

A Multivariate Analysis of Regulated Funding of the French Cinema by Broadcasters

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- The French broadcasters are a significant source of funding for the Cinema industry (30 to 40% of total investment)
- French Cinema appears to be dependent on TV channels both for funding and broadcasting
- However, movies don't drive a lot of audience : the average viewer only spends 5.6% of his consumption on cinema ¹
- The strategies of private and public channels for broadcasting and investing in cinema are strictly regulated

1. Benhamou *et al.* 2009

- The links between the audiovisual and cinema ecosystems are little discussed in the economic literature
- An empirical study of the broadcasters' investments in cinema can help understand the impact of the French unique regulation and copyright structure
- The entry of platforms in the market for broadcasting, bypassing the regulatory framework needs to be addressed

- What drives the investment strategies of broadcasters for both audiovisual and cinema productions?
- In which way does the copyright structure and quota regulation affect investment?
- How can the regulatory framework adapt to recent developments in broadcasting technology?

- Institutional empirical literature : reports from the CNC and CSA
- Economic literature generally focuses either sector :
 - Audiovisual : literature on the links between competition and diversity (Steiner 1952, Rothenberg 1962, Wiles 1963, Beebe 1977)
 - Cinema : determinants of box-office success (Litman 1983, Zufryden 2000). Very few paper discuss the consumption of movies on TV or investment strategies
- Benhamou, Gergaud, Moureau 2009

Outline of the talk

- Context : the French regulation
 - The French regulatory path of the audiovisual has been structured by the release of technical and political constraints
 - New developments in broadcasting technology have yet to be addressed
- Data and empirical methodology
- Results and conclusion

Outline

- 1 Introduction
- 2 Institutional context**
- 3 Data and Methodology
- 4 Results
- 5 Conclusion

Institutional context : the State monopoly

- French Television developed from an initial monopoly of State, justified by technical and political arguments
 - The spectrum of hertzian frequencies, only way to broadcast is a public good
 - "Only public management could protect TV and radio from pressure from lobbies and guarantee the diversity of ideas and programs".
- 1970s : gradual opening to competition
 - 1968 : advertising and use of private funds
 - 1970 : creation of 3 public channels
 - Creation of an institutional mechanism of obligatory funding and financial aid

- 1982 : political change and technical progress open the way to an in depth reform, giving birth to the current regulatory framework
 - Private companies are granted a right to use the frequencies, in exchange for obligatory investments ("concession-obligation")
- Creation of the first pay-TV channel, CANAL+, set with the goal of developing the French cinema ecosystem
- Allowed for a very dynamic industry, 200 movies produced each year and 35 to 40% of market share in theaters²

2. CNC

- 2000s : developments of broadcasting technologies allow for a profusion of new terrestrial television channels
- More recently, the entry of online platforms (OTT) weakens the position of traditional broadcasters
- Those changes are not met with a significant evolution of regulation
- The system of obligatory funding was a way to compensate the market power of hertzian broadcasters, but is still in use now that the barriers on entry have mostly disappeared

The concession-obligation system

Obligations : AV				
	Free-to-air		Pay-TV	CANAL+
	Choice 1	Choice 2		
% of independence		75% of investment		
AV works	15%	NA	15%	NA
Cultural works	10.5%	12.5%	8.5%	3.6%
Obligations : Cinema				
	Non-specialized channel	Specialized channel	Specialized in 1st broadcast	CANAL+
% of independence		75% of investment		
European movies	3.2%	21%	26%	12.5%
French Movies	2.5%	17%	22%	9.5%

TABLE – Simplified presentation of the obligations of investment

- In exchange for these investments, channels are only granted exclusive windows of broadcasting, in compliance with the *chronologie des médias* [details](#)
- Specific case (since 2013) : broadcasters are allowed to take part in further exploitation if their contribution **in co-production** to the funding is "consequent" (more than 70%)

- Broadcasters have become highly dependent of the value of their concession. Their position is weakened by the release of technical constraints
- Producers benefit the most from the distribution of rights. Earlier work³ shows this led to a concentration of the ecosystem around bigger structures
- **No incentive for broadcasters to invest in programs with long-term value**

3. Lavialle, Montecino 2016

Outline

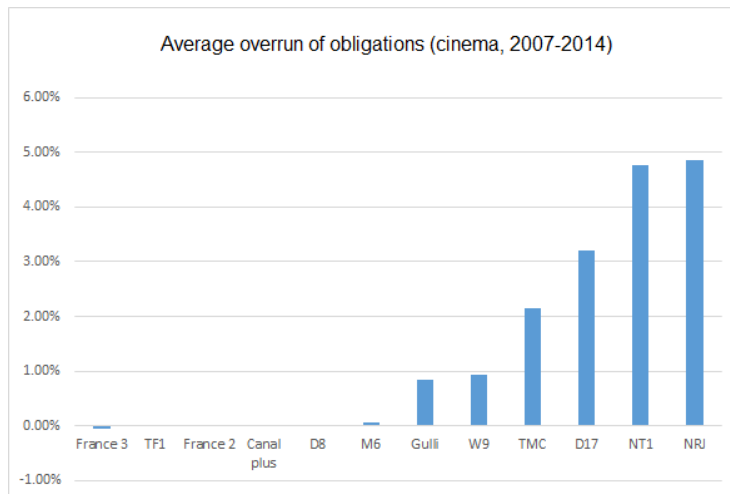
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- CNC database, 2007 to 2014
- Audiovisual :
 - All orders from broadcasters to independent producers
 - 22 000 orders, 2000 producers
- Cinema
 - Details of cinema projects and investments
 - 1600 movies, 600 producers

	Pre-purchase (AV) /projects (cinema)	Production cost 2007-2015 (G€)	Production cost/hour mean	Produced hours by year
Magazine	390	0.3	127 500€	400
Performing arts	3039	0.8	140 600€	700
Documentary	18561	3.5	152 500€	2 500
Total non-fictional	21 990	4.6	150 360	3600
Animation	523	1.7	600 000€	300
Fiction	2314	6.2	988 700€	800
Cinema	2259	11	2 782 000€	400
Total fictional	5096	18.9	1 414 700	1500

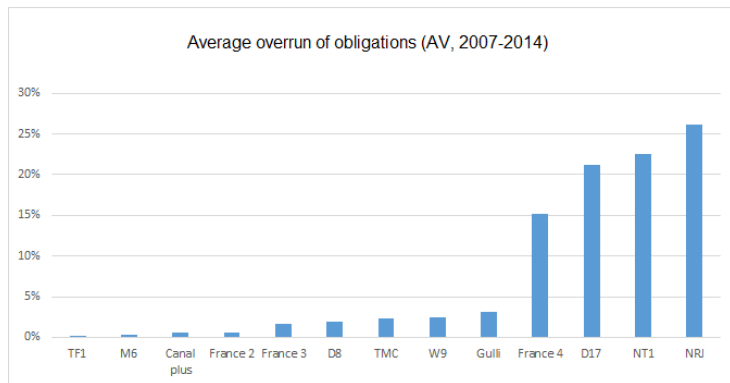
TABLE – Database description

Compliance with the obligations



- Only terrestrial TV Channels are not constrained by the obligations

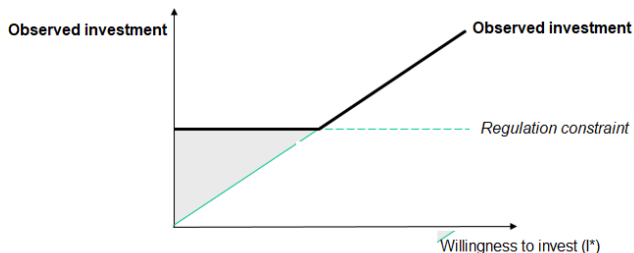
Compliance with the obligations



- Obligations to invest in audiovisual works are less of a constraint
- Are cinema obligations stifling investment in audiovisual ?

- How do broadcasters choose their investment strategy?
 - The broadcaster's problem is to maximize expected return on investment based on *ex ante* characteristics of the movie
- Choice of the multivariate Probit model
 - Measure the impact of exogenous variables on probability of investment
 - Take into account the simultaneity of choice for different broadcasters

Investment strategies



- We cannot observe what the broadcaster considers as an optimal investment
- Grey area : effect of the regulation (Observed investment - willingness to invest)

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Full table

- *ex ante* declared production cost has a positive effect on the decision of investing for every broadcaster, AV and cinema
- All TV channels have a higher probability to invest on big producers for cinema, while audiovisual investment is more spread out
- Evidence of horizontal differentiation in audiovisual investment vs. strong correlations in cinema investment

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- Digitization has altered the value of assets in the industry. While exclusive broadcasting depreciated, big producers were able to constitute large catalogs of rights and reinforce their position.
- Results in an industry of over-funded movies that struggle to find their audience while other formats in demand have low supply
- Going forward :
 - Better identify the effect of regulation of investment choices
 - Analysis of Over-the-top/streaming platforms strategies

- After the opening to competition and the end of the State monopoly, the concession-obligation system ensured the dynamism of the French Cinema industry
- Recent evolution in technology, allowing to bypass traditional hertzian or digital networks impacts the strategies of investment of TV channels by reducing the value of concessions
- These changes need to be addressed by the regulatory framework which may have now a negative impact on the diversity and dynamism of production

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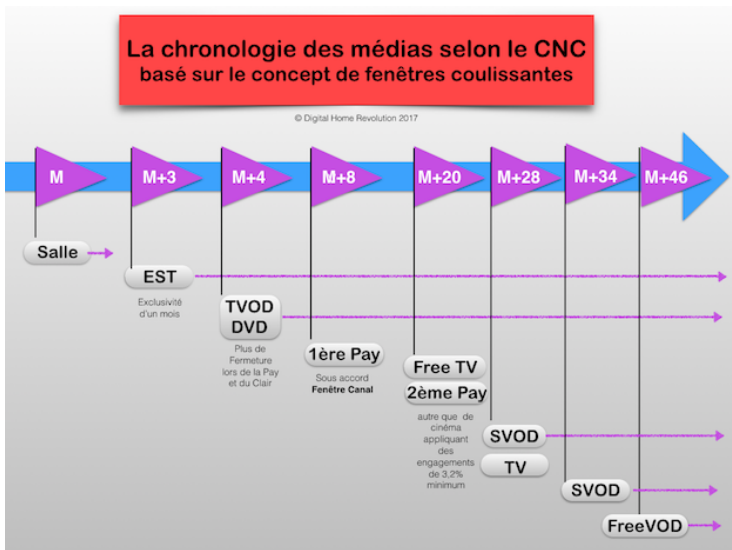
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Chronology of medias



Results - full table

	CANAL+	France TV	TF1	M6
Production cost	9.60e-08***	3.79e-08***	5.05e-08***	4.20e-08***
Documentary		<i>ref</i>		
Animation	0.0221	0.158**	-0.0976	0.123
Cinema	1.086***	-0.224***	-0.260***	-0.395***
Magazine	-0.411***	0.172**	-0.836***	-0.0415
TV series	-0.931***	0.321***	0.483***	-0.225**
Short series	0.121**	0.178***	-0.287***	0.155**
Spectacle vivant	-0.905***	0.0408	-0.356***	-0.451***
TV movie	-0.922***	0.738***	0.410***	-0.259***
Small producers		<i>ref</i>		
Ad Hoc structure	-0.825	-1.025**	-0.427	1.178***
Middle	0.390***	0.104***	-0.0741*	0.478***
Big prod.	0.0137	-0.0825**	0.761***	0.207***
Leaders	-0.0446	0.296***	0.349***	0.183**
Coproduction w/ foreign	0.196***	0.0773***	0.109***	-0.623***
Ob. cinema Canal	0.0665***			
Ob. AV Canal	0.239***			
Ob. cinema FTV		0.454***		
Ob. AV FTV		0.144***		
Ob. AV TF1			-0.0240**	
Ob. AV M6				-0.0619***
Number of movies				
Taxable Turnover (CANAL+ AV)	-2.08e-09***			
Taxable Turnover (CANAL+ cine)	-5.68e-10**			
Intercept	1.212*	-4.990***	-1.425***	-0.832***
Observations	23,381	23,381	23,381	23,381

Clustering of Cinema and Audiovisual producers

Group	Number	Concentration (production costs)	Annual prod. cost (M€)	Number of movies (yearly)	Specialization (cinema)	years in activity cinema
Leaders	4	14%	41	3	86%	9
Big	28	27%	15	2	92%	7
Middle	163	36%	9	1	96%	3
Small	468	16%	2	1	78%	2
<i>ad hoc</i> structures	17	7%	33	1	100%	1
Total	680	100%	4.9	1.1	83%	2

TABLE – Ecosystem of cinema production (2007-2015)

Back

Results- Full Table

	Cinema				Audiovisual			
	CANAL+	TFV	TF1	M6	CANAL+	TFV	TF1	M6
Production cost	1.11E-07***	3.08e-08***	5.70e-08***	3.66e-08***	2.98e-08***	3.79e-08***	1.31e-08	6.35e-08***
Small prods	<i>ref</i>							
Adhoc	-1.071*	-0.453	-0.325	1.639***				
Middle	0.609***	0.785***	0.821***	0.900***	0.335***	0.0502**	-0.122***	0.438***
Big prod.	0.623***	0.843***	0.905***	0.988***	-0.177***	-0.232***	0.817***	0.102
Leaders	-0.311	0.0834	1.213***	0.913	-0.0287	0.282***	0.310***	0.153**
Foreign Coproduction	0.202**	0.224***	-0.314***	-0.504***	0.237***	0.0553**	0.189***	-0.644***
Ob. ciné (CANAL)	-0.0605				0.0664***			
Ob. AV (CANAL)	-0.0831				0.263***			
Turnover Cinema (CANAL)	-1.54E-09*							
Turnover AV (CANAL)					-2.12e-09***			
Ob. ciné (FTV)		0.479				0.506***		
Ob. AV (FTV)		-0.0205				0.143***		
Ob. AV (TF1)			0.0315				-0.0331***	
Ob. AV (M6)				0.0448				-0.0685***
Animation					0.276***	0.202***	0.0107	0.112
TV series					-0.407***	0.355***	0.664***	-0.341***
Short series					0.198***	0.159***	-0.228**	0.116
Performing Arts					-0.889***	0.0364	-0.335***	-0.421*****
TV movie					-0.766***	0.772***	0.462***	-0.241
Documentary						<i>ref</i>		
Observations	1,546	1,546	1,546	1,546	21,835	21,835	21,835	21,835

TABLE – Multivariate probit model (separated analysis)