QUOTAS vs. INCENTIVES FOR THE DEVELOPMENT OF DOMESTIC AUDIOVISUAL PRODUCTION? AN ECONOMIC IMPACT ASSESSMENT

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POLICY DRIVERS

- To preserve and promote their cultural heritage value ((Manning, 2006; Crampes; Hollander, 2008; Richardson, 2006; Petrona, 2015)
- To boost economic growth by developing the audiovisual industry (Manning, 2006)
- To leverage the comparative advantage in creative industries, thereby increasing national competitiveness

ASSESSMENT OF CONTENT QUOTAS

- The imposition of local quotas will diminish the overall size of content catalogs (Dixon, 2018)
- Imposing a local quota may lead the provider to choose old or low-quality content just to meet the requirement (Petrona, 2015)
- Quotas may be met by simply increasing the existing content offer, eliminating the incentives to promote new talent or local productions (Richardson and Wilkie, 2015)
- The increase in local production in free-to-air broadcasting was made based on journalistic programs where politicians and members of the civil society were interviewed, thereby broadcasting mostly unappealing content (Broughton Micova, 2013)
- Quotas only impact the supply side of the equation but cannot ensure that a higher percent of local content will meet the demand of users and trigger audience consumption (Richardson, 2006)
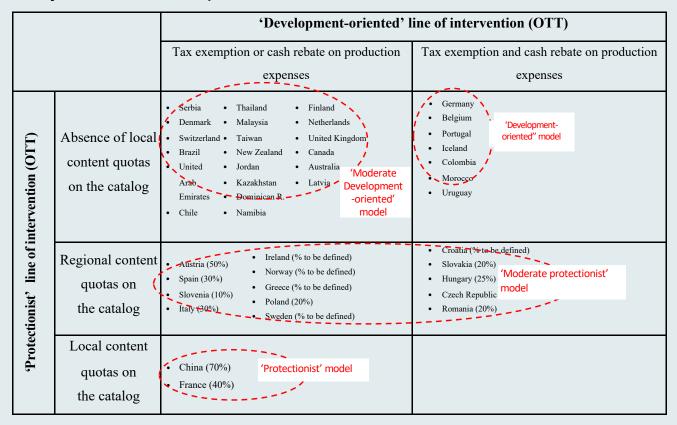
PUBLIC POLICY INITIATIVES

	Film industry	Free-to-air/Pay TV	Audiovisual OTTs
Incentives for production of local content	• Cash rebate or tax exemption • Cash rebate on production expenditures • Financial support for production infrastructure	• Cash rebate or tax exemption • Cash rebate on production expenses • Financing opportunities	• Cash rebate or tax exemption • Cash rebate on production expenses • Financing opportunities
Local content quota requirements	• Screen quotas (cinemas required to screen national films or % by theater)	Transmission quota (% of transmission time dedicated to domestic or regional production)	• Catalog quota (% of titles dedicated to domestic or regional production) • Prominence obligation

Policy models for the promotion of domestic audiovisual content on OTTs

		'Development-oriented' line of intervention (OTT)	
		Tax exemption or cash rebate on production expenses	Tax exemption and cash rebate on production expenses
'Protectionist' line of intervention (OTT)	Absence of local content quotas on the catalog	• Serbia • Thailand • Finland • Denmark • Malaysia • Netherlands • Switzerland • Taiwan • United Kingdom • Brazil • New Zealand • Canada • United Arab Emirates • Jordan • Australia • Kazakhstan • Latvia • Dominican R. • Chile • Namibia 'Moderate Development-oriented' model	• Germany • Belgium • Portugal • Iceland • Colombia • Morocco • Uruguay 'Development-oriented" model
	Regional content quotas on the catalog	• Austria (50%) • Ireland (% to be defined) • Spain (30%) • Norway (% to be defined) • Slovenia (10%) • Greece (% to be defined) • Italy (30%) • Poland (20%) • Sweden (% to be defined)	• Croatia (% to be defined) • Slovakia (20%) • Hungary (25%) 'Moderate protectionist' model • Czech Republic • Romania (20%)
	Local content quotas on the catalog	• China (70%) 'Protectionist' model • France (40%)	

Note: The percentage in parentheses shows the portion of the catalog that should be dedicated to regional or domestic content

Domestic production (per 100,000 population) based on the models applied to OTTs

		'Development-oriented' line of intervention	
		Tax exemption or cash rebate on production expenses	Tax exemption and cash rebate on production expenses
'Protectionist' line of intervention (OTT)	Absence of local content quotas on the catalog	· 2011-2018 average: 0.469 · 2018: 0.495	· 2011-2018 average: 1.610 · 2018: 1.961
	Regional content quotas on the catalog	· 2011-2018 average: 0.383 · 2018: 0.410	· 2011-2018 average: 0.404 · 2018: 0.454
	Local content quotas on the catalog	· 2011-2018 average: 0.241 · 2018: 0.263	

Source: Author analysis based on data from the European Audiovisual Observatory

A MODEL WAS DEVELOPED TO EXPLAIN AND QUANTIFY THE FACTORS DRIVING LOCAL AUDIOVISUAL PRODUCTION

$$\log(AUD) = \mu + \alpha \log \theta + \beta \log INCOME + \Upsilon \log C + \delta REG + \Omega COMP + \varepsilon$$

- AUD, which measures the number of locally produced or co-produced films and documentaries annually (weighted per 100,000 inhabitants)

- θ is a parameter that measures consumers' preference for audiovisual content;

- $INCOME$ is measured based on the GDP per capita

- C is the average historical budget per film

- REG is a binary variable that takes the value 1 if regional or local content quotas are imposed on OTTs (and 0 if not)

- $COMP$ is a measure of competitive intensity (Herfindahl–Hirschman index for the SVOD segment)

- ε represents the error term that is assumed to meet the desired properties

Models are also run adding further controls to account for cross-country differences in audiovisual preferences, measured on the basis of the SVOD penetration and cinema attendance frequency

Source: Katz, R. and Jung, R. (2021). Promotion of local audiovisual content development in OTT: is the introduction of quotas worth it?

TO ESTIMATE THE EQUATION, WE CONSTRUCTED A SAMPLE OF 60 COUNTRIES FOR WHICH REFERENCE VARIABLE DATA IS AVAILABLE

Variable	Description	Source
Audiovisual production per 100,000 population	Local film and documentary production per 100,000 inhabitants. Annual average by country 2016-2018	European Audiovisual Observatory
GDP per capita	GDP per capita (US$) at current prices PPP. Annual average 2016-2018	World Bank
Cost of films	Historical average budget per production (US$). Measurement errors were omitted, and missing data was approximated by levels of similar countries	The Numbers / Authors' analysis
OTT quota	Binary variable taking the value 1 if a quota imposing a certain percentage of local or regional content on OTTs was imposed before 2016	Compilation from regulators sites
SVOD penetration	Percentage of SVOD users in the population. Latest available data (2020)	Statista/World Bank
Cinema penetration	Annual average cinema attendance frequency per capita. Annual average 2015-2017	UNESCO
SVOD HHI	Herfindahl–Hirschman index, SVOD market 2018.	Calculation from industry data
SVOD ARPU	Revenue per SVOD user (US$), as proxy price. Latest available data (2020)	Statista
Cinema ticket	Average cinema ticket price (US$). Annual average 2015-2017	UNESCO

SUCCESSIVE MODEL ESTIMATIONS TESTING THE IMPACT OF QUOTAS ON DOMESTIC AUDIOVISUAL PRODUCTION

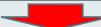|	[I]	[II]	[III]	[IV]	[V]	[VI]
Dependent variable: Log (Audiovisual production per 100,000 inhabitants)						
OTT quota	-0.553***	-0.852*	-0.396*	-0.592***	-0.556***	-0.105*
	[0.197]	[0.498]	[0.226]	[0.204]	[0.190]	[0.058]
Log (GDP per capita)	0.731***	0.712***	0.541**	0.177	-0.971*	-0.050
	[0.183]	[0.173]	[0.206]	[0.291]	[0.512]	[0.148]
Log (Average cost)	-0.013	-0.004	0.065	-0.002	-0.007	-0.001
	[0.082]	[0.083]	[0.101]	[0.077]	[0.067]	[0.018]
SVOD HHI			0.001***			
			[0.000]			
SVOD HHI (Squared)			-0.000***			
			[0.000]			
Log (SVOD penetration)				0.423*	0.756	0.095
				[0.240]	[0.649]	[0.164]
Log (Cinema penetration)				0.350**	1.311***	0.110
				[0.173]	[0.335]	[0.108]
Dependent variable: Log (SVOD penetration)						
Log (GDP per capita)					0.233**	0.234**
					[0.102]	[0.101]
Log (SVOD ARPU)					-0.282**	-0.283**
					[0.131]	[0.131]
Log (Cinema ticket)					0.409***	0.409***
					[0.146]	[0.146]
Dependent variable: Log (Cinema penetration)						
Log (GDP per capita)					0.929***	1.021***
					[0.134]	[0.148]
Log (Cinema ticket)					-0.891***	-0.944***
					[0.211]	[0.214]
Log (SVOD ARPU)					0.315*	0.200
					[0.174]	[0.192]

TAKING THE BASELINE MODEL AS A REFERENCE, WE RE-ESTIMATED IT BY INTRODUCING RESPECTIVE DUMMIES WHICH IDENTIFY THE MODEL ADOPTED BY EACH COUNTRY

	[I]	[II]	[III]	[IV]	[V]	[VI]
Dependent variable: Log (Audiovisual production per 100,000 inhabitants)						
Log (GDP per capita)	0.788***	0.770***	0.741***	0.747***	0.712***	0.759***
	[0.202]	[0.201]	[0.190]	[0.199]	[0.188]	[0.187]
Log (Average cost)	-0.025	-0.029	-0.017	-0.018	-0.002	0.017
	[0.084]	[0.084]	[0.083]	[0.082]	[0.085]	[0.093]
Moderate Development-oriented model	-0.121					-0.366
	[0.228]					[0.264]
Moderate Protectionist model		0.220				-0.094
		[0.360]				[0.363]
Protectionist model			-0.443*		-0.483**	-0.654**
			[0.227]		[0.233]	[0.264]
Fixed effects by region				-0.416**	-0.558***	-0.727***
R-squared				[0.174]	[0.185]	[0.230]
Observations					YES	YES
Estimation method					0.64	0.66
Moderate Protectionist model					60	
Estimation method	OLS	OLS	OLS	OLS	OLS	OLS

SO WHAT IS DRIVING LOCAL CONTENT DEVELOPMENT? PLATFORM COMPETITION

Latin America: Evolution of Audiovisual OTT platforms – By geographic reach

	2013	2014	2015	2016	2017	2018	2019	2020
Global platforms	3	3	4	6	7	7	9	9
Regional platforms	14	24	40	55	64	91	93	93
Local platforms								
Argentina	7	16	17	21	23	18	18	18
Brazil	13	16	22	23	26	29	30	31
Costa Rica	0	0	1	2	3	4	7	9
Ecuador	0	2	2	2	3	1	4	4
Peru	2	2	3	3	4	2	4	5
Uruguay	0	4	9	8	8	8	9	9
Total	39	67	98	120	138	160	174	178

Brazil: OTT catalog origin share

	Films			Series		
	Total titles	National titles	Percent of catalog	Total titles	National titles	Percent of catalog
Netflix	2,757	88	3.2%	1,188	39	3.3%
Amazon Prime Video	2,750	17	0.6%	513	2	0.4%
Globo Play	272	83	30.5%	314	232	73.9%
Claro Video	2,696	63	2.3%	189	62	32.8%
HBO GO	590	5	0.8%	128	13	10.2%
Vivo Play	4,310	469	10.9%	614	244	39.7%
Oi Play	3,930	358	9.1%	1,388	408	29.4%

Source: Katz (2021). Audiovisual OTT business models in Latin America: recent trends and future evolution. WIPO working paper

TO SUM UP, WE ARE UNABLE TO IDENTIFY A POSITIVE EFFECT ON LOCAL CONTENT PRODUCTION RESULTING FROM THE IMPOSITION OF QUOTAS ON OTTS, BUT BELIEVE COMPETITION APPEARS TO BE KEY

- The estimates link the presence of quotas to lower audiovisual production, at least 10% lower than those countries that have not imposed that regulation

- In a context of intense demand and competitive pressures that characterize the OTT market, quotas tend to result in increased production costs, thereby distorting the supply-demand balance, leading to undesired market outcomes

- Ideally, governments should allow the development of the local audiovisual industry to be accelerated by the powerful market dynamics, already proven to deliver great value in 'content localization.'

- A 'Development-oriented' model that prioritizes incentives aimed at growing the local audiovisual industry — sundry tax exemptions, financing opportunities, investment in infrastructure, and cash rebates— allowing the natural supply and demand factors to contribute and create increased OTT catalog 'localization' trends is key

- This model has the advantage of promoting the development of local OTTs based on a content demand and production cost balance, subsequently fostering "content localization" and diversity, and impacting positively the growth of the local audiovisual industry. At a disadvantage, this option requires the allocation of public funding.

- A complementary approach consists in imposing domestic content prominence obligations such as reserving a substantial portion of the platform home page to spotlight local content, or by publicizing the country of origin or the original language of programs through trailers in order to promote the local culture

- Research limitations: unavailability of reliable panel datasets covering a period long enough to analyze the market behavior before and after the imposition of a quota; sample only covered 60 countries, a modest number of observations; our unable to analyze local production in terms of TV series

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