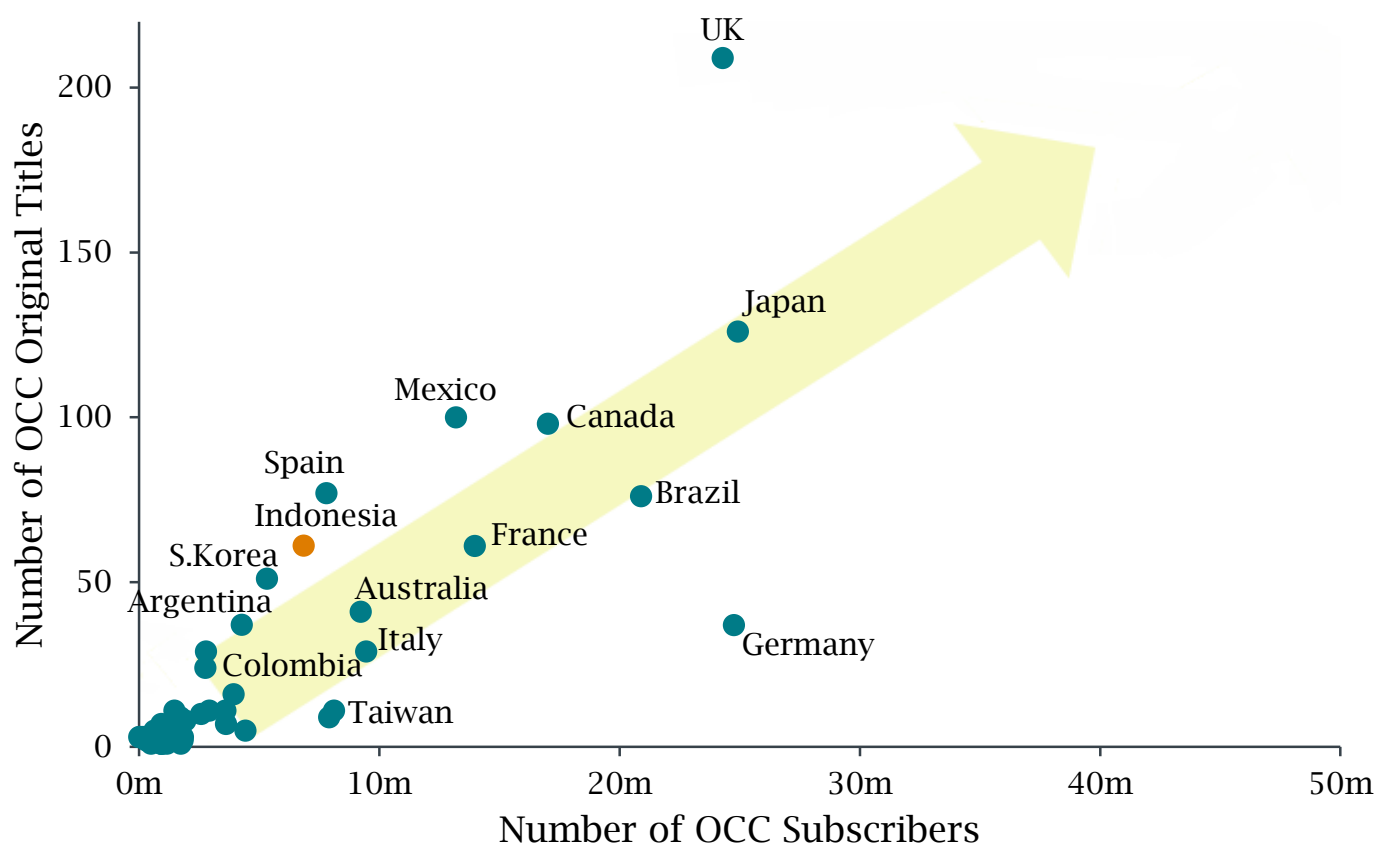
The significant increase in content investment in the pipeline includes:

- The Walt Disney Company's plans to invest **\$14bn-16bn (IDR198trn-226trn)** per year in global OCC content by 2024;
- ViacomCBS's plans to ramp up investment in OCC content to **\$5bn (IDR71trn)** in 2024;<sup>11</sup>
- WarnerMedia's parent company, AT&T's, pledge to invest **\$4bn (IDR57trn)** in HBO Max in the three years through 2022;<sup>12</sup> and,
- Netflix will spend **\$28bn (IDR396trn)** a year by 2028.<sup>13</sup>

### 3. OCC services are investing in Indonesian content

Frontier Economics' research aligns with previous work that has found that there is strong consumer demand for local content, and this demand drives local content production. OCC providers want to meet this demand and are investing locally through original productions and licensing local titles. As a country's subscriptions grow, so do the incentives to produce content from the country. Notably, the geographic distribution of OCC investment in original titles is broadly proportionate to each country's number of global OCC subscribers (Figure 3).

**FIGURE 3 RELATIONSHIP BETWEEN OCC SUBSCRIBERS AND COUNTRY SPECIFIC OCC "ORIGINAL" TITLES**



Source: Frontier analysis of Ampere and Media Partners Asia data

Note: OCC subscribers include any global subscription OCC customers in 2019 who paid a fee. A title has been included as an OCC original title if it was produced by the OCC service and released only on the OCC service. The sample of titles reflects the catalogues of OCC providers available in the following countries: Argentina, Brazil, Canada, Colombia, India, Indonesia, Mexico, Korea and Taiwan. OCC services included in the sample of titles are: Netflix (19% of titles), Amazon Prime Video (15%), Hotstar (8%), Wayve (8%), iflix (5%), Eros Now (5%), WatchaPlay (5%), HamiVideo (4%), Hooq (4%), Claro Video (3%), friDay (3%), myVideo (3%), Looke (3%), SonyLiv (2%), VIU (2%). Others (inc. Globo Play, CraveTV, Vidio and Crunchyroll - 11%). The data includes content titles that were available between June 2017 and April 2020, and an additional set of titles that were available in October 2020 in Indonesia, so does not reflect the most recent releases. All countries that have had an OCC original title produced in their country are included in the analysis. China has been excluded as data was not available. Note that USA and India are not included in the figure since they are outside the limits of the scale. See technical annex for further detail.

It is important to note that leading providers invest in local content, and the local industry, not only for their OCC services, but for all their channels, including linear and theatrical distribution. In 2019, The Walt Disney Company, NBCU, WarnerMedia and ViacomCBS collectively poured **\$45bn (IDR637trn)** into content spending and creation globally (excluding sports) across their distribution channels, which they will partly monetise on their OCC services (Disney+, Peacock, HBO Max/HBO GO and Paramount+ respectively).

With subscriber numbers and demand for OCC surging, providers have an incentive to keep developing the content industry in Indonesia and the skilled expertise to support it.

- To support Disney+Hotstar, The Walt Disney Company has signed multi-year content supply agreements with leading Indonesian studios including Kharisma Starvision Plus, Falcon and MD Pictures. The agreements include **300** pieces of local content to be produced in the next few years.<sup>14</sup> The OCC service already offers over **250** local Indonesian films to subscribers.<sup>15</sup>
- Viu invested in **80** Viu original titles in 2019. This included productions from Hong Kong, Malaysia, Thailand, Indonesia, India, the Philippines and the Middle East.<sup>16</sup>
- Local player Vidio focuses on local Indonesian original content alongside premium sport. Since 2019, it has launched several original series and Vidio is aiming to continue to produce local content in the future.<sup>17</sup>
- OCC service iQiyi has revealed plans for international expansion focussing on south-east Asia, specifically in Malaysia, the Philippines and Indonesia. Part of this expansion will involve developing local teams and investing in local content.<sup>18</sup>
- Since 2016, Netflix has invested in **180** Netflix originals from Southeast Asia creating work for over **8,000** producers, cast and crew, with more investment planned.<sup>19</sup> Netflix has also invested in hundreds of Indonesian titles through partnerships and licensing such as *The Night Comes For Us*, *Guru Guru Gokhil* and upcoming film, *A Perfect Fit*.
- WarnerMedia has been investing in HBO Asia Original productions since 2012. **26** HBO Asia Originals have been produced and aired to date in a variety of different Southeast Asian countries, with more slated to premiere in the coming years. Examples of these productions filmed in Indonesia include *Food Lore*, season 1 and 2 of horror series *Folklore* and season 1 and part of season 2 of *Halfworlds*.

Consumers in fast-growing markets such as Indonesia's demand that OCC services offer the highest quality content and experience. This means pairing global content with locally relevant programmes and delivering it via innovative technology.

#### 4. OCC services create jobs and deliver returns for the economy

The media companies offering OCC services create jobs directly in the production sector across multiple lines of business. These lines include OCC services, feature film, TV content production, distribution of pay TV channels and the licensing of consumer products. The total economic impact of the Asian screen production sector in 2019 was **\$58.7bn (IDR830trn)**, supporting **8.8m** jobs in the region.<sup>20</sup> Additionally,

according to research, on average **60%** of production costs are spent outside the specific AV sector in the general economy on inputs to support media companies investments, for example, on catering, hospitality, construction and legal services.<sup>21</sup>

This spending broadens the employment benefits and the media sector's contribution to the Indonesian tax base. Content investment and production is a significant engine of growth, both within the AV industry and the wider economy. The “employment multiplier” measures the amount of direct, indirect and induced jobs created in the area through investment. The multiplier for the creative economy in Indonesia means that for every new AV position, **2.72** jobs are created in other sectors of the economy as a result of the ensuing demand for input.<sup>22</sup>

## 5. Indonesians are finding the local content they demand on OCC services

Frontier Economics surveyed 1,000 internet users in Indonesia and found that Indonesian consumers demand a diverse array of content, both local and international, and that OCC services are delivering content consumers want and love.<sup>23</sup>

Consumers feel it is important that OCC services provide local content. Indonesian consumers use their OCC services to watch local, Indonesian content. 50% of the programming they stream is from Indonesia. As Indonesians adopt OCC services at a rapid pace, the survey data shows that OCC services are already keeping their customers satisfied by meeting the demand for diverse local content.



**50% OF HOURS WATCHED ON INDONESIAN OCC SERVICES WAS LOCAL CONTENT** <sup>24</sup>



**66% OF INDONESIANS CONSIDER IT IMPORTANT THAT THEIR OCC OR TV CONTENT SERVICES PROVIDE LOCAL CONTENT** <sup>25</sup>



**80% OF CONSUMERS ARE SATISFIED WITH THE AMOUNT OF LOCAL CONTENT ON THE OCC OR TV SERVICES THEY USE** <sup>26</sup>



**63% OF INDONESIAN VIEWERS THINK THAT THEIR OCC SERVICES PROVIDE EITHER A GOOD LEVEL, OR THE BEST LEVEL OF CONTENT THAT IS MADE SPECIFICALLY FOR PEOPLE IN INDONESIA**<sup>27</sup>

## 6. OCC providers bring Indonesian content to the global stage

International OCC providers are able to expand the reach of Indonesian content to a global audience. OCC services offer unprecedented scale and reach to diverse viewers, including niche audiences that have long sought to watch Indonesian content from their home on a completely different continent. By meeting this demand, OCC services are supporting local producers, Indonesian exports and promoting the country's artists and culture.

## CASE STUDY OCC CONTENT INVESTMENT IN INDONESIA REACHING GLOBAL AUDIENCES: *GURU GURU GOKIL*

The COVID pandemic has highlighted the role that OCC services play in investing in the creation and distribution of content. Netflix supported Indonesia's film sector by releasing *Guru Guru Gokil* as a Netflix Original in 2020. Dian Sastrowardoyo, who produced and acted in the film, said that as a result the *"stories of Indonesian teachers will touch the hearts of viewers around the world and our fans in Indonesia."*<sup>28</sup>

Fauzan Zidni, a successful Indonesian film producer, also noted the importance of OCC services, particularly during the COVID pandemic. He said that

*"for film producers, OCC services offer a valuable pathway to the global market through licensing and by producing original content. The pandemic has closed movie theatres for months, causing several production houses to release their films directly to OCC services"*.<sup>29</sup>



Licensing content on OCC services for global audiences, benefits consumers and producers alike. Global consumers are better able to find the content they like most; and producers can increase the export value of their content. The Indonesian Minister of Education and Culture, Nadiem Makarim, emphasised this point saying that Netflix has a big role in distributing Indonesian films, talent and culture to the international community.<sup>30</sup>

## CASE STUDY OCC CONTENT INVESTMENT IN INDONESIA: *PRETTY LITTLE LIARS*

Viu Original, *Pretty Little Liars*, is an Indonesian adaptation of Warner Bros. mystery series of the same name.<sup>31</sup>

The first season was filmed entirely in Indonesia using Indonesian actors and crew and a second season has already been commissioned.

The content showcases Indonesian talent and is available to view within Indonesia but also in the other 16 countries Viu is active in. The series was well received and recorded strong viewership from audiences in both Indonesia and Malaysia.

Indonesian filmmaker Emil Heradi who directed the series said, *"The series was fully shot in Bali, with a brilliant cast and top-notch feature film crew that was focused on showcasing premium Asian cinematic values to the world. The characters and relationships have been adapted for local appeal, while the strong twists and turns of the original series were given a Viu-style makeover. I appreciate Viu's expertise in taking international formats and making them locally relevant"*.<sup>32</sup>





## INVESTMENTS BRING WIDER ECONOMIC BENEFITS

### 7. OCC investment spurs skills, innovation and infrastructure

Content investments by global OCC services, and the media companies backing them, create indirect economic benefits for the broader AV sector. Policymakers should consider these benefits when setting the policy and regulatory environment: by supporting and incentivising investments, they enhance the capacity and capabilities of the entire sector. OCC providers invest in training and skills development which supports the sector. For example:

- Netflix is undertaking a series of capacity building workshops in Indonesia. The workshops are supporting skills development in the creative economy in the area of scriptwriting and post-production.<sup>33</sup>
- Viu has supported training and skills development in south-east Asia through their Viu Original initiative. The initiative aims to support and develop local creative industries and eco-systems through programs such as the Viu Pitching Forum and ViuShorts!.<sup>34</sup>
- Viu Pitching Forum was first launched by Viu in Indonesia in 2016 to create opportunities for scriptwriters. Viu Pitching Forum also offers mentorship opportunities with renowned writers, directors and producers, who have been involved in previous Viu original productions. The mentorship fosters a culture of sharing and allows skills and knowledge to diffuse through the AV eco-system.
- ViuShorts! is a young creator development programme. The programme helps high-school and university students develop their abilities to be creative by running year-long workshops. The programme also includes a competition to win an internship with the Viu Original production team. ViuShorts! has run for two seasons so far and produced **33** young directors and more than **900** young creators from **33** cities and regencies across Indonesia.

Investments by OCC providers can also encourage innovation and grow infrastructure capacity in the sector:

- Innovations introduced to Indonesia on the back of inward investment will diffuse around the industry and be taken up by other domestic productions in Indonesia.<sup>35</sup>
- Investments in infrastructure, such as studio space or post-production facilities, increase the capacity and capabilities of the industry as a whole.

### 8. OCC investments produce broader benefits for Indonesia

OCC investments bear fruit beyond the AV sector. More broadly, the creative industries disproportionately generate wider economic impacts. The industry can connect people, cut across cultural and political divides, and act as a source of identity and expression. Content is a uniquely powerful tool to aid national integration, deliver social messages and project Indonesia's culture and influence on the global stage.



Investing in content can also be a magnet for tourists who want to see where their favourite show was shot. OCC services, with their ability to bring Indonesian content to a global audience, are exceptionally well placed to stimulate tourism and generate wider reputational benefits for Indonesia, long after a title's initial release. Content-induced tourism is on the rise. A TripAdvisor survey suggested that **20%** of global travellers have visited a destination because they saw it in a TV show or movie.<sup>36</sup> The 2010 film *Eat, Pray, Love*, which was filmed in Bali, led to a large increase in tourists to the area and heightened global awareness of Indonesia and Bali as a destination. By showcasing Indonesia, OCC services raise the country's international profile and reputation.

In addition, through training partnerships and content decisions, OCC services can also help achieve broader social goals and affect public opinion.



## HELP INVESTMENT, DON'T HINDER IT

### 9. Pro-investment policies can keep Indonesia's audiovisual sector growing

Governments benefit when they attract investment in content: this high-value-added activity makes a disproportionately large contribution to GDP, provides skilled, well-paid employment, and supports a country's exports.

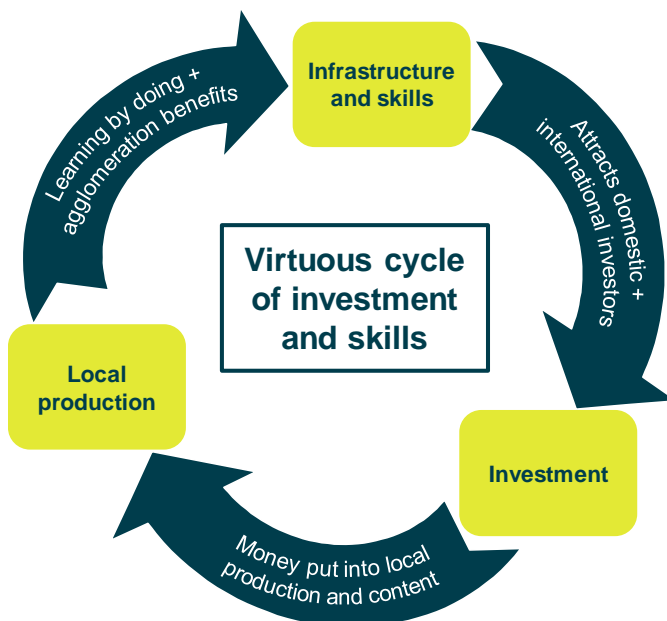
However, production of top-quality content is costly. It requires sector-specific infrastructure, state-of-the-art technology, complex production processes and large crews of highly trained specialists from many different trades. At the same time content creation, like any art form, is a risky investment.

Policies such as tax rebates or subsidies, that mitigate the risk and high fixed costs of content creation, have been found to significantly increase content investments.<sup>37</sup> Policymakers can also help to ensure a strong supply of skilled, high-value workers by supporting training and education programmes, that will benefit both global and Indonesian providers of local content.

A policy framework that encourages investment in Indonesia's AV sector could underpin a virtuous circle of investment.<sup>38</sup> Catalysing investment in infrastructure and skills, enhances the industry's capacity and capabilities. This, in turn makes it an increasingly attractive location for new investment.

These policies can nurture the growth of self-sustaining "creative hubs of local production" with firms incentivised to locate and concentrate activities in Indonesia, to the benefit of the country's economy.<sup>39</sup> For example:

- In Indonesia, Netflix's Post-Production Partner program is profiting post-production firms such as IYUNO Indonesia, Kantana CSPro Indonesia and SDI Media Indonesia. The collaborative scheme



aims to improve the quality of post-production such as dubbing, audio description, scripting, and quality control.<sup>40</sup>

- Viu aims to build an industry ecosystem for Asia, by bringing together show creators, directors, and production houses who wish to showcase their work to a larger and more diverse audience. Viu wants to support this and help create content that can cross borders beyond their own markets.<sup>41</sup> *My Bubble Tea* is one of the projects that is part of this aim as it support Viu's efforts to take Thai and Asian content to the rest of the world.
- Mr. Varun Mehta, Country Head of Viu Indonesia, emphasised Viu's aims saying that "*Viu is committed to Indonesia not only to entertain, but also to support the creative industry by empowering talent across Indonesia. This will play a very important role in the future of the Indonesian creative economy industry. Keeping our high commitment to build an ecosystem that supports the sustainability of the content industry in Indonesia, Viu will continue to bring Indonesian talent and stories to the global stage*".<sup>42</sup>

Policies that discourage or constrain foreign investment and market entry can disrupt this virtuous cycle. Instead of the local AV sector enjoying rising investment, cutting-edge infrastructure and ever-higher skill levels, protectionist policies may hamper innovation and growth opportunities in the long run.

## 10. Our research finds that protectionist policies can hurt the economic potential of local AV industries

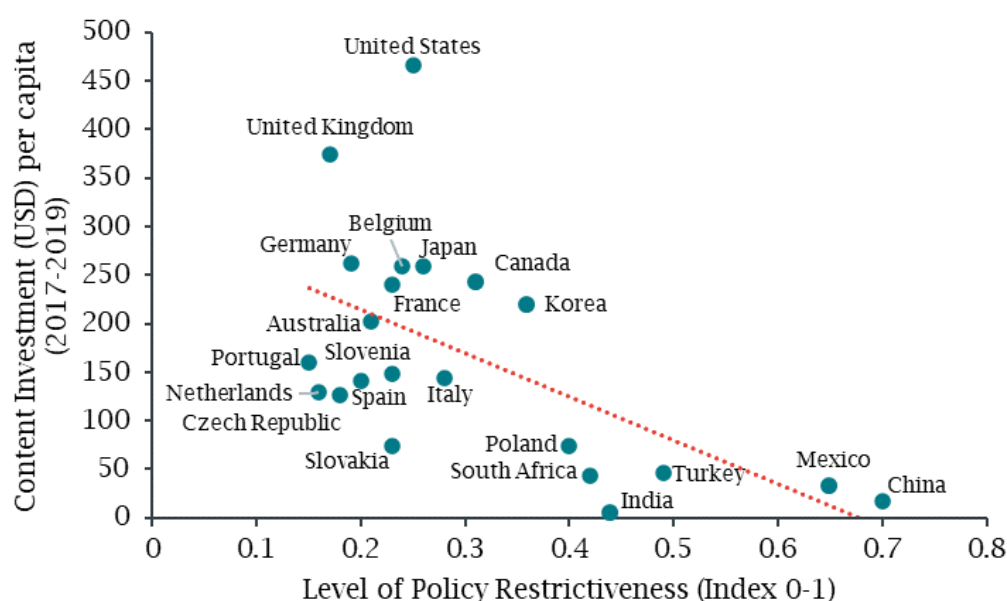
Protectionist policies intended to shield local companies from international competition could result in local industries that are inward-looking, less innovative and less able to produce high-quality content that is in demand internationally. Many countries have cultural policies aimed at promoting local content, but some come at a cost and prove ineffective at achieving the goals they pursue. Our analysis, which examined the relationship between protectionist policies and AV trade (i.e. licensing of content internationally), found that higher levels of protectionist policies (for example the introduction of content quotas), **lead to reductions in AV exports**.<sup>43</sup> This implies that countries with higher levels of protectionist policies are less able to monetise their content in international markets, or show off and promote their culture to audiences around the world.



## 11. Put up barriers and you may put off investors in content

Countries that have greater policy restrictions tend to have lower levels of investment in content. While there are many other factors at play,<sup>44</sup> Figure 4 below is consistent with the hypothesis that more protectionist policies discourage content investment (at least for the countries selected). The result of lower content investment is inevitably lower employment and skills development in the sector.

**FIGURE 4 RESTRICTIVE AV POLICY CORRELATES TO LOWER INVESTMENT (SELECTED OECD COUNTRIES AND CHINA)**



Source: Frontier analysis of Ampere and OECD data

Note: All values of content investment are nominal. For each country, content investment data includes investment by commercial and public broadcasters and also by selected OCC services, where spend can be disaggregated by country. Excludes any investment in sports rights. Countries were selected based on data availability and include OECD countries and China. The level of policy restrictiveness is the OECD's broadcasting-specific Services Trade Restrictiveness Index (STRI), which captures the level and range of non-tariff barriers in services trade within the sector. The STRI is a widely used measure of policy restrictions on services used by academics and policymakers. The STRI is an index between zero and one attributed to each country, where zero would imply no policy restrictions, and one the highest possible policy restrictions.

## 12. Restrictions reduce incentives

The AV industry is growing globally and in Indonesia, benefiting the local creative sector and the broader economy. Policymakers can encourage this growth to continue. While protectionist restrictions can have a number of understandable policy objectives (e.g. support the creation or consumption of local cultural content or to help the home-grown AV sector), they can also have adverse impacts, such as:

- Restrictions can drive up costs for domestic and foreign companies, reducing competition and raising prices for consumers.<sup>45</sup>
- Policy restrictions that erect barriers to inward investment, deter the influx of international capital, talent and skills, and can restrict the arrival of new techniques and innovations that inbound investment brings.
- Onerous definitions of “local content” for the purpose of defining quotas, or other restrictive policies, can discourage investment in local content and the local industry.<sup>46</sup>

- Broadcast-time quotas are designed to nudge consumers towards local content, but implementing them for OCC services can be problematic.
  - Quotas applied to OCC services **may not be effective** in changing tastes, as consumers choose their content on demand.<sup>47</sup>
  - Quotas can **distort incentives**, as providers are motivated to focus on the *quantity* of local content rather than its *quality*, which could have less of an economic impact.<sup>48 49</sup>
  - OCC services may **reduce the size of their overall libraries** in proportion to the volume of local content that they are able to license, leading to less choice for consumers and less investment in wider production by OCC services.
  - Quotas can **create barriers to entry** as they may disproportionately affect smaller OCC entrants, rather than established OCC providers with large domestic customer bases.

As a way for the local industry to learn and grow, joint productions with foreign companies may be more effective than restricting the entry of international providers.

Protectionist policies can also have adverse impacts through increasing costs, restricting investment and ultimately limiting the content available to local consumers, with potentially further negative consequences for the creative industries in Indonesia. Some protectionist policies may have the unintended effect of increasing levels of piracy. Piracy drains a country's AV economy through reducing the returns on investment, reducing the incentives of creatives to innovate and produce new content, and it reduces government tax revenue as legitimate business revenue streams are hit. **36%** of OCC users in Indonesia have said that they would watch or download OCC content from unauthorised services if it was not otherwise available, to the detriment of both the country's economy and its culture.<sup>50</sup>



## OCC CAN HELP INDONESIA'S AV INDUSTRY CONTINUE TO FLOURISH

Indonesia has a vibrant film, television and video on-demand industry which brims with potential. OCC services make a significant and growing economic contribution within that sector. Consumers are increasingly subscribing to OCC services and, as a result, the services are delivering the content made in Indonesia that consumers want and love. OCC services can be Indonesia's

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“shop window” to the world: offering international audiences a diversified menu of in-demand Indonesian content.

By carefully calibrating policy to incentivise investment, Indonesia will enjoy wider benefits such as new employment opportunities, higher economic output, increased exports, a more competitive skills base, and expanding sector infrastructure. This, in turn, creates conditions to attract new investment. Policymakers should seek to achieve the right policy mix, and be mindful of potential unintended consequences of protectionist policies that can reduce investment, economic outputs and exports, while stimulating digital piracy. By working with producers and production companies, policymakers can create the right conditions to support investment, which allows the creative sector in Indonesia to continue to flourish.

<sup>1</sup> OCC subscribers counts the number of paid subscriptions there are to OCC services in Indonesia. These are often used by more than one person usually within the same household.

<sup>2</sup> Results are from an online consumer survey of 1,006 Indonesian internet users (“Kantar Survey”). The survey, designed by Frontier Economics, was conducted by Kantar between 30<sup>th</sup> November and 14<sup>th</sup> December 2020. See technical annex for further detail. Question: *How often do you watch Online video subscription services (OCC) which offer professionally-produced full length movies, shows or series on online video services on demand for a regular fee?* Base: *All respondents (1,006)*

<sup>3</sup> Kantar Survey, Question: *When you watched your Online video subscription service (OCC) last week how many hours did you spend watching local content from your country?* Base: *Respondents who watched subscription OCC at least once a week (754)*

<sup>4</sup> The average 2019 USD-IDR exchange rate has been used to convert USD figures into IDR. OECD Exchange Rates.

<sup>5</sup> Ampere, Subscription OCC revenue in 2019, extracted October 2020

<sup>6</sup> Revenue in the Indonesian Video Streaming (OCC) segment is projected to reach \$237m (IDR3.4trn) in 2021 and to show an annual growth rate (CAGR 2021-2025) of 18.55%, resulting in a projected market volume of \$467m (IDR6.6trn) by 2025. Statista, *Video Streaming Market Forecast – Indonesia*, March 2021

<sup>7</sup> Arnold, R., & Tas, S. (2018). More Movies, More Messages, More Bandwidth? How OTT Usage Intensity Drives IAS Upgrades in Germany

<sup>8</sup> Sudtasan, T., & Mitomo, H. (2016). Effects of OTT services on consumer's willingness to pay for optical fibre broadband connection in Thailand.

<sup>9</sup> Quagliione, D., Agovino, M., Di Berardino, C. and Sarra, A., 2017. Exploring additional determinants of fixed broadband adoption: policy implications for narrowing the broadband demand gap. *Economics of Innovation and New Technology*, 27(4), pp.307-327.

<sup>10</sup> World Bank Data from the International Telecommunication Union (ITU) World Telecommunication/ICT Indicators Database. Records individuals using the internet as a percentage of the population. Most recent data is from 2019. Internet users are individuals who have used the Internet (from any location) in the last 3 months. The Internet can be used via a computer, mobile phone, personal digital assistant, games machine, digital TV etc.

<sup>11</sup> Deadline, *With Ambitious Paramount+ Launch, ViacomCBS Targets 65 Million-75 Million Streaming Subs By 2024*, February 2021

<sup>12</sup> Variety, *Inside HBO Max, the \$4 Billion Bet to Stand Out in the Streaming Wars*, May 2020

<sup>13</sup> Fortune, *Netflix will spend over \$17 billion on content in 2020: Analyst*, January 2020

<sup>14</sup> TheStar, *Local content gets priority as Disney Plus Hotstar confirms Indonesia launch*, August 2020

<sup>15</sup> The Hollywood Reporter, *Disney+ Hotstar Takes Subscriber Lead Over Netflix in Growing Indonesia: Study*, January 2021

<sup>16</sup> PCCW Press Release, *Viu announces eight Viu Original titles and aims to release over 80 titles in 2019 to reinforce its commitment to content creation*, April 2019

<sup>17</sup> Daily Social, *Vidio's Way to Capture Indonesian Market*, August 2020

<sup>18</sup> Digital TV, *iQiyi to open four new international offices as it focuses on global expansion*, July 2020

<sup>19</sup> Fierce Video, *Hastings says Netflix has invested in 180 originals from the SE Asia region*, November 2019

<sup>20</sup> Olsberg-SPI, *Global Screen Production – The Impact of Film and Television Production on Economic Recovery from COVID-19*, June 2020

<sup>21</sup> Olsberg-SPI, *Global Screen Production – The Impact of Film and Television Production on Economic Recovery from COVID-19*, June 2020

<sup>22</sup> Olsberg-SPI, *Global Screen Production – The Impact of Film and Television Production on Economic Recovery from COVID-19*, June 2020. Estimated that Asia has an employment multiplier of 3.72.

<sup>23</sup> Kantar Survey

<sup>24</sup> Kantar Survey, Question: *When you watched your Online video subscription service (OCC) last week how many hours did you spend watching local content from your country?* Base: *Respondents who watched subscription OCC at least once a week (754)*

<sup>25</sup> Kantar Survey, Question: *Considering all TV and video services you use, how important is it that your TV and video services provide the following types of content on a scale of 1-5?* Scale: 1 = Not important to me at all, 2 = somewhat unimportant, 3 = neutral, 4 = quite important to me, 5 = Very important to me. The content types were content that includes people like me, represent where I live, is made in your country, is relevant to my life, is made by people from your country. The result shown here is an average across the content types. Base: *All respondents (1,006)*

<sup>26</sup> Kantar Survey, Question: *Considering all TV and video services you use, on a scale of 1-5, how satisfied are you with the amount of TV and video content that is made specifically for people in your country and in your language?* Scale: 1 = Very unsatisfied, 2 = somewhat unsatisfied, 3 = Neutral, 4 = somewhat satisfied, 5 = Very satisfied. Base: *All respondents (1,006)*

<sup>27</sup> Kantar Survey, Question: *Thinking about each of the different TV and video services that you watch, how well do they provide content that is made specifically for people in your country for example, telling stories about people in your country, or with actors or presenters from your country?* Scale: 1 = Does not provide any content that is made specifically for people in my country at all, 2 = Does not provide enough content that is made specifically for people in my country, 3 = Provides some content that is made specifically for people in my country, 4 = Provides a good level of content that is made specifically for people in my country and 5 = Provides the best possible level of content that is made specifically for people in my country. Base: *All respondents that use the services at least once every 3 months (821)*

<sup>28</sup> The Jakarta Post, *'Guru-Guru Gokil' coming to Netflix on Aug. 17*, July 2020

<sup>29</sup> KrASIA, *Chinese and American entertainment platforms vie for screen time in Indonesia*, October 2020

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- <sup>30</sup> detiknews, *Kolaborasi soal Film-Budaya, Nadiem: Saya Ngefans Banget Sama Netflix*, January 2020
- <sup>31</sup> Variety, *Viu Streamer Launches Asian Adaptation of 'Pretty Little Liars'*, April 2020
- <sup>32</sup> Advanced Television, *Viu releases latest original series Pretty Little Liars*, April 2020
- <sup>33</sup> AntaraNews.com, *Netflix invests US\$1 million in Indonesia's movie industry*, January 2020
- <sup>34</sup> PCCW Press Release, *Viu announces eight Viu Original titles and aims to release over 80 titles in 2019 to reinforce its commitment to content creation*, April 2019
- <sup>35</sup> Research has shown that the companies that innovate obtain less than 10% of the total economic benefit of the innovation, with the remainder diffusing in the wider economy. (Baumol, W., (1997). Pareto Optimal Sizes of Innovation Spillovers. Working Papers 97-42, C.V. Starr Center for Applied Economics, New York University). Other research has described how the geographic clustering of media activity promotes innovation which is necessary for a successful AV sector. (Karlsson, C., & Rouchy, P. (2015). Media clusters and metropolitan knowledge economy. Handbook on the Economics of the Media.)
- <sup>36</sup> TripAdvisor, *6 key travel trends for 2016*, December 2015. As an example, on-screen content attracts around 230,000 international tourists to Australia each year, driving an estimated AUD725m (IDR7.1trn) in tourism expenditure. Screen Australia, *Screen Currency Valuing Our Screen Industry*, 2016
- <sup>37</sup> BFI (2018) *How screen sector tax reliefs power economic growth across the UK*. A study found that 91% of production would not have occurred absent the tax relief
- <sup>38</sup> Messerlin. (2019). Building Consistent Policies on Subsidies in the Film Industry. *Kritika Kultura*, 32, 375-396
- <sup>39</sup> Karlsson, C., & Rouchy, P. (2015). Media clusters and metropolitan knowledge economy. Handbook on the Economics of the Media
- <sup>40</sup> Netflix Post Partner Program - <https://np3.netflixstudios.com/>
- <sup>41</sup> PCCW Press Release, *K-pop 2PM star Nichkhun Horvejkul and Thai Gen Z idol Mean Phiravich head up the cast in the latest Viu Original production My Bubble Tea*, August 2019
- <sup>42</sup> Television Asia, *Indonesia's pride, Viu Shorts! is back with 16 short films by Indonesian students*, July 2020
- <sup>43</sup> This analysis examines the relationship between protectionist policies and audiovisual trade. An econometric model was used that simultaneously estimates how different factors impact the level of audiovisual trade between countries. This was done in order to correctly isolate the impact of trade restrictiveness on audiovisual exports (as measured by the OECD's Services Trade Restrictiveness Index). Alternatively, if Indonesia were to reduce its level of policy restrictions in the broadcasting sector to the average (median) level in the OECD, the modelling suggests that broadcasting exports could increase by 55%. See technical annex for further detail.
- <sup>44</sup> Factors that affect the level of investment in a country include the existing capital stock in the sector, the level of income of a country and the level of public investment.
- <sup>45</sup> OECD. (2015). *Emerging Policy Issues: Localisation Barriers to Trade*. Paris: OECD Publishing
- <sup>46</sup> Lee, B., & Bae, H.-S. (2004). The Effect of Screen Quotas on the Self-Sufficiency Ratio in Recent Domestic Film Markets. *Journal of Media Economics*, 163-176
- <sup>47</sup> Picard, R., Davis, C., Papandrea, F., & Park, S. (2016). Platform proliferation and its implications for domestic content policies. *Telematics and Informatics*, 683-692
- <sup>48</sup> Anderson, C., Leigh, G., Swimmer, & Wing, S. (1997). An empirical analysis of viewer demand for US programming and the effect of Canadian broadcasting regulations. *The Journal of the Association for Public Policy Analysis and Management*, 525-540
- <sup>49</sup> Crampes, C., & Hollander, A. (2008). The regulation of audiovisual content: quotas and conflicting objectives. *Journal of Regulatory Economics* 34.3, 195-219
- <sup>50</sup> Kantar Survey, Question; *If the online subscription video service (OCC) that you use became unavailable to you, would you try and watch or download movies, shows and series from that service from another source, even if it was an unauthorized service, or app?* Scale: 1 = Definitely would not, 2 = Probably would not, 3 = Maybe, 4 = Probably would, 5 = Definitely would. Base: *All respondents that use the service at least once every 3 months (821)*.