# ERASMUS UNIVERSITY ROTTERDAM

# MASTER THESIS

# The legitimisation of Public Service Broadcasting

Why should there be a public news broadcast, if there isn't a public news paper?

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Abstract: Media play an important role in the Dutch democratic society, with television being the most important supplier of content. The broadcasting landscape consists of a public broadcaster and commercial broadcasters. The start and first justification of Public Service Broadcasting originates from the time that there were a limited number of channels. In the current time there are numerous channels which means that the justification does not hold anymore. Governments nowadays justify Public Service Broadcasting on the grounds of market failures by commercial broadcasters. They argue that commercial broadcasters are not able to supply a pluralistic, independent, qualitative supply which is accessible for all. This thesis, which focuses on the news provision of the public broadcaster, studies this justification by using theoretical research and an empirical study. The empirical study in this thesis can be seen as a contribution to research in the field of Dutch broadcasting. The outcome of the empirical research does not support the justification for Public Service Broadcasting with respect to pluralism, independency and accessibility. Is does support the concern with respect to quality.

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# **Chapter 1**

# Introduction

# 1.1 Introduction

On the 9th of October in 2013, the Dutch Secretary of State of the Ministry of Education, Culture and Science received a petition signed by 260000 people against the €300 million in budgets cuts (37 percent of the the total budget), which the Dutch Public Service Broadcaster (NPO) would had to endure. The budget cut is likely to have a major influence on the programming of the NPO. The director of the NPO stated that the cuts are likely to be 'the noose' for the NPO. The cuts are part of a large package of budget cuts due to the poor financial situation of the Dutch government. A €300 million cut is however just a small part of the total amount of cuts. So why would the Dutch government decide to cut 37 percent of the NPO's budget whereas it could had 'easily' economize this money somewhere else? One could however also ask the question why doesn't the government cut the whole budget of the NPO and leave the public with only commercial broadcasts? This thesis will investigate the question: why did Public Service Broadcasting ever start and why is it still here?

# 1.2 Public Service Broadcasting

Media play an important role in the Ducth democratic society: they are a source of knowledge and information, offer a stage for different opinions and debate. Media are said to be resources which enables citizens to orientate within society. Media give people a window to the world and provide them with information on global, national and a regional level. Media do also entertain and transfers emotions. The functions which media have are at the core of the legitimisation of the influence which the governments has with respect to media policies.

The average Dutch citizen spends seven hours of his day to use a certain form of media. More than three hours per day is used to watch television [Huysmans et al., 2010]. About one third of that time Dutch citizens tune in to the public broadcaster. The Dutch government states that the public broadcaster has a very important role within the media landscape of The Netherlands. "The public broadcaster acts as a reference point for a reliable, honest, pluralistic and independent way to contribute to the cohesion of our society. With a range in which every Dutchman can find themselves, not necessarily for everyone, but always for some and sometimes for everyone."

There is however also a lot of discussion with respect to the public broadcasters. This discussion is not a new discussion, but was already present in 1987. Commercial broadcasters than and now state that they can 'do' the exact same as the public broadcaster does. They also mention that The Netherlands does not have a public newspaper, so why should there be a public broadcaster? Another argument which is often used against the public broadcaster is the digitisation of the media landscape. In 2005 Nahuis et al. [2005] and the Scientific Council for Government Policy (WRR) [2005] both presented a study with respect to the future of the Dutch media system.

Nahuis et al. [2005] investigated to which extent market failures are relevant with respect to the supply within the media market. Nahuis et al. [2005] discuss four characteristics that can lead to market failure, namely, the cost structure (high fixed costs, low marginal costs), information asymmetry, non-excludability and externalities. Nahuis et al. [2005] examine which objectives are influenced by which market failures. They conclude that the main objective of accessibility is achieved through the market, but that additional policies are needed for pluralism, independence and quality.

The study by Scientific Council for Government Policy (WRR) [2005] states that: "a function-approach is the best (future-proof) basis for a policy-oriented analysis of the medialandscape. The media landscape will be considered as a system with six functions that are important for the contribution to the functioning of society, economy and democracy." [Scientific Council for Government Policy (WRR), 2005]. This is something which is also mentioned by Nahuis et al. [2005], which say that: "with the increasingly blurred distinction between distribution channels, the difference between various types of content becomes more clear. Therefore, it stands to reason that in the future, the characteristics of content guidelines for media policy in stead of the distribution channels."

The research by the Scientific Council for Government Policy (WRR) [2005], in contrast to the study by Nahuis et al. [2005], is not based on economics. The research by Nahuis et al. [2005], in contrast to the research by the Scientific Council for Government Policy (WRR) [2005], does not contain a further detailed breakdown of the objectives for each function/type of content. Besides these differences, both studies have a similarity, namely that they do not contain any empirical research. This thesis aims to provide empirical evidence to the discussion on the broadcasting landschape. This thesis will focus on the function provision of news, which will

be analysed in a theoretical and most importantly empirical way. This empirical research can be seen as a contribution to research in the field of Dutch public broadcasting.

# 1.3 Research Question

The provision of news has traditionally been an important function provided by the media. Along with the feature opinion and backgrounds it can be seen as a function which is essential for the functioning of society [Scientific Council for Government Policy (WRR), 2005]. Journalists state that *the media should inform the public in a balanced way, as to make citizens understand what is happenings within the world.*" [van Vree, 2004]. The idea that the media should provide citizens with news is also supported by European governments<sup>1</sup>. Although governments find that there should be a public broadcaster to provide news, there is also a role for the commercial broadcasters. The government however states that the commercial broadcasters are not able to provide news which is pluralistic, of high quality, independent of commercial influence and accessible for all citizens. This thesis will try to answer the question:

To what extent do market failures affect the governments media objectives with respect to the provision of news and does this justify the interference by the government?

This research originated from an internship within the Ministry of Education, Culture and Science. The idea for this thesis follows from an international comparison of broadcasting land-scapes. The similarities between countries with respect to the objectives which justify government interference and the emphasis on the provision of news by a public broadcaster by all countries lead to the research question stated above.

# 1.4 Method and Structure

This thesis will consist of two different parts: a theoretical research and an empirical analysis.

The theoretical research will be used to answer the following questions:

- 1. How can the objectives with respect to the media be described and what is the importance of these objectives?
- 2. Why is the provision of news seen as the most important role of public broadcasters?
- 3. How can the objectives with respect to news be described?
- 4. Which market failures influence the provision of news?

<sup>&</sup>lt;sup>1</sup>[Flemish Government, 2012], [Deutsche Bundestag, 2009] and [BBC Trust, 2010]

- 5. How do the market failures influence the objectives with respect to the provision of news?
- 6. What is the role for the government with respect to the provision of news?

The second part of this thesis contains a content analysis of the two most important news broadcasts in The Netherlands: The public broadcast by the Dutch Broadcasting Foundation (NOS) and the commercial broadcast by Radio Television Luxembourg (RTL). This analysis will be used to see if the theoretical arguments are in line with empirics.

# 1.5 Chapter Structure

This thesis will start with a brief overviews of the history and current broadcasting landscape in the Netherlands and in several European countries. Chapter 3 will elaborate on the objectives which are seen as the legitimation of the public broadcasters. Chapter 4 will describe the policy change which was proposed by Nahuis et al. [2005] and the Scientific Council for Government Policy (WRR) [2005]. It will furthermore elaborate on the importance of the function provision of news and how the objectives by the government relate to this function. Chapter 5 contains the theoretical information to the research question of this thesis. The chapter starts by describing the different market failures which influence the provision of news and will than show which effect these failures have with respect to the objectives within the provision of news. Chapter 6 will present empirical information about the level of pluralism, quality, independency and accessibility within both newsbroadcasts by the NOS and RTL. The thesis will end with a conclusion and discussion.

# Chapter 2

# **Broadcasting**

This Chapter will give a brief overview of the history and of the current broadcasting landscape in the Netherlands and in several European countries. Section 2.1 is dedicated to the public service broadcasting (PSB), whereas section 2.2 on commercial broadcasting. Although this chapter is not directly relevant for the research question it gives some extra information about the differences between public and commercial broadcasting, which will be useful in the chapters to come.

# 2.1 Public service broadcasting

"Public Service Broadcasters are broadcasters with a public service mandate. The definition of this mandate falls within the competence of the Member States, which can decide at national, regional or local level. Such a mandate would be consistent with the objective of fulfilling the democratic, social and cultural needs of a particular society and guaranteeing pluralism, including cultural and linguistic diversity. To fulfil this mandate, the public broadcaster benefits from license fees or direct financial support from the State." [European Commission, 2012]

#### 2.1.1 Netherlands

#### **2.1.1.1** History

The foundation of public service broadcasting in The Netherlands originates from the 1920's. The Dutch society was said to be 'pillarized' (*Verzuiling* in Dutch)<sup>1</sup>. This pillarisation was reflected in the media system, where it was embodied by several different radio-broadcasters

<sup>&</sup>lt;sup>1</sup>The compartmentalization of the society into different groups on ideological or socio-economic basis, with the groups, to some extent, shielded from each other [Davids and t Hart, 2011]

representing different pillars. The difference between broadcasters led to competition in obtaining available 'on air' time, which led to the 'decision' on 'on air' time ('Zendtijdbesluit') in 1930 [Dommering, 2004]. The 'decision' on 'on air' time is the foundation of the current PSB model.

The Dutch Television Foundation (Nederlandse Televisie Stichting (NTS)) was founded in 1951 by the four largest radio-broadcasters at the time and started broadcasting on national television on the second of October 1951 [Hageman and Vos, 1996]. The 'decision' on television ('Televisiebesluit') in 1956 saw that the (radio-)broadcasters were entitled to a percentage of the television broadcasting time. The 'decision' also saw that from 1956 people had to pay a license fee for television (besides the fees for radio which citizens already paid)[Bardoel, 1994]. 'Depillarisation'<sup>2</sup>, to some extent caused by public service broadcasting, combined with growing welfare led to discussion about the use of airtime for commercial purposes (e.g. advertisement). The discussion led to a new law on Broadcasting which went into effect in 1969. The main objective of the new law was to be an open system with necessary cooperation between broadcasters and the beginning of mixed funding [Bardoel, 1994]. With this law it was possible for new broadcasters to enter the system (via paying members) and to create revenue by advertisements (via the STER). This law caused a fierce competition between broadcasters. In the following years the Dutch public broadcaster (NOS) not only faced internal competition but also external (other European countries accepted commercial television [Dommering, 2004]). The government tried to fight off commercial television by a new Media law in 1987 [Ministry of Welfare, Health and Culture, 1987]. This law did not overcome the introduction of the commercial broadcasters, which was the beginning of the dual system in 1989.

# 2.1.1.2 Now

The NPO (Dutch Public Broadcaster) nowadays has three channels, a number of regional channels, seven digital channels and a comprehensive internet site with the possibility to watch live television and to watch repetitions of programmes online. In 2011 the channels had a combined market share of 33.7 percent, which has been constant for the past five years [European Audiovisual Observatory, 2012].

For the fulfilment of the mandate, which can be read in the Law on Media by the Ministry of Education, Culture and Science [2008], the NPO receives government funding but also generates revenue itself (however minimal). The NPO has said to have a mixed funding model. In 2012 the NPO had a revenue of € 806 million. This amount came about by: 74 percent public funding, 24 percent commercial revenue and two percent own revenue [Nederlandse Publieke Omroep,

<sup>&</sup>lt;sup>2</sup>The elimination of parallel structures/groups in a society on ideological or socio-economic basis.[Dam, 2011]

2008]. Dutch citizens don't pay a license fee anymore but pay a small extra (1,1 percent) in taxes

The programming of the public broadcaster is for a large part provided by broadcasters. The remainder is provided by task organisations (NOS and NTR) and broadcasters based on religious grounds. The different broadcasters ensure diversity in the broadcasting system in the area of content, genre, topic and the intended audience. The programme requirements and performance agreements, which must be met by the NPO, are recorded in the performance agreement. The agreement elaborates on the qualitative and quantitative objectives for the media supply [Ministry of Education, Culture and Science, 2010]. The Commission for Media shall ensure that the public broadcaster will comply with the rules of the law on media. The commission monitors the quality, diversity and independency of the media.<sup>3</sup>.

## **2.1.2 Europe**

The definition of PSB which is given by the European Commission is interpreted in different ways by different European countries.

The largest European countries like Belgium, Germany, France, Great Britain and Sweden all have a dual broadcasting system. The Public Service Broadcasters across Europe have a dominant role in the broadcasting market. The broadcasters have a similar market share which ranges between 30 and 40 percent which, on average, is divided over three channels [European Audiovisual Observatory, 2012].

The mandates of public broadcasters in all the above mentioned countries have the same focus and view and can be compared with the Dutch mandate. The programme requirements and agreements, which must be met by public broadcasters, can, except Belgium, also be compared with The Netherlands.

All public broadcasters receive government funding, but also generate own revenue (mixed funding system). There are large differences in the size of the budgets which the broadcasters have at their disposal. These range from  $\leq 8,36$  billion in Germany to  $\leq 419$  million in Belgium<sup>4</sup>. The part of this budget which is financed 'by' the government ranges from 66,9 percent in Belgium to 94,3 percent in Sweden. Although the amount received by the broadcasters is paid by the government, it is funded by the public. Citizens in Germany, France, Great Britain and Sweden who own a television(transmitter) pay an annual license fee. In Belgium the budget is funded in the same way as in the Netherlands, by taxes. The rest of the budget is revenue via advertisement (not allowed in Great Britain and Sweden) and the sale of programmes and services.

<sup>&</sup>lt;sup>3</sup>http://www.cvdm.nl, consulted on 6 November 2011

<sup>&</sup>lt;sup>4</sup>[Vlaamse Radio- en Televisieomroeporganisatie, 2012] and [Kommission zur Ermittlung des Finanzbedarfs der Rundfunkanstalten, 2011]

This paragraph has shown that although the definition of what public service broadcasting is, is open for interpretation, it is roughly the same for all named countries. They way in which the PSB is modelled however varies greatly per country.

# 2.2 Commercial broadcasting

The European Commission does not give a definition of commercial broadcasting, like the one about public broadcasting. They do however describe 'audiovisual commercial communication' which is the main element of commercial broadcasters. The reason for the fact that images are displayed in return for payment is that commercial broadcasters do not receive public financing and are dependent on 'making money'. The following section will shortly discuss the introduction of commercial television as a competitor of the public broadcaster and the current commercial broadcast landscape in the Netherlands and Europe.

#### 2.2.1 Netherlands

From 1989 on, The Netherlands had a dual system consisting of national PSB and foreign commercial broadcasters. Because of the changing circumstances in the media environment, the government decided to accept domestic commercial broadcasters from 1992 onwards[van Vliet, 2007].

The Netherlands has seven commercial channels which can be received analogously. These seven channels have a combined market share of 43,4 percent [European Audiovisual Observatory, 2012]. Besides the seven main commercial channels it is also possible to receive foreign commercial channels (e.g. MTV and Discovery Channel). The important role of the commercial broadcasters can be seen within viewer figures, which shows that seven of the ten most watched tv-programmes in 2011 and 2012 were broadcasted by the commercial broadcasters<sup>5</sup>.

The rules and mandate which apply to public broadcasting do not apply to commercial broadcasters. Commercial broadcasters don't have to fulfil performance agreements or requirements. Commercial broadcasters thus do not have a public figure and therefore do not receive public funding. Commercial broadcasters finance themselves primarily by commercials and sponsoring. Although the government does not have regulations for this kind of programmes, they do have regulation for advertisements and sponsoring (e.g. no advertisements for alcohol between 06.00 and 21.00 hrs.and programmes which contain news facts may not be sponsored [Commissariaat voor de Media, 2013]).

<sup>5</sup>http://www.kijkonderzoek.nl/component/Itemid, 45/option, com\_kijkcijfers/ file, n1-0-1-p and http://www.kijkonderzoek.nl/component/Itemid, 45/option, com\_ kijkcijfers/file, n1-1-1-p

### **2.2.2 Europe**

Commercial television is present in all European countries. The market shares of the commercial broadcasters are higher than the public shares in Belgium, Germany and France, whereas in Great Britain and Sweden the public shares are higher [European Audiovisual Observatory, 2012]

The programming of commercial channels is not the same in every country. Commercial broad-casters are mostly associated with entertainment and drama [Huysmans et al., 2004]. There are however big differences between countries. For example The Voice, a talent show, airs on commercial channels in the Netherlands and Germany, but on the public channel in Great Britain. The NPO however airs Champion League games, whereas in Belgium, Great Britain, France and Germany these are aired by commercial broadcasters.

All commercial broadcasters in Europe are subject to the rules on advertisement and sponsoring ordered by the European Union (e.g. the length of the advertisement is limited to 12 minutes per hour) [European Commission, 2007]. Besides these European rules, some countries have extra regulations for commercial broadcasters.

This paragraph gives a short explanation about the commercial broadcasting in The Netherlands and in Europe. The big difference with the public broadcasters is that commercial broadcasters do not receive public funding. This causes commercial broadcasters to use advertising and sponsoring to generate revenue. The commercial channels broadcast more entertainment and drama than informative programmes because this seems to attract more viewers. This in turn expands the base of viewers for advertising.

# 2.3 Public vs. commercial broadcasting

The sections above describe how the public and commercial broadcasting systems were and are modelled. However they do not give an explanation why PSB started and why there still is PSB and how the commercial broadcasting fits in this picture. This section will try to give a brief explanation.

The start and first justification of PSB was on technical grounds. When radio broadcasting started there were a limited/finite number of channels/wavelengths available [McChesney, 1997] and [Scannell, 1990]. Governments in Europe argued that the limited number of channels justified private appropriation. This justification had to do with the vision on democracy. The European vision, which can be described as interventionist, made market competition impossible because governments argued that (international) agreements about the allocation of wavelengths

could not be provided by the market [Scannell, 1990]. This was the reason for the British government to create the British Broadcasting Company and with that the start of PSB.

The view in the United States, which was very different from the Western-Europe view, was more Neoliberal. This vision is open for commercial influences. So instead of adopting PSB, the United States adopted a commercial system, which led to the creation of two commercial broadcasters, whose sole revenue was by advertisements [McChesney, 1997]. The public broadcaster, which was created years later, has a subordinate role in the US.

The commercial broadcasting in the US did not go unnoticed in Europe. To satisfy commercial parties the BBC established a state regulated commercial channel (ITV). The reason for the state regulation of that channel was the judgment about commercial television. Pilkington and Britain [1962] argued in a report of the Pilkington Committee that programmes supplied by commercial broadcasters were produced as to obtain as many viewers as possible and that this goal was reached by aiming at a low level of public taste. Pilkington and Britain [1962] also argued that the BBC in contrary had an excellent performance.

The first opposition against PSB started around the 70's. The technological changes and the changing vision on democracy during the 80's and 90's weakened the position of the PSB [Steemers, 2003]. The technological changes (e.g. cable and satellite) meant that instead of a finite number of channels there were now multiple channels. The European vision about democracy changed towards a neoliberal view. The view was that a certain public demand for information of content in the current digital environment, will show up on the Internet or somewhere else [McChesney, 1997]. The mind change led governments to accept commercial broadcasters.

With the 'loss' of the first justification, the supporters of PSB changed their justification. The 'new' justification was based on market failures. Supporters argue that these market failures will have influence on certain public values because of the profit-orientated state of mind of commercial broadcasters [McChesney, 1997]. The current justification lays at the heart of this thesis. As the paragraphs above have described, the public broadcaster receives both public and commercial funding whereas the commercial broadcasters only receive commercial funding. Despite the public funding for public broadcasters, the market shares of the public broadcasters are lower than those of commercial broadcasters. This thus raises the question: Why should citizens pay for a public broadcaster when there are also commercial broadcasters? The next chapter will elaborate on the current justification for the public broadcaster.

# **Chapter 3**

# The task of the media: objectives set by the Dutch government

The answer to the question why does the government find that citizens should pay for a public broadcaster is, primarily, because they find that the commercial broadcasters do not fulfil some important objectives. The most important objectives of the media policy are: (1) pluralism and diversity, (2) independency, (3) quality and (4) accessibility [Ministry of Education, Culture and Science, 2008], [Council for Culture, 2003] and [Scientific Council for Government Policy et al., 2005].

There are multiple reasons why the government would want to intervene and set objectives, namely: (1) market failures, (2) paternalism and (3) 'being a welfare state' [Nahuis et al., 2005]. The most important reason, market failures, will be elaborated in Chapter 5. In the case of broadcasting it is often claimed that commercial broadcasters supply 'elusive amusement' and quick 'scoring' programmes [van de Donk and von Wackerbarth, 2005]. Governments argue that this might lead to a flood of programmes focused to amuse and a 'shortage' of documentaries and cultural programmes, which educate. The flood of amusement might also lead to negative effects e.g. aggressive behaviour by people who watched violence on tv or the 'use' of babies in programmes<sup>1</sup>. The second reason plays a role even when there are no market failures. A government might have certain ideas about which kind of programmes are 'good' and which are 'bad'. These ideas might lead to a policy which focusses to enhance the number of viewers of the 'good' programmes and limit the number of viewers of the 'bad' programmes. If these 'good' programmes, which in economic terms are called merit goods<sup>2</sup>, are stimulated by the government we can speak of a paternalistic role by the government. This is why the government

Ihttp://www.rijksoverheid.nl/documenten-en-publicaties/kamerstukken/2012/
11/13/antwoorden-op-kamervragen-over-de-tv-serie-barbie-s-baby-en-het-bericht-holleeder-gehtml

<sup>&</sup>lt;sup>2</sup>Goods which are believed to generate positive externalities and which would be under consumed if the government did not intervene

wants the public broadcasters to have a role in broadcasting educational programmes [Fiorito and Kollintzas, 2004] and in cultural and art programmes [Van Der Ploeg, 2002]. The last reason is the fact that The Netherlands can be seen as a welfare state which wants all people to have access to certain kinds of goods and service (e.g. health care). The government finds that certain programmes (e.g. football matches) or events (e.g. the coronation of the king) must be accessible for all people, irrespective of income.

The four most important objectives with respect to the media can be defined in social and in economic terms. The next paragraphs will explain each objective in both ways. This will be done in a broad sense and is related to all the types of content which the public service broadcaster supplies. The next chapter will further elaborate on the objectives for the content type news.

# 3.1 Pluralism

Pluralism is the most important objective of the government. There are several ways to describe pluralism because of the fact that the definition of pluralism can refer to different levels: pluralism of providers (often referred to as plurality), pluralism 'within' providers, pluralism (or diversity, variation, etc.) of the supply in terms of content and genre and pluralism of the demand [Scientific Council for Government Policy (WRR), 2005]. Pluralism can also be described in economic terms, namely: *the heterogeneity of the supply has to fit the heterogeneity of the demand*.

The definition which is used by the government is a combination of definitions and can be read in the media law: *The media supply has to be arranged as such that it gives a balanced view of the society, which includes all beliefs, attitudes and interests which live among the population.* The government finds this objective important because of the fact that the whole society must be able to watch programmes which is based on their individual belief or attitude. This way no one is left out.

# 3.2 Independency

The definition of independency can be given as: *The suppliers of content must be independent with respect to political or economic 'powers'*[Scientific Council for Government Policy et al., 2005]. Political powers could be the consequence of being financially dependent on the government or a certain political party. An example of an economic power is the pressure which big advertisers can put on broadcasters which need to generate revenue via advertising and sponsoring.

The most important reason for this objective is that all the viewers have the right to form their own opinion. If suppliers would not be independent it might be that the information which is presented or content which is shown is biased<sup>3</sup>. Biased information (or content) is information which might not be complete due to the fact that the supplier of the information has a certain inclination towards a certain party. The possibility of incompleteness of information or content due to inclination is the reason that the government has set this objective. Independent is sometimes misinterpreted as impartial or unprejudiced. The government does however not mind unprejudiced broadcasters. The structure of the current broadcast system in the Netherlands is actually based on the fact that broadcasters: 'have a supply which is based on a certain social, cultural, religious or spiritual movement/group and focusses on the satisfaction of the needs of these movements/groups [Ministry of Education, Culture and Science, 2008]. If a broadcaster however withholds information due to bias, the government does mind [Nahuis et al., 2005]. The economic definition of independency can be described as: the supply of the content must not be biased<sup>4</sup> or influenced by incentives<sup>5</sup> which could be present if political or commercial parties have a certain power.

# 3.3 Quality

The objective quality is the most difficult to describe. Although the law on Media repeatedly refers to the quality, it does not give a description. Within media policy, quality is mostly referred to in the sense of decency. Literature distinguishes different ways of interpreting decency:

- 1. The way in which the media (suppliers) fulfils its social functions (e.g. personal development or educative and cultural development [Fortuijn, 2003]). A supplied 'good' can, with this description, be said to be of quality if it fulfills social functions.
- 2. The way in which the media (suppliers) comply with legal public interests (e.g. the protection of juveniles [Ministry of Education, Culture and Science, 2008] or the prohibition of discrimination<sup>7</sup>).
- 3. Professional quality, which will vary between different kinds of mediasectors. Professional quality of journalism (accuracy) is not the same as professional quality of a certain movie or series (acting or use of camera).

<sup>&</sup>lt;sup>3</sup> Cause to feel or show inclination or prejudice for or against someone or somethinghttp://www.oxforddictionaries.com/definition/english/bias, consulted on 26 november 2013

<sup>&</sup>lt;sup>4</sup>See Footnote 3

 $<sup>^5</sup>$ a thing that motivates or encourages someone to do something http://www.oxforddictionaries.com/definition/english/incentive

<sup>&</sup>lt;sup>6</sup>In the broad sence a 'good' can be defined as televisionprogramme. In a narrow sence this thesis will define a 'good' as the content of information which is supplied via a news broadcast [Nahuis et al., 2005].

<sup>&</sup>lt;sup>7</sup>Article 1 of the Dutch Constitution: 'All persons in the Netherlands shall be treated equally in equal circumstances. Discrimination on the grounds of religion, belief, political opinion, race or sex or on any other grounds whatsoever shall not be permitted'

- 4. Quality in terms of demand and supply. Does the supply of the 'goods' fulfil the demand. [Scientific Council for Government Policy (WRR), 2005]
- 5. Quality in terms of a complete programme supply. A complete supply of programme genres can be seen as a form of quality

The objective quality is not only hard to define, but also hard to measure because quality is very personal and subjective.

The economic interpretation of quality is linked to paternalism, which is explained in the introduction of this chapter. The definition of a 'good' with high quality is thus: a 'good' which generates positive externalities (e.g. educative effect) [Nahuis et al., 2005]. The reason for this objective is thus that the government has certain ideas about which kind of programmes are 'good' and which are 'bad' and that the viewers themselves have to be 'guided' by the government towards the 'good' programmes.

# 3.4 Accessibility

The objective accessibility can be described for suppliers and for viewers. The focus in this thesis is however on the viewers. The definition for viewers is that they have to have: 'a free and equal access to social information' [Bardoel and Van Cuilenburg, 2003]. The definition can be divided in the components availability and affordability. The Centre for Media Pluralism and Media Freedom [2013] states that "a well-functioning democracy requires access to information as a means to make informed political choices." The reason why this is required is that, access to pluralistic information could help people to form a 'better' or clearer view about ongoing politics [Mutz and Martin, 2001]. Affordability is simply defined as: the viewers must be able to afford certain content which is broadcasted. The accessibility is only for programmes or content which are said to have a high newsvalue [Nahuis et al., 2005] or which are of major importance for society (e.g. World and European Championship soccer or the Eurovision Songcontest) [The Council of State, 2008].

# 3.5 Summary

The paragraphs above describe and define the four most important objectives which are set by the government with respect to the policy on media. The definition of the objective is as follows:

1. Pluralism: The media supply has to be arranged in such a way that it gives a balanced view of the society (which is heterogeneous). The heterogeneity of the supply has to fit the heterogeneity of the demand.

- 2. Independency: The supply of the content must not be biased or influenced by incentives which could be present if political or commercial parties have a certain power.
- 3. Quality: The supply of content and information must be composed so as to generate as many positive externalities as possible and to keep the negative externalities as low as possible.
- 4. Accessibility: Content which is said to have a high newsvalue or which is of major importance for society must be priced at an affordable (low) price or free.

# 3.6 Origin and future of the objectives

The section above describes the four most important objectives which the Dutch government has with respect to broadcasting. It does however not discuss the origin of these objectives.

The origin of the objectives is not set to a certain date. The law on Broadcasting from 1967 does only make note of pluralism and accessibility [Boerma, 1982]. These two objectives are based on the 'pillared' society (see Section 2.1.1.1) and the scarcity of wavelenghts (see Section 2.3). Quality and Independency were first mentioned in the law on Media in 1987 [Ministry of Welfare, Health and Culture, 1987] and have been present ever since.

Although these objectives have been widely accepted and are also 'used' by other European countries (see Section 2.1.2), "there has never been a generally accepted theory of public service broadcasting' [McQuail, 2010]. A viewpoint which is often used to define the purpose or role of public service broadcasting and is very related to the objectives is that of Habermas [1991]. Habermas [1991] states that for a good working democracy it is necessary for citizens to have access to a diverse range of viewpoints, free from state influence or market interference. Although this view is for the society as a whole it is very applicable to PSB. The fact that the objectives are widely accepted also appears from the fact that the European Commission [2001] has named the objectives as 'role of the public service broadcaster'.

The objectives, which are the current justification for public broadcasting, have their origin in the past and might not be applicable any more in the future. There has been a large debate on the exact justification of these objectives in the current media landscape. The debate is again on the role of the commercial broadcasters which might also fulfil the objectives by the government and thus act against the justification of public broadcasting. Chapters 5 and 7 will describe the relevance of the objectives today and in the future. The following Chapter will first elaborate on the functions of PSB and the function news in particular.

# **Chapter 4**

# Policy discussion: a functional approach

For a long time the mediapolicy and the law on Media were primarily based on different distribution channels which meant that there were different policies for radio, television, newspapers and internet. The Scientific Council for Government Policy (WRR) [2005] argued that this way of thinking was no longer sustainable and that the government should switch to a function based policy (See Section 4.1). The reason for this change was the convergence of media infrastructures, which enabled users to substitute more and quicker between platforms (for instance internet for news consumption and online videoservices for amusement consumption). Suppliers however used different platforms in a more complementary way (for instance 'second screen' on pc or tablet). The convergence led the Dutch government to focus on a public broadcaster which must be active at multiple platforms. This is the basis of the law on Media in 2008, also called the 'Multimedia law' [de Koning et al., 2008]. Although the government took over the recommendation to let go of the focus on distribution channel, they did not implement the full recommendation to base the media policy on functions [Scientific Council for Government Policy (WRR), 2005].

## 4.1 Functions

In 2005 the Scientific Council for Government Policy (WRR) [2005] and Nahuis et al. [2005] both presented a paper which stated that the policy on media should be based on types of content [Nahuis et al., 2005] and functions [Scientific Council for Government Policy (WRR), 2005]. There are several reasons for a function (content) based policy and there are several reasons for

<sup>&</sup>lt;sup>1</sup>"The ability of different network platforms to carry essentially similar kinds of services, orthe coming together of consumer devices such as the telephone, television and personal computer."[European Commission, 1997]

government interference in the mediamarket, described in Chapter 3. Market failures (coststructure, information asymmetry, non-excludability and external effects, see Chapter 5) are the most important reason for the government to intervene. These failures can however in greater extent be linked to content (e.g. external effects have more to do with the kinds of content than with the channel which provides the content). The same reasoning seems to apply for motive paternalism. If the government wants to make sure that children 'consume' educational programmes it does not matter if they 'consume' this via the television or computer [Scientific Council for Government Policy et al., 2005]. Because of the convergence of channels and the diminished link between the reasons for government interference and distribution channels Nahuis et al. [2005] state that the government must base their policy on types of content (news and opinion, culture and art, specific information and amusement). The Scientific Council for Government Policy (WRR) [2005] uses the idea of content but states that functions<sup>2</sup> create more 'stable' categories. The reasons for this are that contents are 'changeable', which is not the case with functions. It is possible that a certain programme has multiple functions (e.g. amusement and informative: information about safe sex in a soap), this does however not create a new function. Functions are therefore more 'stable' to base policy on. The Scientific Council for Government Policy (WRR) [2005] described six functions:

- 1. The provision of news.
- 2. Forming opinion and backgrounds.
- 3. Providing amusement.
- 4. Providing art and culture.
- 5. Specific information provision.
- 6. Commercial information provision.

[Scientific Council for Government Policy (WRR), 2005]

The Scientific Council for Government Policy (WRR) [2005] thus describes six functions. There is however an emphasis on the function news provision. Section 4.2 will describe the emphasis on news and why this thesis examines that function.

## 4.2 News

The first article in the decision on Media, which is an important part of the law on Media, describes that the Nederlandse Omroep Stichting should offer a supply which contains at least: a

<sup>&</sup>lt;sup>2</sup>Functions are that what we as society expect of the media landscape. These functions are made concrete by means of specific content [Scientific Council for Government Policy (WRR), 2005]

daily news service with i.a., reports about national and international political and social events [The Council of State, 2008]. This is not only emphasized by the Scientific Council for Government Policy (WRR) [2005] and the Dutch government but also by other European governments. The Flemish Government [2012] states that 'providing news is the core mission of the public broadcaster.' The news provided by the VRT has to be a reliable and professional guide which provides information in an accessible and balanced manner. The Deutsche Bundestag [2009] argues that the public broadcaster 'is supposed to give special attention to news broadcasts.' The French public broadcaster, France Télévisions, is said to have a major role in the provision of news [Conseil Superieur de L'audiovisuel, 2011]. In Great Britain not only the government but also the British public find that 'the provision of news is one of the most important public purposes of the BBC' [BBC Trust, 2010].

Although it is clear that European governments see the provision of news as one of the core functions of public broadcasters, it is not clear what the provision of news exactly is. To clarify what the provision of news is, the next section will begin by how the provision of news is 'created'.

# 4.2.1 'Creating' and defining news

The provision of news starts with a certain newsworthy fact or event. This fact or event has to reach a news redaction/editorial office. The event reaches the editor via news agencies or journalists (freelancers or employed). News agencies gather and check the newsworthy facts, write texts and take pictures and sell them to the editors. News editors collect all the texts and photo's or video and make it to a final product which can be distributed. After the news item is finished it can be broadcast, printed, aired or put online after which it can be consumed (See figure A.1). The 'path' above can bypassed when a person or company broadcasts or prints an event themselves [Rutten and Slot, 2011] and [Baarsma et al., 2013]. Note that this section does not mention the 'step' advertisers. This 'step' will be explained in more detail in section 5.2.

In this thesis news will be defined as: a newsworthy, topical<sup>3</sup> fact or newsworthy, topical information which is transferred. This definition is independent of the way it is distributed and is open for interpretation as to which subjects may be newsworthy. This thesis will furthermore 'see' news as a source of 'pure' information [Mullainathan and Shleifer, 2005] and will make no difference in how the news is presented. News can be presented as a simple statement (e.g. there are riots in The Ukraine) or with journalistic enrichment like reporting or research journalism (e.g. a live coverage by a journalist in The Ukraine, interviewing people).

<sup>&</sup>lt;sup>3</sup>important at this moment/ ongoing at this moment

#### 4.2.2 News broadcast

The definition which is given above is independent of the way it is distributed or consumed. There are however many ways in which it can be consumed (see Figure A.1). There are multiple studies which show that although the use of internet to consume news is rising, news broadcasts stay the most imporant source of news consumption followed by the internet and newspapers. An American study by Kohut et al. [2008] used a nationwide sample of 3615 adults to examine which source(s) people use to consume news. Kohut et al. [2008] find that on a daily basis; 57 percent of the surveyed watch TV news, 34 percent reads the newspaper, 35 percent listens to news on the radio and 29 percent uses the internet for news<sup>4</sup>. Of the 29 percent which used the internet for news, 84 percent also got their news from the tv, newspaper or radio. A recent Dutch study has shown that a person on average; watches 7.0 newsbroadcasts, reads 2.6 newspapers and visits a website for newspurposes 2.7 times per week [Trilling and Schoenbach, 2013]. Studies thus show that television broadcasts are an important source for news consumption.

#### 4.2.3 The social function of newsbroadcasts

So far we know; how the provision of news is defined, why television is an important source of news consumption and that the provision of news is very important for governments and public broadcasters around Europe. It is however not clear why this is so important.

Broadcasting news and supplying information about current affairs have historically been the most important task of, and the foundation for public service broadcasting. The integrity of journalists is said to be unaffected by state interference or commercial pressure. The most important function of newsbroadcasts is its value for democracy. Cushion [2012] states that:

"In many countries, public service broadcasting has been established to prevent state corruption and to act as a safe haven from market manipulation. In countries previously governed by corrupt regimes or autocratic leadership, the transition to democracy is often associated with a strong public broadcasting infastructure and a robust regulatory framework needed to uphold values of journalistic independence. Of course, news alone does not define the concept of public service broadcasting, but in up-and-coming democracies establishing an editorial charter independent of the state has served as an important shield from government control and propaganda."

In The Netherlands however there is no corrupt regime, nor autocratic leader. The Netherlands has a 'good' functioning democratic system. So why do we need news? News media enable people to participate in public debate, expand the public sphere and the range of opinions in

<sup>&</sup>lt;sup>4</sup>Note that the overall percentage is higher than 100, because surveyed may use multiple sources.

that sphere and increase the public engagement with the governments and/or public institutions [Witschge et al., 2011].

"A healthy news service acts as a key indicator of a fully functioning democratic system, providing a range of information on which citizens can deliberate and make their own decisions. This is a vitally important role. The news media may not tell us what to think but they do set the agenda on what we should think about, and they play a central part in informing our hopes, fears and desires." [Witschge et al., 2011]

So the answer to the question, why do we need news, is that: *it enables people to participate in this democracy and enhances democracy.* This is why European governments find the provision of news very imporant.

# 4.3 The objectives with respect to news

The government has, as described in chapter 3, formulated four objectives with respect to the media-supply. Although these objectives are directed at the media-supply as a whole, they can also be linked to the provision of news. The objectives with respect to news are however not defined in totally the same way as for the media-supply as a whole. which was addressed by the Scientific Council for Government Policy (WRR) [2005]. In order to focus on the function chosen within this thesis, the following section will describe the objectives with respect to the provision of news.

#### 4.3.1 Pluralism

Pluralism was described as: *The heterogeneity of supply has to fit the heterogeneity of the demand (See Chapter 2)*. Because news provision enables people to participate in the public debate, it is very important that news is being provided on different levels and with different perspectives. Citizens can themselves decide which level is the most suitable to consume the news. With respect to news broadcasts variation of supply can be achieved in several ways, namely: diversity in themes, the scope of the themes and diversity in sources. [Ruigrok et al., 2011] and [Ruigrok et al., 2012]

# 4.3.2 Independency

Independency was described as: The supply of the content must not be biased or influenced by incentives which could be present if political or commercial parties have a certain power. (See Chapter 2)

"Imagine a world where patronage drives news coverage. Editors seeking favours from political parties slant the discussion of government policies. Newspapers trying to sell space to advertisers tailor the way the cover politics in order to gain more readers to market." [Hamilton, 2004]

The world described above would not enhance democracy. Important stories would be left out or certain voices would not be heard, both on purpose. When news broadcasters are not independent, they might not broadcast certain stories as to protect a certain politician or commercial company.

# 4.3.3 Quality

Quality was described as: The supply of content and information must be composed so as to generate as many positive externalities as possible and to keep the negative externalities as low as possible (See Chapter 2). Although the quality of news it not totally the same and is, as for all genres, subjective, it is possible to describe quality of news/journalism. Quality journalism has to be accurate because of the fact that for most people television news is their main source of news. It is crucial that this news is accurate [Hooghe et al., 2007]. Quality journalism also has to contain a certain level of information value (hard or broadsheet coverage). "A news medium which only or for a large part provides "tabloid" coverage is automatically diminishing the quality of news/journalism" [Lehman-Wilzig and Seletzky, 2010]. Finally, the journalists which provide news items have to obtain the news according to journalistic standards (e.g. no discrimination, no plagiarism etc. [Internationale Federatie van Journalisten, 2009]

Note that the three indicators of quality can all be linked to keeping the positive externalities high and the negative externalities low.

#### 4.3.4 Accessibility

Accessibility was described as: Content which is said to have a high newsvalue or which is of major importance for society must be priced at an affordable (low) price or free (See Chapter 2).

This means that people must be able to receive news broadcasts and that the costs of receiving it must be low. With respect to news it also means that people should be able to understand the news. The news broadcast should be on such a level (see section 4.3.1) that it is accessible for people to 'use' as source of information.

## 4.4 Public vs. Commercial news

This chapter has shown that the government finds the provision of news very important. Although there are several 'functions' which a public broadcaster can have, European governments focus on news. This chapter also described the objectives, which the Dutch government has formulated for media supply, with respect to the provision of news. The question which is still not answered and which is at the heart of this thesis is: Why do citizens pay for a public news provision when there is also commercial news provision? In 2012 the NOS received € 170 million to provide news [Nederlandse Omroep Stichting, 2012]. This money was received from the government and was paid by money raised by taxes (75 percent) and by advertisment revenues (25 percent). This means that in 2012 a Dutch citizen paid about €8 to be able to consume news via the NOS. There are however also news broadcast on commercial channels which are free to consume. A study by Trilling [2013] has shown that 82 percent of the population watches a broadcast by the NOS on a weekly basis, whereas the commercial news broadcaster by RTL and SBS are only being watch by 68 and 57 percent respectively. The research however also showed that 70 percent of the people which browsed nos.nl to consume news, also browsed on rtlnieuws.nl. Although the NOS has a larger market share than RTL and SBS, it is still not an answer to the question: Why should citizens pay? The next chapter will try to analyse this question by looking at the influence of market failures on the objectives formulated by the government, and also at the influences of market disruption and government failure.

# **Chapter 5**

# Provision by the market and government objectives

Chapter 3 described the objectives which the government formulated as legitimisation of public service broadcasting. Chapter 4 linked these objectives to the function news, which European governments see as one of the most important functions of public broadcaster. Chapter 4 also mentioned that in 2012, 'every' Dutch citizen paid € 8 in taxes so as to finance the NOS and to consume news. Consumers can however also watch the commercial news broadcasts by RTL (RTL news and RTL Z) and SBS. Citizens are not obliged to pay taxes for these broadcasts. The government has chosen to raise taxes because they find that the commercial news broadcasters fail to accomplish the objectives formulated by the government [Nahuis et al., 2005]. This chapter will describe the market failures (section 5.1) which commercial broadcasters endure and will set forth what effect this has on the objectives (section 5.2). The theories in this Chapter are based on the research by Nahuis et al. [2005]. The empirical research used has come from an extensive literature research on the provision of news.

Note that the next parts are only focussed on the television broadcasts and not for example on the internet or watch on demand/delayed viewing, which are often seen as substitutes for the content which is broadcasted. The first reason for this choice is that news broadcasts are the most important source of consuming news (see section 4.2.2). The second reason is that the number of viewers which 'view delayed' are much lower than live viewers (live: 2 million on average, delayed: 20.000 on average<sup>2</sup>). The last and most important reason is that the provision of news is often seen as the core of the public service broadcaster and it is therefore, as already mentioned in the introduction, important to see if this is the case.

<sup>&</sup>lt;sup>1</sup>Watch a rerun of the programme on the internet or interactive tv

<sup>&</sup>lt;sup>2</sup>Source: SKO and NOS.nl

## **5.1** Market failures

A market can fail in two different ways: *markets fail to efficiently allocate goods and services* and markets fail to serve the public interests [Storsul, 2007]. There has to be a good for a market to fail. This thesis describes a good as: the information which is supplied via a news broadcasts." News itself it seen as an information good. This thesis will not pay attention to the fact that a news broadcast is a show (i.e. camera shots of the presenter, decor etc.) and will only pay attention to the news which is supplied. The characteristics of information goods, which will be elaborated below, are also applicable to news broadcasts<sup>3</sup>.

Information goods can be characterized as public goods and experience goods. They furthermore have the characteristic of being very expensive to produce (high fixed costs), but cheap to reproduce (low variable costs) [Shapiro and Varian, 1998], [Hamilton, 2004] and [Nahuis et al., 2005]. A public good cannot exclude consumers from consumption [Head and Shoup, 1969] and is non-rival<sup>4</sup>. Information goods often have the same characteristics. Person A using information goods does not exclude person B from using the same good at the same time. It is, in most cases, neither possible to totally exclude people from using information goods. A news story can be for example be taped or relayed mouth-to-mouth and a newspaper can be passed on. Information goods can thus be seen as examples of a public good. Information goods are also examples of an experience good<sup>5</sup>. Before consuming an information good it is not know by the consumer what the quality, the subject, the length or tone of the news item will be. The consumer has to experience these features by consuming the good [Nelson, 1970]. The last characteristic is the cost structure of information goods. The costs of producing a news broadcast (fixed costs) are very high. The costs of distributing the broadcast after it is broadcasted to the first person (variable costs) are very low compared to the fixed costs. The features/characteristics of information goods lead to market failures with respect to the certain parts of the production of information goods. These failures will be discussed below<sup>6</sup>.

# **5.1.1** High fixed costs, low marginal costs

The cost structure of information goods is characterized by very high fixed costs and low marginal costs. The financial report of the NOS gives a good example of this cost structure. In 2012 the NOS had direct production costs of €116.9 million and personnel and social costs

<sup>&</sup>lt;sup>3</sup>For the convenience of the reader and writer, this Chapter will use the definition information good instead of *the information which is supplied via a news broadcasts*.

<sup>&</sup>lt;sup>4</sup>A public good is the counterpart of a private good. Privates goods are able to exclude consumption

<sup>&</sup>lt;sup>5</sup>Experience goods are the counterpart of search goods. The quality of a search good can be known before consuming when research is done.

<sup>&</sup>lt;sup>6</sup>Market failures are based on research by: [Albarran, 1996], [Doyle, 2002], [Greco, 2003], [Hoskins et al., 2004] [Albarran, 2004], [Hamilton, 2004], [Nahuis et al., 2005], [Storsul, 2007] and [Doyle, 2013]

of  $\leq$  50 million. These costs can be seen as fixed costs and were 93,5 percent of the total costs [Nederlandse Omroep Stichting, 2013].

The cost structure has several effects. It creates economies of scale, which are present when the cost of providing an extra unit of a good falls as the scale of an output expands. <sup>7</sup> The second effect of the high costs is that it can form an entrance barrier for new companies. This entrance barrier consists of the huge investment which has to be made to start up without knowing if the investment will pay off. Both of the effects can lead to a *concentration of providers (monopoly or oligopoly) which supply information goods.* Monopolies or oligopolies cause markets to fail because they create a situation in which markets do not efficiently allocate goods and services.

# 5.1.2 Information asymmetry

Information goods have the characteristic of an experience good. Viewers do not know the content, the quality or the correctness of the broadcast before they watch it. After they have watched the broadcast they still do not know if the information is correct. The broadcaster has all the information. There is said to be information asymmetry between suppliers and consumers. The reason for information asymmetry in a competitive market sphere is that "people do not know what they are "buying" until they have experienced it, yet once they have experienced it they no longer need to buy it [Graham and Davies, 1997]. This asymmetry of information is seen as a market failure because it is not the most efficient outcome possible.

## 5.1.3 Non excludeable

Information goods are, to some extent, characterized by the fact that they are non excludeable, which means that for a larg part of the information goods "there is no effective way of excluding individuals from the benefit of the good, once it comes into existence [Storsul, 2007]. Because this inability to exclude individuals there is a certain form of revenue which 'leaks' away. There are people who consume the good, but do not pay for it (free-riders). Figure A.3 gives a graphical explanation. With a 'normal' stream of revenue (TR1) the supplier would supply until the total revenue is equal to the total costs. Because of the "leaking" revenue (TR2) the supplier does not supply at Q1 but at Q2. This outcome is inefficient. In the case of the news broadcasts it is clear that it is almost impossible to exclude viewers. RTL and SBS are free to air channels which are at everyones disposal. A possibility to exclude people is, for example pay-per-view or only broadcast digital (for which people have to pay). This will however not been taken into account because RTL and SBS are free (conditional on having access to a provider. So "because of the

<sup>&</sup>lt;sup>7</sup>This happens when the marginal costs (supplying an information good to one viewer more) are lower than the average costs (see Figure A.2 for graphical substantiation).

fact that goods or services are non-excludable, it is difficult to make 'free-riders' pay" [Griffiths and Wall, 2004]. Thereby leading to an inefficient outcome.

# 5.1.4 Externalities of information goods

A characteristic of information goods which is not yet mentioned is that some parts of the information good can be seen as a 'merit good', wheras some parts can be seen as a 'demerit good'. Merit goods are goods of which the government finds that it should be consumed in a larger volume than consumers would consume if they had the choice. 'Demerit goods' on the other hand should be consumed in a smaller volume [Musgrave, 1956]. The reason why the government wants a larger (smaller) volume of 'merit (demerit) goods' is that they have positive (negative) externalities. Externalities arise when person A consumes a good which also effects person B on a positive or negative way, without person B having any vote if person A consumes.

In the case of information goods, broadcasts with a high level of research journalism or a large number of international topics are said to offer positive externalities because they increase the democratic proces by informing people. Broadcasts with a high level of 'showbizz' or with topic which provoke e.g. violence are said to produce negative externalities [Meijer and van Dijck, 2001] and [Cushion, 2012]. Figure A.4 gives a graphical explanation of the market failure which is likely to arise because of externalities. The producer of the information good produces until the total costs (TC) exceed the total private revenue (PR). The producer thus produces between Q and Q1. The social revenue (SR) is higher than the private revenue (PR) because of positive externalities of high quality news (note that the quality of news increases from left to right). The level of Q which would be socially desirable is Q2. This level is however not reached because of market failures.

#### **5.1.5** Problems of market failures

Section 5.1 has described the market failures with respect to information goods. Although section 5.2 will give an extensive overview of the effects of the market failures on the objectives, this section will already give a short introduction to it by summarizing the market failures:

- Cost structure: The cost structure of information goods leads to a concentration of suppliers. This concentration of suppliers can lead to an inefficient allocation of the goods. This will most likely affect pluralism and the quality.
- 2. Information asymmetry: Consumers are unable to know what they are going to consume and when they have consumed it, if it is correct. Although the quality is partly known after viewing a broadcast, it is unlikely that viewers are totally sure that a broadcast is

correct and independent of certain market or political factors. Information asummetry is likely to affect the objective independency.

- 3. Non excludeable: "Leaking" revenue because of the fact information goods are non excludeable leads to an underprovidance of, first of all the amount of goods and most likely second all the quality of the goods. This market failure is likely to affect pluralism and quality.
- 4. Externalities of information goods: Goods with positive externalities are most likely to be consumed in a smaller volume than the government would like. This difference in volume is caused by the fact that the private benefits are lower than the social benefits. Suppliers supply goods until it is profitable (revenue higher than costs). Because of the fact that the private revenues are lower than the social revenues there will be a shortage of certain types of goods (or an surplus of goods with negative externalities). This market failure is likely to affect quality of information goods.

Two notes have to be made after this summary. This summary gives the most likely effects which the market failures have on the objectives. It is possible that for example externalities have an effect on independency. The second note on this summary is that it does not mention the objective accessibility. This is because of the fact that none of the market failures can be directly linked to this objective. Section 5.2 will go in to further detail on the effects.

# 5.2 The effect of the market on the objectives

The question: What effect do market failures have on the governments objectives?, is influenced by the precise market form of the information suppliers. Suppliers of information goods have to generate revenue, which can be done in three different ways. The first way is by advertising. Advertisers have to pay for the advertisement time which generates revenue for the broadcasters. In the case of Dutch commercial broadcasters selling advertisement time contributes 90 to 100 percent of the revenue generated [Mulder et al., 2006]. The second way is by direct payment, of which pay-tv is the most obvious example. To watch programmes by pay-tv broadcasters, consumers have to subscribe and pay a single (pay-per-view) or monthly contribution. Although pay-tv broadcasters generate revenue by subscriptions, they also generate revenue by advertisement [Mulder et al., 2006]. The last way of generating money is by government support.

The market form which will be the most important in this thesis is the advertisement form. The first reason why this form is chosen over pay-tv is the history of broadcasting in Europe. Pay-tv is very uncoming in Europe in contrast to the United States [Nolan, 1997]. Although the digitisation of the media landscape has created more opportunities for pay-tv broadcasters, it is

unlikely that these kind of broadcasters will dominate the current commercial broadcasters in the years to come. The second reason is that even if they would gain a huge market share it is unlikely that these broadcasters will focus on the provision of information goods<sup>8</sup>. Despite the reason to focus on the advertisement form, some attention will be paid to pay-tv because this form might be interesting for certain forms of information provision. Note that the outcomes presented below are under the presumption that there are only commercial broadcasters

#### 5.2.1 Pluralism

Pluralism is influenced by not only the market form, but also the number of distribution channels within this form. There are two forms which can be distinguished: a limited number of channels (e.g. radio or television) and an unlimited number of channels (internet).

#### 5.2.1.1 Pluralism in an advertisment based market form

The most important thing in a competitive market in this form is that: "the benefits of spreading fixed costs over large audiences favour programme delivery services that are able to reach large audiences [Owen, 1992]. A larger audience means more advertisement revenue because firms are willing to pay more to advertise. Broadcasters can also decide to broadcast advertisements in an extensive amount, which means more revenue [Gabszewicz et al., 2000] and [Gabszewicz et al., 2004]. The level of pluralism is dependent on the taste of the largest group of viewers. The content of a newsbroadcast is likely to be chosen so as to draw the largest number of viewers with, if possible, the highest purchasing power<sup>9</sup>, rather than as to create a programme which is valued very highly by a select group of people.

The choice of the broadcasters can be analysed with spatial models, of which the hotelling model is the most known. Figure A.5 gives a visual interpretation of the market outcome under the hotelling model. This outcome is based on the assumption that there are only two broadcasters (A and B). The horizontal line reaches from zero to one and indicates the total variety of the content<sup>10</sup>. Both broadcasters start at the end of the line, in which situation they attract half of the audience. If broadcaster A decides to deviate from zero to 0.1 he can increase his number of viewers. In this situation broadcaster A has 55 percent of the audience whereas B only has 45 percent. Broadcaster B on the other hand can also decide to deviate to 0.9, which leads to an even audience. This game of deviation continues until both broadcasters reach the middle, in which they both have 50 percent of the audience and have no incentive to deviate [Spitzer,

<sup>8</sup>http://en.wikipedia.org/wiki/Pay\_television

<sup>&</sup>lt;sup>9</sup>The higher the purchasing power, the more likely that a viewer can afford a good. Which is the most important purpose of advertising.

<sup>&</sup>lt;sup>10</sup>Note that the total variety is not the same as pluralism, but is an important indicator.

1997]. The outcome of the model thus concludes that both broadcasters will broadcast a news programme which have the same amount of variety. The model assumes that taste of the viewers is equally distributed over the range from zero to one. If this assumption does not hold there could be a different outcome which depends on the distribution of the viewers [Hamilton, 2004].

The model above is focussed on the case in which there are only two broadcasters. Theoretical literature states that if the number of broadcasters would increase, there should be an increase in diversity<sup>11</sup>. The main reason is that firms can attract viewers whose preference is more towards this differentiated programme than under the outcome above. This enables broadcasters to increase the amount of advertising which was not the case in the previous situation [Van der Wurff, 2004].

The number of substitution possibilities combined with the viewers aversion to advertisement also influences the level of pluralism is. A broadcaster not only has the option to raise advertisement revenue by reaching a large number of viewers but also by extensive advertisement. However "the higher the ratio between advertising broadcasting time and programme broadcasting time, the larger the number of viewers who are willing to switch to competing programmes with lower advertising rates" [Gabszewicz et al., 2000]. Research by Wilbur [2008] shows that when a certain competitive broadcaster decreases the amount of time spent on advertisement by 10 percent, it will endure an audience increase of 25 percent (assuming no competitive reactions). So in a market in which broadcasters choose to duplicate there will be no extensive advertisement because viewers switch to another programme. This situation however changes when the programmes are bad substitution options. A broadcaster can increase his advertisement time because the viewers will not switch channels [Kind et al., 2005]. In this case there is more pluralism, but also more advertisement.

#### 5.2.1.2 Pluralism in a pay-tv based market form

The most important difference between this market form and the form above is that pay-tv takes into account that people attach a certain value to certain programmes. This may lead broadcasters to create programmes which are very different from existing programmes because the value which people attach creates possibilities to generate revenue.

Although pay-tv is likely to increase pluralism, it comes at a certain cost. Recall that the marginal cost price of information goods is very low (almost zero). If a broadcaster charged his audience a certain price, even if it was very low, some viewers would be inefficiently excluded. People who value a programme higher than zero, but lower than the price charged will not watch the programme anymore. The profit which a broadcaster makes comes at the expense

<sup>&</sup>lt;sup>11</sup>Research on the increase of competition and diversity: [Spitzer, 1997], [Cabral, 2000] [Hamilton, 2004], [Nahuis et al., 2005] and Belleflamme and Peitz [2010]

of the consumer. Research by Hansen and Kyhl [2001] shows that a ban of pay-tv for certain important events always increases consumer surplus and with that contributes to the welfare level <sup>12</sup>. News is not the same as an important event but is likely to generate even more positive effects on welfare because the provision of news has a lot of positive externalities (see Chapter 4). Pay-tv also comes at the expense of the government because the objective accessibility would be violated.

## 5.2.1.3 Market failures and pluralism

Empirical research has shown that a moderate form of competition<sup>13</sup> will lead to the best outcome with respect to level of diversity and pluralism<sup>14</sup>. Because of the fact that the cost structure of information goods will lead to a concentration of suppliers, *it is likely that the level of pluralism in the news provision will be lower than efficient*.

Research has also shown that the level of pluralism is likely to be higher under the market form in which people can be excluded (pay-tv) in contrast to the advertisement form [Nahuis et al., 2005] and [Peitz and Valletti, 2008]. News broadcasts are however likely to be non excludeable<sup>15</sup>. *It is therefore again likely that, the level of pluralism in the news provision will be lower than efficient.* 

The empirical research on this likely outcome is however very scarce<sup>16</sup>. Research by Wasburn [1995] shows that with respect to news broadcast on the radio in the United States there was no significant difference in the level of pluralism. A research on the difference between the coverage of elections by public and commercial newsbroadcasters in the United States showed that there were some differences, but that these differences were not as clear as some might think. The coverages by the public broadcaster differ mostly on structure instead of content. Kerbel et al. [2000] state that "public service viewers were invited to experience the election as they would if they were watching commercial television."

The most extensive and clear empirical research is however done by Sinardet et al. [2004] and Hooghe et al. [2007]<sup>17</sup>. Sinardet et al. [2004] examine four news broadcasts in Belgium of which two public and two commercial. Sinardet et al. [2004] find a big difference between the level of diversity in favour of the public news compared to the commercial news in the French part. In the Flemish part however they find that, on average, there is only a small difference

<sup>&</sup>lt;sup>12</sup>It is for this reason that the The Council of State [2008] has drafted a list of events which must be broadcasted by the public broadcaster, for example Champions Leauge games played by Dutch teams.

<sup>&</sup>lt;sup>13</sup>Between 5 and 10 broadcasters

<sup>&</sup>lt;sup>14</sup>[Aslama et al., 2004], [Van der Wurff, 2004], [Van der Wurff, 2005] and [Lund and Berg, 2009]

<sup>&</sup>lt;sup>15</sup> Again: there is no pay channel in the whole world which is based on providing news

<sup>&</sup>lt;sup>16</sup>The likely outcome: the level of pluralism of news must, although closely related, not be confused with level of quality of news. The research on that topic is more extensive

<sup>&</sup>lt;sup>17</sup>This research will be the basis of the case-study in Chapter 6

in favour of the public news compared to the commercial news. This outcome is remarkable because, as stated in Chapter 4, the Flemish government states that: *providing news is the core mission of the public broadcaster.* It does however seem that with respect to diversity there is no big differene between the public and commercial news broadcasts.

## 5.2.2 Quality

Because of the fact that the factors which influence the level of quality are almost identical to those of pluralism there will be no extensive analysis or use of models in this section. The models and examples which are used to describe the factors which influence pluralism have almost the same outcome with respect to quality. The reason for this equality is because of the fact that both objectives are, to a large extent, interwoven.

## 5.2.2.1 Market failures and quality

The section about pluralism concluded that: in an advertisment based market form, the concentration of suppliers is likely to supply an inefficient level of pluralism. This outcome is also most likely to be the case with quality, because of factors mentioned in section 5.2.1. The section also states that there has to be a certain level of competition as to obtain a higher level of pluralism. This is however very unlikely in the case of quality, as will be explained below.

The most important factor in the providence of quality are the costs. The provision of high quality news, despite of the definition, is always interpreted with higher fixed costs [Waterman, 1990]. Until now it was assumed that these high fixed costs lead to concentration. Although this was rightly assumed, there is also the possibility of creating a 'new' market/segment in which the costs are, although fixed, not so high as to lead to concentration. This change of market, with respect to news, begun with the introduction of the 'tabloid' [Fang, 1997]. The newspaper differed from the existing type<sup>18</sup> on multiple aspects. The most important aspect was the size of the newspaper which decreased. This decrease in size led to a decrease in the amount of political and social news and even an increase in entertainment news [Ferrell and Websdale, 1999] and [Uribe and Gunter, 2004]. The change made led to a large decrease in costs, an increase in (possible) profit and thereby an increase in competition. The increase in competition caused prices to drop, leading suppliers to decrease their costs and thereby decrease the amount of extensive journalism, 'hard-news' and global news<sup>19</sup>. This decrease is referred to as the 'tabloidisation' or 'sensationalisation' of news, terms researchers and journalists most often used to give notice to the decline in quality news and journalisms." The 'tabloidisation'

<sup>&</sup>lt;sup>18</sup>Broadsheet

<sup>&</sup>lt;sup>19</sup>[Comrie, 1999],[Esser, 1999], [Uribe and Gunter, 2004] [Bek, 2004], [Hendriks Vettehen et al., 2005], [Plasser, 2005]

<sup>&</sup>lt;sup>20</sup>[Zaller, 1999], [Hooghe et al., 2007], [Wadbring, 2013]

of news can also be seen as the outcome of the market failure with respect to externalities. The inefficient level of quality arises because of the fact that consumers are unwilling to pay or are unable to value the price of good with high quality. It is thus clear that great commercial competition leads to a decline in quality. Note however that the market of news broadcasts does not experience the level of competition described above, which might have caused the quality of the news to remain on the same level. Empirical research however shows that the the commercial news broadcasts in The Netherlands are influenced by the tabloidisation of the news, causing quality to decline [Vettehen et al., 2006] and [Vettehen et al., 2010].

The 'tabloidisation' of news thus seems to strengthen the concern which the government addresses towards the level of the quality of news provided in a commercial market. *It is very likely that the level of the provision of high quality news will be to low.* There are however several remarks.

The first remark is that this section used the tabloidisation of news as the standard for quality. There are however more ways in which quality can be defined. This section however used tabloidisation because it is a term which entails the most factors with respect to quality.

The second remark is that the level of quality is likely to be higher if there was a possibility to exclude people. In that situation it would be possible to charge contribution as to finance a higher quality of news provision. This situation is however unlikely to be a possibility as it violates the accessibility objective by the government. In addition it can be said that the declining number of high quality/broadsheet newspapers act as an example of the concerns about quality news and decrease the likelihood of high quality news via pay-tv [Baarsma et al., 2013].

The third remark is again based on the research by [Hooghe et al., 2007], who found that both the public and commercial broadcaster were influenced by a certain level of tabloidisation. This result was also the outcome of studies by Vettehen et al. [2006] and Vettehen et al. [2010]. All studies however do conclude that commercial broadcasters were more affected by the tabloidisation than the public broadcasters.

The last remark is towards the fact that the government might underestimate the quality of 'tabloid' news. Several studies show that this certain kind of news might attract an audience which would normally not be involved or would not have been interested in subjects which enhance democracy (politics etc.).<sup>21</sup>

## 5.2.3 Independency

The sections above have already shown that the content which broadcasters supply *depends* on several factors with the largest group of viewers and costs being the most important ones. It thus

<sup>&</sup>lt;sup>21</sup>[Baum, 2002],[Baum, 2003], [Brewer and Cao, 2006], [Brewer and Marquardt, 2007] and [Taniguchi, 2011]

seems that it is already possible to conclude that commercial news broadcasts are not independent and that the government should intervene. The section below will discuss the correctness of the drawn assumption.

## **5.2.3.1** Market failures and Independency

Recall that independency was defined as that: the supply of content must not be biased or influenced by incentives caused by a certain political or commercial party. In the case of commercial newspapers it is clear that there is influence by a commercial party [Jackson, 2010]. Influence of political and commercial parties might lead to a form of objectivity of presenting news [Prater, 2007]. This objectivity is only a problem if it causes broadcasters to change, falsify or deliberately omit certain information. Objectivity is also a problem when a broadcasters tries to persuade viewers or when there are not enough alternatives for an objective broadcaster [DellaVigna and Kaplan, 2007]. It can thus be concluded that the intervention of the government with respect to independency is only justified in case a supplier changes, falsifies or deliberately omits certain information.

It is an important point to address that: *if there would be no asymmetry of information, there would be no need for the government to form any concern.* In the case of the provision of news however, this asymmetry is present. Imagine a person which watches a random news broadcast. After watching, he or she would be able to give an opinion about the quality, the content or the presentation. He or she would however not be able to give an opinion about the correctness of the information presented. This inability to value the correctness is used as an argument in favour of the public broadcaster. The argument however only holds if there is one source of information. If a person was able to watch news broadcasts aired by different suppliers, he or she would be able to compare the information and thereby value the information supplied. The possibility to value information will, assuming that consumers give a high value to independent news, act as an incentive for suppliers to supply news which is not changed or falsified. By doing so suppliers are able to build a certain reputation which, if positive, attracts or, if negative, repels consumers. A reputation mechanism has a positive effect on the independent news provision<sup>22</sup>. The function of this mechanism however depends on the level of competition/concentration.

As frequently stated, the level of competition does influence the level of pluralism. The level of pluralism in its turn, influences independent news provision in two ways. A high level of pluralism first of all ensures that there is a large supply of different opinions and angles with respect to certain information [Mullainathan and Shleifer, 2005]. In such a case there would be no problem with a supplier of information being objective because other suppliers will present other views. A high level of pluralism also ensures a certain level of vigilance between suppliers.

<sup>&</sup>lt;sup>22</sup>Conclusion based on the influence the market mechanism on product quality by [Akerlof, 1970]

Competition causes suppliers to keep an eye on and if possible emphasize mistakes made by competitors.

The first conclusion which can be made is that an independent news supply is influenced by the level of competition through a reputation mechanism and the level of pluralism. In the case of the news broadcasts in The Netherlands it can be said that there is a low level of competition. The reputation mechanism between broadcasters is likely to be present, but not in full force. The competition between online news suppliers however acts as a perfect addition as to ensure that the reputation mechanism between broadcasters is present<sup>23</sup>. The influence of the internet thus seems to ensure that news provided by broadcasters is not changed or falsified because of commercial or political influence [Baarsma et al., 2013].

The low level of competition is however likely to cause an inefficient level of pluralism (see section 5.2.1). This inefficient level is a threat with respect to the level of different opinions and angles and thus seems to justify the concerns by the government. The empirical evidence is again almost non existent. A research by [Van Aelst, 2007] shows that, with respect to Dutch elections in 2002, Dutch media had extensive interests in two populair politicians in comparison to the rest. This research however makes no difference between public and commercial broadcasters. A study which does addres this difference is by [Hooghe et al., 2007], which shows that the level of objectivity is the same on public and commercial news broadcasts. [De Keyser, 2012] even states that Flemish journalists find that they are not influenced by any commercial influence.

## 5.2.4 Accessibility

With respect to accessibility it is important to note that there are two ways in which this objective can be defined.

The first definition describes accessibility as content with high newsvalue being priced at an afforable price or free. It is already addressed that Hansen and Kyhl [2001] show that a ban of pay-tv raises welfare. It is however also addressed that pay-tv is very unlikely to broadcast news (see sections 5.2.1 and 5.2.2. With respect to Dutch news broadcast it can be said that there is no need for the government to intervene.

The second definition of accessibility is however defined as information which is accessible for people to 'use' as source of information. News is thus accessible if it fits the social and mental capabilities of the consumer. The accessibility of news can thus be linked with pluralism. A higher level of pluralism contributes to a larger accessibility with respect to news. With respect to news broadcasts it is already stated in section 5.2.2 that certain forms of news, caused

<sup>&</sup>lt;sup>23</sup>[Kiousis, 2001], [Bucy, 2003], [Bucy, 2004b] and [Bucy, 2004a]

by competition, may have made news more accessible for a certain audience. The empirical evidence on this matter is however scarce.

## 5.3 Conclusion

The sections above have given a theoretical and empirical overview of the possible problems with respect to government objectives which may arise because of certain market failures. This section will try to present a final analysis of the question: What effect do market failures have on the governments objectives with respect to the provision of news by commercial broadcasters?

#### 5.3.1 Pluralism

The effect of competition and market failures on the level of pluralism is dependent on a number of factors. The first influential factor is the level of competition. A moderate form of competition is desirable as to maximize the level of pluralism. The cost structure of news provision by broadcasters is however likely to lead to a concentration of suppliers which will lead to an insufficient level of pluralism.

The second factor is the market form in which broadcasters act. News provided in a market form based on contribution will lead to a higher level of pluralism compared to an advertisment based market form. News broadcasts are however likely to be non excludeable which causes news broadcasts to be supplied through the advertisement based market. This market form is likely to supply a level of pluralism which is lower than efficient.

## 5.3.2 Quality

The quality of the news provided by commercial broadcaster is, remarks set aside, likely to be lower than socially optimal. The first reason is because of the fact that consumers are unwilling to pay or are unable to value the price of goods with high quality. This prevents suppliers to obtain the social revenue of high quality and leaves them with only the private revenue. The difference between these two revenues cause the insufficient level of high quality news. This is however not the only factor which influences quality.

High quality news is always associated with higher costs. These high costs first of all causes a certain level of concentration of suppliers which will not supply a level of quality which is likely to be socially optimal, as was the case with pluralism. These costs however also cause suppliers to form a 'new' market and provide a form of news which is relatively cheap. The competition created by the new market caused a decline in possible revenue, which lead to another decrease

in the budget and thereby to a decrease in quality of news, also know as the 'tabloidisation of news'.

## 5.3.3 Independency

In order for news to be independent, there has to be a working reputation mechanism and a high level of pluralism. A reputation mechanism incentivises broadcasters to supply news which is not changed or falsified due to political or market factors. A reputation mechanism only works in the case of competition because it enables consumers to value the correctness of news. This valuation is not possible without competition because of the asymmetry of information between suppliers and consumers.

A reputation mechanism however is not an quarantee against objectiveness. Commercial news broadcasters which generate revenue by advertisements are influenced by commercial parties. This influence is likely to create a certain level of objectiveness. It is already stated that there is no concern towards objectiveness in the case of a pluralistic supply because such a supply ensures a broad range of opinions and views.

## 5.3.4 Accessibility

The sections which discuss pluralism and quality both show that news supplied by pay-tv broad-casters is likely to contain a higher level of pluralism and is also of a higher quality. The reason is due to the fact that broadcasters are able to generate revenue because people attach a certain value to the product. This would however violate the objective of accessibility. The sections above have already made clear that with respect to accessibility of commercial content there should only be concerns about the coverage of certain sporting events. The accessibility of 'normal' news, if defined as free/cheap, is unlikely to be affected by commercial broadcasters.

If accessibility would be defined as the level in which people can use information it is shown that commercial news provision is likely to have a positive influence on the objective. This positive influence is due to the fact that certain forms of news are able to attract an audience which would not otherwise be attracted.

## 5.3.5 Role for the Dutch government so far?

The theory presented seems to conclude that there is a role for the government with respect to the level of pluralism, quality and independency of the news supplied by commercial broadcasts. With respect to accessibility it it seems that there is no real need for the government to intervene. These conclusions however are not as clear as one might think.

With respect to pluralism it can be said that commercial broadcasters are unable to supply an efficient level of pluralism. Empirical evidence however shows that the level of pluralism supplied by public broadcasters might not be much different from the level supplied by commercial broadcasters. And even if there would be an inefficient level of pluralism supplied by broadcasters there might not be a need for concern because the internet is likely to supply a level of pluralism which compensates for the gap caused by commercial broadcasters. However this does not mean that the concern with respect to the level of pluralism within commercial news broadcasts is rejected.

In the case of quality it is certain that commercial broadcasters supply a level of quality which is not as high as socially desirable. The question however is: What level of quality is socially desirable? The government states that news with high positive externalities is of high quality. Empirical research however shows that certain forms of tabloid news, seen as low quality news, also have positive externalities. Research also shows, as was the case for pluralism, that the level of quality supplied by public broadcasters might not differ much with respect to that supplied by commercial broadcasters. An extra difficulty with respect to quality is that the government has not given a clear definition of how to quantify quality. This again does not mean that the concern with respect to the level of quality within commercial news broadcasts is rejected.

The concern with respect to the influence by political or commercial parties with respect to the falsification of news is prevented by the growing number of online news suppliers. As far as objectiveness is concerned, it can be said that with respect to Dutch commercial newsbroad-casters is likely that they will supply content which is objective. This level of objectiveness is worrisome because of the fact that the concentration of suppliers causes an insufficient level of pluralism. This level of pluralism and thus large range of opinions is however likely to be supplied by online news providers. In the case of broadcasters it does however still mean that there is a certain level of concern.

## 5.3.6 Conclusion

This chapter has clarified that different kinds of market failures influence the objectives formed by the government with respect to the provision of news. It has also made clear that the concerns by the government are likely to be justified to a certain extent. Although it is not exactly sure to which extent. In order to obtain a beter overview of the real value of the concerns by the government it is interesting to compare the news supplied by the public and commercial broadcaster, as will be done in chapter 6.

## **Chapter 6**

# **Empirical analysis**

Chapter 5 has analysed the question: What would happen with the provision of news if it was only provided by commercial broadcasters and does thus outcome mean that the Dutch government has the right to intervene in the broadcasting market? The conclusions drawn are based on theory and empirical research on the provision of news in countries which, mostly, are different from The Netherlands. There are some studies which have examined Dutch news broadcasts in a certain way. Studies by Ruigrok et al. [2011] and Ruigrok et al. [2012] have examined the level of pluralism in news programmes by the public broadcasters. A research by ter Wal [2012] focussed on the migrant representation in the news by the public and commercial broadcasters. A thesis by Daub and de Kruif [2011] used interviews to examine the difference of the foreign editorial offices of the NOS and the RTL. There is however no quantitative evidence which can support the concerns by the government. Even studies by Nahuis et al. [2005], Scientific Council for Government Policy (WRR) [2005] and Baarsma et al. [2013] have not given quantitative evidence with respect to the legitimitisation of the public broadcaster. This chapter will try to provide quantitative information on the provision of news by public and commercial broadcasters. The quantitative information will focus on the following question: How does the NOS satisfy the objectives of news provision compared to the RTL and does this difference legitimise the interference by the government?

## 6.1 Research design and methodology

The research design used is called a quantitative content analysis. The quantitative content analysis is seen as one of the most important methods in the field of communication sciences, as can be seen in several master and Phd theses written by communication students<sup>1</sup>. A content analysis can be described as counting the number of times a certain variable occurs.

<sup>&</sup>lt;sup>1</sup>[Hauttekeete, 2004], [Devroe, 2007], [Likoglu, 2008] and [Vandenhende, 2010]

A content analysis will only be of any scientific value if it is performed in an objective, reliable and valid way [Berelson, 1952]. The variables used will be described in such a way that they are objective and clear. By doing so any form of subjectivity which can influence the results will be excluded. Describing variables in an objective way also helps to improve the reliability of the analysis provided in this chapter.

The operationalisation of describing the variables is called the "codebook". The codebook will consist of all the variables which lend themselves to be quantified and coded. The following sections will elaborate on the research design of this thesis.

## 6.2 Research design

#### **6.2.1** Data units

Because this thesis focuses on the provision of news, a unit is chosen with only that function instead of having multiple functions, like amusement. The public broadcaster broadcasts a number of different programmes which can be defined as providing news and being informative<sup>2</sup>, but also as informative and amusing<sup>3</sup>. The commercial broadcasters also have a number of programmes in both sections<sup>4</sup>. The units used in this analysis are the NOS Journal (NOS Journal) at 8pm and the RTL News (RTL Nieuws) at 7.30pm. Both broadcasts are seen as the 'most' important in the provision of news. The broadcast has a daily average of respectively 2.2 and 1.3 million viewers<sup>5</sup>. Both broadcasts have the essence of providing daily news, which makes them the best choice to compare.

## 6.2.2 Data sample and setup

To ensure a certain level of representation of the population, a sample structure is used based on studies by [Riffe et al., 1993] and [Riffe et al., 1996], which are used in many theses<sup>6</sup>. The structure used is called "constructed week" sampling and is said to be the most superior form of sampling for television broadcasts<sup>7</sup>. A constructed week can be described as a stratified week based on the days of the week. By using this structure oversampling of a certain day is prevented. A broadcast on Monday is likely to have more items about sports than a broadcast on a Wednesday. Riffe et al. [1996] show that, if constructed weeks are used, it is efficient to use

<sup>&</sup>lt;sup>2</sup>NOS Journaal, NOS Jeugdjournaal and Nieuwsuur

<sup>&</sup>lt;sup>3</sup>De wereld draait door and Pauw en Witteman

<sup>&</sup>lt;sup>4</sup>Providing news: RTL Nieuws, RTL Z Nieuws, informative/amusement: Editie NL, RTL Late Night, SBS Shownieuws source: http://www.tvgids.nl

<sup>5</sup>www.kijkonderzoek.nl

<sup>&</sup>lt;sup>6</sup>See footnote 1

<sup>&</sup>lt;sup>7</sup>[Riffe et al., 1993], Hüttner et al. [1995] and Krippendorff [2004]

two days per month during a whole year as to create a representative sample. The sample will thus contain 24 broadcasts of both NOS and RTL, broadcasted in 2013, which form a constructed week. The start date of the sample, which was chosen by a random generator, will be Monday the 14th of January 2013. The rest of the sample is generated by skipping 14 days as to construct artificial weeks <sup>8</sup>.

The broadcasts have been watched via the archives provided by the broadcasters<sup>9</sup>.

#### **6.2.3** Data instrument

The "codebook" is the complete list of codes which are used to code the variables [Saunders et al., 2011]. The categories/codes used to quantify the variable will be such that there is no confusion about which category to choose (exclusive). The categories will furthermore be exhaustive which refers to the fact that the coder can always pick a category. Adding a code "other" ensures that the categories are exhaustive [Krippendorff, 2004]. The variables and categories will be chosen in such a way that they can be used to analyse the hypotheses which will be made. The following subsection will provide information on the variables which will be used. The full codebook can be found in Appendix B.

#### 6.2.3.1 The news broadcasts

The first section of the codebook focuses on the news broadcast itself and mainly consists of general data variables like: date, day of the week, broadcaster, number of items etc. These variables are necessary in order to compare the two news broadcasts in total. The variables which follow can be seen as content variables. Appendix B will contain a full outlay of all the variables and codes used.

## 6.2.3.2 Pluralism

The variables used to quantify pluralism are based on studies by [Ruigrok et al., 2011] and [Ruigrok et al., 2012]. These studies perform a content analysis, with respect to pluralism and diversity, of several different Dutch news programmes on the Dutch public channels. The objective pluralism is subdivided into three sections which all contain different variables:

<sup>&</sup>lt;sup>8</sup>Monday, 14/1/13, Tuesday, 29/1/13, Wednesday, 13/2/13, Thursday, 28/2/13, Friday, 15/3/13, Saturday, 30/3/13, Sunday, 14/4/13, Monday, 29/4/13, Tuesday, 14/5/13, Wednesday, 29/5/13, Thursday, 13/6/13, Friday, 28/6/13, Saturday, 13/7/13, Sunday, 28/7/13, Monday, 12/8/13, Tuesday, 27/8/13, Wednesday, 11/9/13, Thursday, 26/9/13, Friday, 11/10/13, Saturday, 26/10/13, Sunday, 10/11/13, Monday, 25/11/13, Tuesday, 10/12/13, Wednesday, 25/12/13

<sup>9</sup>http://nos.nl/nieuws/video-en-audio/ and http://www.rtlxl.nl/#!/gemist/

rtl-nieuws-132237

- 1. Diversity in themes and subjects: An important aspect of pluralism is the number of different themes and subjects which are discussed in the broadcast. The higher the number of different themes/subjects, the higher the level of pluralism. Themes are not the same as subjects. A theme is an 'umbrella term', which is formed by different subjects, for example the theme economy is formed by the subjects economics and finance, housing and housing market and labour market.
- 2. The scope of the themes: The scope of the themes indicates the different levels/groups of the society which are reached in and by the news broadcasts. There are several different variables which can be used to analyse the scope of the themes, for example left versus right or progressive versus conservative. These variables will however not be used because they cannot be operationalised in a correct way. The variables which will be used are the geographical scope, which analyses if the items only focus on national or also on local and global events and the political scope which analyses if the political actors, which are used as source, represent the different political movements.
- 3. Diversity of sources: The diversity of sources will be used to analyse the range of people which are reached by the news broadcast. The higher the range, the higher the pluralism. The term sources can be defined as the people who give information or opinions within a certain item. The variables which will be used are: gender, nationality and the qualification in which way the sources can be qualified, for example expert or involved citizen.

Note that there are more variables which can be used to analyse pluralism, for example the framing of items, the use of the set or the use of visual effects [Heinderyckx, 1993]. These variables can however not be used for this analysis because they cannot be defined as qualitative variables.

## **6.2.3.3** Quality

The discussion about how to qualify and quantify the quality of news is one that has been addressed by a large number of studies<sup>10</sup>. This analysis will however use variables which are used in the research by Hooghe et al. [2007]. This research consists of multiple studies which all examine different terms linked with the quality of news. The authors state that *the quality criteria* which are studied are helpful for academic studies, but not so must for the journalists themself. The reason for the use of this research is that it contains a full analysis of all quantifiable variables which are ready to use. The variables which will be used to analyse quality are:

<sup>&</sup>lt;sup>10</sup>Zaller [1999], [Meijer and van Dijck, 2001], Meijer [2003], Tang et al. [2003], [Vettehen et al., 2006], [Vettehen et al., 2010]. [Burgers and de Graaf, 2013]

- 1. *International news coverage*: The coverage of news outside of the domestic sphere is seen as a measure of quality and has been a topic of many researches<sup>11</sup>. The reason why may sound a little strange but news coverage of international events is likely to be the only way in which (Dutch) citizens consume knowledge about what is happening in the world. International news coverage thus increases knowledge of and attitude towards the rest of the world [Beaudoin, 2004] and [Brewer et al., 2003]. The coverage of international news can be analysed by the following variables:
  - Quantity of international coverage: Which percentages of the items which are covered in the news are about national and global events and what is the average duration?
  - Exact geographical scope: Which country does the international coverage involve?
     Does the coverage only focus on neighbours (Belgium or Germany) or important countries (United States and China) or also on Third world countries (African and Southern European countries).
  - Thematical scope: About what is the international coverage? Does the international news only covers items about war or also others themes?
  - 'Domesticated' coverage: The variable quantity of international news includes the code mixed news. With this code it is possible to analyse a subcategory called 'domesticated' coverage. 'Domesticated' coverage is coverage in which the event takes place in a country different from the home country, but in which the own country is also mentioned. [Peeren, 2003] For example, a plane crashed in Malesia which led to the death of one Dutch citizen. This definition is different from that of mixed news which just mentions the home country and another country. For example, the stock markets in Germany and The Netherlands both fell. To exclude forms of subjectivity this thesis will present domesticated and mixed as the same.
  - Sources: Which information sources are used to provide information about international events?

Note that the some of the above mentioned variables are also used to analyse pluralism.

2. *Tabloidisation*: Tabloidisation is described as the shift towards short, popular and entertaining content<sup>12</sup>. Tabloidisation entails a shift of the selection of news and an increasing importance with respect to visual parts [Hauttekeete, 2004]. The shift of the selection of news, will be used to analyse the tabloidisation of the television news. The shift is mostly described as the change from "hard" to "soft" news. This thesis will see "hard" news as news which is focused on informing about public affairs and policy aspects, whereas "soft" news will be defined as entertainment/human interest news with a relative low level

<sup>&</sup>lt;sup>11</sup>[Peeren, 2003], [Wouters et al., 2009] and [Joye, 2010]. Which are just a few of many others.

<sup>&</sup>lt;sup>12</sup>see footnote 19 and 20 in chapter 5

- of importance for society <sup>13</sup>. A list of topics which can be seen as hard or soft can be found in Appendix B and is based on research by Hooghe et al. [2007]. Note that Hooghe et al. [2007] also address sensational news, which in this thesis will be added to soft news.
- 3. Diversity of subjects: The diversity of subjects can be used to analyse the quality of the news because of the fact that it narrows the watchers view of the actual world [Hooghe et al., 2007]. The diversity of subjects will not only be analysed by the amount of different subjects, but also by the average time of the subjects. It is obvious to say that a news broadcast which covers 20 different subject in 20 minutes is not by definition of a higher quality than a news broadcast which covers 10 subjects in the same amount of time.

There are other criteria which can be used to analyse the quality of the news of which accuracy is the most important. Section 4.3.3 already states that for news to be of a certain quality it has to be accurate. Other criteria which can be used are: the representation of parliament in the news, the amount of crime in the news and other variables with respect to journalistic standards. This thesis will however not pay attention to them because they are difficult to measure or not informative enough.

## 6.2.3.4 Independency

Compared to the two objectives above, the operationalisation of independency is very hard. The amount of research on the level of the independency of news coverage is very limited. Most research focuses on the objectivity of the news instead of independency. Is it not possible to use a variable which can 'check' if certain information is falsified or deliberately forgotten. There is however a possibility to use a self-made 'quasi-variable'. Because of the fact that the coding is arranged such that a NOS and RTL broadcast on the same day are coded back-to-back, it is easy to see if there are major differences in subjects or information. If major differences were the case, the presence of these differences could be examined to see if they might be the result of a certain political or market power. This kind of analysis is very subjective and has no empirical power. Because of the fact that there are a low number of suppliers of television news, it is also possible to analyse the level objectivity. Recall, that in the case of a low number of suppliers, objectivity might be harmful because not all the opinions are heard. Hooghe et al. [2007] use the distribution of time in which politicians of different parties are used as source. Hooghe et al. [2007] also look if broadcasters use more than one politician per item, so as to analyse the level of different parties which give their opinion on an item. This way of analysing objectivity is not used to see if there is a perfect distribution of time for every political party, this is unlikely to be the case because of the fact that politicians which are in the parliament are more 'important'

<sup>&</sup>lt;sup>13</sup>[Palmer, 1998], [Grabe et al., 2001], [Baum, 2003], [Baum and Jamison, 2006] and [Lehman-Wilzig and Seletzky, 2010]

than those in the opposition. The analysis is used to see if there is no bias towards certain parties, whereas other parties are neglected.

## 6.2.3.5 Accessibility

The accessibility of news has two different kind of definitions. The analysis will use the variable: use of sources, which is also used for pluralism. By analysing the use of sources it is possible to obtain a certain knowledge about the accessibility of the news. A news broadcast which only uses experts as a source will not be understandable for the lower part of society. This analysis will however not be used to give a conclusion about the objective accessibility due to the lack of empirical power.

## 6.2.4 Reliability of the data

The data collection for the content analysis has been done by a single person, which means that the reliability of the results is influenced by this single person. In order to analyse the reliability of the results use will be made of inter-rater agreement/reliability.

The inter-rater agreement analyses the level of reliability of the results by 'using' three different coders other than the one which codes the entire data set. All raters were asked to watch and code two random broadcasts which led to a total number of six broadcasts (12.5 percent) which included 52 items (10 percent). The results of these three 'extra' coders are used to calculate the Kappacoefficient (Cohen's Kappa). This coefficient rates the level of reliability within the possibility of chance into account. A Kappa which has a value of 0.40 or less means that there is a low level agreement between the two raters. A value between 0.41 and 0.60 is said to be a reasonable level of agreement, a value between 0.61 and 0.80 is said to be very good and a level above 0.81 is said to be perfect. Table 6.1 shows the values of the Cohen's Kappa for each rater and the average Kappa. With respect to the reliability of the data it can be said that the results are very likely to be reliable.

TABLE 6.1: Cohen's kappa

Cohen's kappa	Rater 1	Rater 2	Rater 3	Average
Subject	0.786	0.872	0.893	0.850
Region	0.83	0.901	0.95	0.894
Foreign	0.95	0.872	0.862	0.895
Qualification	0.866	0.798	0,853	0.839

## 6.3 Research question and hypotheses

The variables which are discussed make it possible to draft hypotheses. These hypotheses help to give an answer to the question: *How does the NOS satisfy the objectives of news provision compared to the RTL and does this difference legitimise the interference by the government?* The hypotheses are according to the conclusion presentend in section 5.3 combined with hypotheses by [Hooghe et al., 2007].

Hypothesis 1: The level of pluralism of the news provision by the NOS will be higher than that of RTL.

The reason for this hypothesis is that RTL is a commercial broadcaster which is dependent on advertisement income. This will influence the RTL to choose the level of pluralism which is most profitable and not likely to be socially efficient. The hypothesis is divided into several hypotheses:

- Hypothesis 1a: The number of different subjects will be higher in the news provided by the NOS.
- Hypothesis 1b: The number of different themes will be higher in the news provided by the NOS.
- Hypothesis 1c: The diversity of subjects will be higher in the news provided by the NOS.
- Hypothesis 1d: The diversity of themes will be higher in the news provided by the NOS.
- Hypothesis 1e: The geographical scope of the items within the NOS news will be more diverse than that of the RTL.
- Hypothesis 1f: The political scope of the items within the NOS news will be more diverse than that of the RTL.
- Hypothesis 1g: The sources which are 'used' within the NOS news will be more diverse than those 'used' by RTL.

Hypothesis 2: The news coverage provided by the NOS will have a higher level of quality than the news coverage provided by the RTL.

The reason for this hypothesis is again that RTL is a commercial broadcaster which is dependent on advertisement income. The costs of high quality news provision are likely to be to high as to be profitable. The hypothesis is divided into several hypotheses:

• Hypothesis 2a: The percentage of international coverage provided by the NOS will be higher than that provided by RTL.

- Hypothesis 2b: The geographical scope of the international coverage will be higher in news provided by the NOS.
- Hypothesis 2c: The thematical scope of the international coverage will be higher on news provided by the NOS.
- Hypothesis 2d: The news by RTL will be more 'domesticated' than the news provided by the NOS.
- Hypothesis 2e: The sources which are 'used' with respect to international coverage will by higher within the NOS news.
- Hypothesis 2f: The percentage of 'hard' news items will be higher within the news broadcast provided by the NOS.
- Hypothesis 2g: The diversity of subjects will be higher in the news provided by the NOS.

Hypothesis 3: The news coverage provided by the NOS will be less influenced by political and commercial forces and therefore more independent than RTL news.

The reason for this hypothesis is again that RTL is a commercial broadcaster which is dependent on advertisement income. This will likely have a certain influence on the items and information provided.

Hypothesis 4: The news coverage provided by the NOS contains a larger diversity of sources, which means that it is more accessible for the entire society.

## 6.4 Results

This section will present the results of the content analysis. This section will only contain data in a summarized form. Appendix C will contain most of the tables which will be discussed in this section.

## 6.4.1 The news broadcasts

Table 6.2 shows the descriptive statistics of both types of broadcasts. The dataset consists of 48 broadcasts divided over the two broadcasters. The broadcasts contained a total of 510 items of which 241 (47.3 percent) were within NOS broadcasts and 269 (52.7 percent) were within the RTL broadcast. The average news broadcast by the NOS has a duration of 1248 seconds, which is 75 seconds longer than the news broadcast by the RTL (1163 seconds). The difference in average duration time is not significant (p=0.1080). Despite the shorter duration of an RTL

broadcast, they do on average contain a larger number of items. There is a significant difference (p=0.0457) between the average number of items provided by the NOS (10.13) and RTL(11.7).

	NOS	RTL
Broadcasts (n)	24	24
Items total (n)	241	269
Average broadcast (sec.)	1248	1163
Average number of items	10.13	11.7
Average item duration (sec)	118.7	101.3

TABLE 6.2: Descriptive statistics broadcasts

## 6.4.2 Pluralism

This section will give results with respect to the level of pluralism of both news broadcasts.

## 6.4.2.1 Subjects and Themes

The first level of pluralism is the diversity in themes and subjects. The different subjects and themes used can be found in Appendix B. Table C.2 shows the frequency and percentage of different themes within the news broadcasts. Figure C.1 gives a visual interpretation to this information. The frequency, percentage and visual interpretation with respect to themes are given in table C.4 and figure C.2. Recall that the themes are formed by grouping subjects. Examples of subjects are: Business, Politics and War, peace and terrorism, whereas examples of themes are: economics and social affairs.

The percentages are analysed with the so called 'Fractionalisation index' which is often used to calculate the diversity of ethnic groups within a country [Montalvo and Reynal-Querol, 2002] and [Alesina et al., 2003]. In this thesis the index is used to measure the level of diversity within the news. The index is calculated as follows:  $ELF_j = 1 - \sum_{i=1}^{I_j} (\frac{\eta_{ij}}{N_j})^2 = 1 - \sum_{i=1}^{I_j} s_{ij}^2$ , with i=1, .... $I_j$ .  $\eta_{ij}$  is the number of items which belong to a certain group (subject, themes, qualification etc.),  $N_j$  is the number of items within the dataset,  $I_j$  is the total number of different groups and  $s_{ij}$  is thus the percentage of item i within the dataset. The index measures "the chance that two random observations drawn from a single news broadcast are both within a different group." The index ranges from zero to one, with zero being a news broadcast with only one subject or theme and one being a completely diverse news broadcast.

Tables C.3 and C.5 show the fractionalisations of all the broadcasts by the NOS and RTL. Table 6.3 shows the average index<sup>14</sup> of the broadcasts and the overall index for the items overall (all broadcasts combined). The average index with respect to diversity in subjects is the same for

<sup>&</sup>lt;sup>14</sup>The average index is average of all the fractionalisation indices of the broadcasts.

both broadcasters (p=0.9487). The average index with respect to diversity in themes is slightly higher within the NOS broadcasts. It is however not significantly different (p=0.3656) from the RTL index. It must also be said that the range of the index for both subjects and themes is smaller within the RTL compared to the NOS.

The indices which contain all the items show no significant difference between the diversity in subjects and themes. Table 6.3 also shows the fractionalisation indexes when equal items are excluded. The reason for this exclusion is that items which are within both broadcasts on the same day will likely be 'the most' important news items. Items which are not within both broadcasts are, by one of the broadcasters, seen as 'not important'. Although the fractionalisation index with respect to subjects and themes is higher within NOS news, there is no significant difference between the average indexes (subjects (p=0.6609) and themes (p=0.4655)) for NOS and RTL.

The indices above can be used to answer the hypotheses. Table C.2 shows that the number of different subjects and themes within the entire data set is exactly the same for both broadcasters, rejecting hypotheses 1a and 1b:

Hypothesis 1a: The number of different subjects will be higher in the news provided by the NOS. Hypothesis 1b: The number of different themes will be higher in the news provided by the NOS.

The average fractionalisation indexes with respect to subjects of the NOS and RTL are not significantly different. This means that the level of diversity with respect to subjects within the NOS broadcasts is not different than that within the RTL broadcasts. When equal items are excluded from the data set there is difference between average indexes, but not significantly different. This means that hypothesis 1c should be rejected:

Hypothesis 1c: The diversity of subjects will be higher in the news provided by the NOS.

The difference between broadcasters with respect to the diversity in themes is higher than the difference with respect to subjects. The differences are however not significantly different, rejecting hypothesis 1d:

Hypothesis 1d: The diversity of themes will be higher in the news provided by the NOS.

## **6.4.2.2** Scope of the themes

The second level of pluralism is the scope of the themes. Table C.10 shows the frequency and percentage of the different geographical scopes of the news items within the broadcasts. The table shows that the percentage of national news is higher within RTL broadcasts, whereas the percentage of European and global news is higher within NOS broadcasts. To analyse the level of diversity the fractionalisation index is again used (see Table C.11). Table 6.3 shows that although there is a difference between the two broadcasters, with the average index of

NOS being higher, there is no significanty difference (p=0.2063), which leads to the rejection of hypothesis 1e:

Hypothesis 1e: The geographical scope of the items within the NOS news will be more diverse than that of the RTL.

Table 6.3 also contains the overall indexes with respect to political parties and party colours. It is not possible to look at the indexes per broadcast because of the fact that the number of political actors is low, compared to the number of items (see table C.12). Therefore the overall indexes will be used. Table C.12 shows that the largest percentage of Dutch politicians within news items in both the NOS and RTL affiliate with the VVD or PvdA. This is not strange because of the fact that these two parties are in the current political parliament. The other parties seem to be equally divided, with the exception of the SGP which does not appear within items by the RTL. The percentage of political scope also seems to be equally divided between Left, Centre and Right parties. This equality of the diversity of parties and political colour is also shown by the indexes presented in table 6.3. The information above rejects the hypothesis 1f:

Hypothesis 1f: The political scope of the items within the NOS news will be more diverse than that of the RTL.

### **6.4.2.3** Sources

The last level of pluralism is the diversity of sources 'used' within the news, which is divided in three different parts: qualification, nationality and gender.

The differences between the qualifications of the sources being used by the two broadcasters are very small (see table C.13). The biggest differences between the broadcasters can be seen when comparing the percentage of domestic voxpop<sup>15</sup> (2.85 percent point higher within RTL broadcasts), domestic business (2.10 percent point higher within RTL broadcasts) and foreign internal journalists (2.07 percent point higher within NOS broadcasts. The rest of the differences are very small.

The average fractionalistion index with respect to qualification is higher within RTL broadcasts, the difference is however not significant (p=0.7496). The diversity with respect to sources does not differ between the two broadcasters (see table 6.3). The same can be said about the nationalities of the sources which are used. There are a few small differences, but no big ones (see table C.15). The biggest differences between the broadcasters can be found within the groups Middle Eastern (1.9 percent point higher within RTL broadcasts) and African (1,85 percent point higher in RTL broadcasts). The average fractionalisation index with respect to nationality are

 $<sup>^{15}</sup>$ A domestic actor which is not directly involved by a certain event. e.g. an interview with a random person on the street. See Appendix B

TABLE 6.3: Fractionalisation indices

	NOS	RTL	P-value <sup>16</sup>
Subjects			
Overall frac. index subject	0.947	0.945	
Average frac. index subject	0.847	0.848	0.949
St. dev.	0.056	0.051	
Themes			
Overall frac. index themes	0.794	0.766	
Average frac. index themes	0.718	0.692	0.3656
St. dev.	0.112	0.083	
Subjects excluding equal items			
Overall frac. index subject	0.949	0.94	
Average frac. index subject	0.724	0.700	0.6609
St. dev.	0.086	0.252	
Themes excluding equal items			
Overall frac. index themes	0.797	0.745	
Average frac. index themes	0.605	0.566	0.4655
St. dev.	0.141	0.218	
Geographical scope			
Overall frac. index geo.	0.652	0.642	
Average frac. index geo.	0.600	0.564	0.206
St. dev.	0.077	0.114	
Political scope			
Overall frac. index party	0.649	0.647	
Overall frac. index colour	0.774	0.792	
Qualification sources			
Average frac. Qualifications	0.865	0.869	0.750
St. dev.	0.035	0.050	
Nationalities sources			
Overall frac. index nationality	0.347	0.347	
Average frac. index nationality	0.328	0.316	0.7752
St. dev.	0.130	0.158	
Gender sources			
Overall frac. index gender	0.430	0.400	
Average frac. index gender	0.417	0.380	0.086
St. dev.	0.070	0.0760	
	N = 24	N = 24	

not significantly different (p=0.7752). With respect to gender it can be said that the broadcasts by the RTL contain five percent point more male sources (see table C.17). The indexes of the two broadcasters are however not significantly different (p=0.0860).

The data above shows that with respect to qualification, nationality and gender of the sources within the news there is no significant difference. This leads to the rejection of Hypothesis 1g:

Hypothesis 1g: The sources which are 'used' within the NOS news will be more diverse than those 'used' by RTL.

#### 6.4.2.4 Conclusion

The hypotheses which have been analysed in this section can be used to see if the hypothesis with respect to pluralism should be rejected or not:

Hypothesis 1: The level of pluralism of the news provision by the NOS will be higher than that of RTL.

All hypotheses with respect to pluralism are rejected. This leads to the conclusion that hypothesis 1 also has to be rejected. The rejection of hypothesis 1 means that there is no significant difference between the level of pluralism within the news broadcasts of the NOS and the RTL.

In order to give a conclusion about the level of pluralism two other factors were analysed: the diversity of the demand and the power of the measurement.

Note pluralism was defined as: the heterogeneity of the supply has to fit the heterogeneity of the demand. Unfortunately it is not possible to analyse the diversity of demand in an extensive way because of the fact that the information is not widely accessible. The data which can be used shows the average percentage of viewers divided by age group. Tables C.27 and C.28 show the percentage within a certain age group which watch the NOS broadcast. Table 6.4 shows the average viewers percentage by age group. It is clear that without taking into account the 6 to 12 year age group, the people who watch the RTL news are of a younger age than those who watch the NOS news. Calculations show that the average age of the NOS viewers is 51.9 years old whereas the average age of the RTL viewers is 33.3 years old. The Chi-square test, which is often used to analyse population distributions, shows that the distribution of viewers within age groups is different between the two broadcasters (Chi-square value: 10.96, p-value:0.029). It can therefore be said that, with respect to age, there is a different heterogeneity of demand between the two broadcasters. This heterogeneity is however not seen within the supply.

TABLE 6.4: Average viewers percentage by age group

Age group	NOS	RTL
6-12	0.144	0.106
13-19	0.151	0.164
20-34	0.133	0.229
35-49	0.235	0.259
50+	0.337	0.242

The second factor is the sample size of the data set. The sample size of the data influences the statistical power<sup>17</sup> of the analysis. Because this thesis has a low sample size, due to the time consuming data collection, the rejections of the hypotheses might be incorrect. So although

<sup>&</sup>lt;sup>17</sup>Statistical power is the likelihood that a study will detect an effect when there is an effect there to be detected.

all hypotheses are rejected, there might be a difference between the level of pluralism of NOS and RTL news broadcasts. Table 6.5 shows a summary of the fractionalisation indices, the difference, and which index is higher. It can be said that with respect to subjects, party colour and qualifications of the sources there is a higher level of pluralism within RTL broadcasts. The rest of the indices is higher within NOS news broadcasts. With a larger sample size this could lead to the conclusion that the pluralism is higher within NOS broadcasts. The sample size is however not large enough to justify this conclusion.

TABLE 6.5: Summary of the indices

	NOS	RTL	Difference	Higher on:
Subjects				
Average frac. index subject	0.847	0.848	0.001	RTL
Themes				
Average frac. index themes	0.718	0.692	0.026	NOS
Subjects excluding equal items				
Average frac. index subject	0.724	0.700	0.024	NOS
Themes excluding equal items				
Average frac. index themes	0.605	0.566	0.039	NOS
Geographical scope				
Average frac. index geo.	0.600	0.564	0.036	NOS
Political scope				
Overall frac. index party	0.649	0.647	0.002	NOS
Overall frac. index colour	0.774	0.792	0.018	RTL
Qualification sources				
Average frac. Qualifications	0.865	0.869	0.004	RTL
Nationalities sources				
Average frac. index nationality	0.328	0.316	0.012	NOS
Gender sources				
Average frac. index gender	0.417	0.380	0.037	NOS

## 6.4.3 Quality

This section will give results with respect to the level of quality of both news broadcasts.

## **6.4.3.1** International coverage

The international coverage of both broadcasters is analysed by looking at different parts of the coverage. Table 6.6 is divided in two parts. The first part shows the regional scope of the items and the second part whether an item contained information on only The Netherlands, on The Netherlands and an other country, or only on a foreign country. It is clear that the percentage of both regional and national items is higher within RTL broadcasts, whereas the percentage of European and global items is higher within NOS broadcasts. The differences are however not

very large. The same can be said about the second part. The percentage of items which contain information only about The Netherlands is higher within the RTL, whereas the percentage of domesticated/mixed and foreign items is higher within NOS broadcasts.

Frequency NOS Percent NOS Frequency RTL Percent RTL Regional 0.041 10 13 0.05 National 116 0.481 136 0.51 European 52 0.216 53 0.20 Global 63 0.261 67 0.25 Dutch 121 0.502 145 0.54 Domesticated/Mixed 47 47 0.195 0.17 73 0.303 77 0.29 Foreign

TABLE 6.6: Quantity of international coverage, all items

Table 6.7 shows the top ten of 'newsworthy' countries within the broadcasts, excluding The Netherlands. Although in a different order, the top top countries are almost the same. There is a big difference between the frequency of Germany and Belgium. The news items of the NOS focussed 11 times on Germany and seven times on Belgium, whereas the news items of RTL only focussed four and three times. This is 11 percent of the foreign broadcast by the NOS and four percent of the foreign broadcast by the RTL.

Country	NOS	Country	RTL
Middle East	26	United States	27
United States	21	Middle Feet	10

TABLE 6.7: Top 10 'News worthy' countries, excluding The Netherlands

Country	NOS	Country	RTL
Middle East	26	United States	27
United States	21	Middle East	19
Africa (developing countries)	13	France	15
Italy	13	Italy	15
Germany	11	United Kingdom	13
Eastern-Europe	10	Africa (developing countries)	12
United Kingdom	9	Asia	9
European Union	8	Russia	8
France	8	Eastern-Europe	7
Russia	8	South America	7

Table 6.8 shows the top five subjects within both broadcasts with respect to 'domesticated'/mixed and foreign news. Table 6.9 shows the percentage of hard<sup>18</sup> and soft<sup>19</sup> news within the international coverage. The themes which are present in the international coverage are almost the same. For both broadcasters, the largest part of the 'domesticated' news is about security, justice, crime and police, business or war and peace. Foreign news covers information about war, disasters and foreign politics. Table 6.9 however shows that percentage of hard news is higher within the foreign coverage by the NOS.

<sup>&</sup>lt;sup>18</sup>Hard news is described as news which is focused on informing about public affairs and policy aspects

<sup>&</sup>lt;sup>19</sup>Soft news is described as entertainment/human interest news with a relative low level of importance for society

TABLE 6.8: Top 5 subject percentage mixed/domesticated and foreign news

Subject	NOS percentage.	Subject	Percentage RTL
'Domesticated'/mixed News			
Security, Justice, crime and police	0.213	Security, Justice, crime and police	0.170
Business	0.106	Business	0.085
War, peace and terrorism	0.085	Human interest	0.085
Disasters, accidents and nuisance	0.043	War, peace and terrorism	0.085
Economics and finance	0.043	International relationships	0.064
Foreign News			
War, peace and terrorism	0.247	Disasters, accidents and nuisance	0.169
Disasters, accidents and nuisance	0.123	War, peace and terrorism	0.143
Politics Foreign	0.110	Politics Foreign	0.130
Death of 'special' person	0.055	Security, Justice, crime and police	0.104
Elections	0.055	Religion	0.078

TABLE 6.9: Quantity of hard and soft news within foreign coverage

	NOS			RTL				
	Hard Soft		Hard		Soft			
	Freq.	Percent.	Freq.	Percent.	Freq.	Percent.	Freq.	Percent.
Dutch	43	0.391	78	0.595	47	0.465	98	0.583
Domesticated/Mixed	20	0.182	27	0.206	17	0.168	30	0.179
Foreign	47	0.427	26	0.198	37	0.366	40	0.238

Table 6.10 shows the top five of the sources used within domesticated/mixed and foreign coverage. The big difference within the 'domesticated'/mixed news is that within the NOS news there is a high percentage of domestic directly involved citizens, whereas within the RTL news there is a high percentage of foreign voxpop. Within foreign news there is a large difference in the 'use' of a foreign internal reporter. The international coverage of the NOS contains a higher percentage of journalists abroad compared to the international coverage by RTL.

TABLE 6.10: Top 5 Source percentage mixed/domesticated and foreign news

Source	NOS percentage.	Source	Percentage RTL
'Domesticated'/mixed News			
Dom journalist/reporter internal	0.164	Dom journalist/reporter internal	0.181
Dom directly involved citizen	0.105	For Voxpop	0.150
Dom presenter	0.105	Dom presenter	0.100
Dom business	0.092	Dom political actor	0.088
Dom political actor	0.086	Dom business	0.081
Foreign News			
Dom presenter	0.200	Dom presenter	0.203
For journalist/reporter internal	0.174	For Voxpop	0.163
For directly involved citizen	0.163	For political actor	0.119
For Voxpop	0.147	For directly involved citizen	0.106
Dom journalist/reporter internal	0.068	For journalist/reporter internal	0.106

The information above can now be used to answer the hypothesis with respect to international coverage.

The percentage of foreign broadcasts is higher within news by the NOS, the difference is however very small (1.03 percent). Hypothesis 2a will therefore not be rejected:

Hypothesis 2a: The percentage of international coverage provided by the NOS will be higher than that provided by RTL.

The geographical scope of the international coverage (European + Global) is again higher within the NOS news. This difference is however not very large (2.7 percent). Hypothesis 2b will thus not be rejected.

Hypothesis 2b: The geographical scope of the international coverage will be higher in news provided by the NOS.

The fractionalisation index (section 6.4.2), is calculated to analyse hypothesis 2c. The index gives a measure to the diversity in the subject within the domesticated/mixed and foreign coverage. The measure will be used for the entire set of items. The indices are 0.915 and 0.892 respectively for the NOS and 0.924 and 0.902 respectively for the RTL. This leads to the conclusion that the thematical scope of the international coverage is not higher within the NOS news and thus rejects hypothesis 2c:

Hypothesis 2c: The thematical scope of the international coverage will be higher on news provided by the NOS.

Table 6.6 shows that the percentage of 'domesticated' coverage is higher within NOS broadcasts and thus rejects hypothesis 2d:

Hypothesis 2d: The news by RTL will be more 'domesticated' than the news provided by the NOS.

To answer the next hypothesis the fractionalisation indexes for domesticated/mixed and foreign coverage were calculated. The indexes are 0.915 and 0.863 respectively for the NOS and 0.896 and 0.882 respectively for the RTL. The diversity of sources is thus higher within the domesticated/mixed news by the NOS, but not within the foreign coverage. This therefore rejects hypothesis 2e:

Hypothesis 2e: The sources which are 'used' with respect to international coverage will be higher within the NOS news.

#### 6.4.3.2 Tabloidisation

Table 6.11 shows the percentage of items which are said to be hard and soft within the news broadcasts. In the case of all the items it is clear that the broadcasts by the NOS contain a higher percentage (8.1 percent point) of hard news compared to the RTL. The largest percentage of items is however said to be soft. When equal items are excluded it is clear that the diffference between the two broadcasters becomes even bigger. Broadcasts by the NOS contain 14.7 percent more hard news than broadcasts by the RTL. In this case the percentage of hard news is higher than the percentage of soft news.

All items NOS RTL Freq. Percent. Freq. Percent. Hard 110 0.456 101 0.375 Soft 131 0.544 168 .,625 Equal items excluded Freq. Percent. Freq. Percent. Hard 60 0.508 51 0.359 Soft 58 0.492 91 0.641

TABLE 6.11: Hard and Soft news

Hypotheses 2f will not be rejected:

Hypothesis 2f: The percentage of 'hard' news items will be higher within the news broadcast provided by the NOS.

With respect to tabloidisation it can also be said that the broadcasts by the RTL contain a larger percentage of voxpop (2.9 percent point more domestic and 1.6 percent point more foreign). The 'use' of voxpop can sometimes be seen as a form of tabloidisation [Hooghe et al., 2007].

## **6.4.3.3** Diversity in subjects

The diversity of subjects was already analysed with respect to pluralism, but can also be used to analyse with respect to quality. Table C.2 shows that both broadcasters inform viewers about a large number of different subjects. The fractionalisation index with respect to diversity of themes is 0.847 for the NOS and 0.848 for RTL. Both broadcasters have a diverse news coverage. When the equal items are excluded the average indexes decline to 0.605 and 0.566. The large difference between the indices with all items and with equal items excluded shows that diversity is for some part influenced by the events on a certain day. This conclusion is however not strange, due to the fact that the broadcasts aim to provide the most important news. Figure C.5 shows the indexes of

both broadcasters per day. This figure can be used to see how major events influence the diversity of a broadcast. Hooghe et al. [2007] state that the diversity within commercial news broadcasts are more likely to be influenced by major events/'hypes'. Figure C.5 does not completely lead to that same conclusion. In six cases, the broadcasts by RTL have an index which is lower than average (see figure C.6). In four of the cases, the indexes are influenced by a major event:

• 29th of January: Announcement of the Queen's abdication

• 29th of April: The King's coronation

• 12th of August : Death of Prince Friso

• 10th of December: Death of Nelson Mandela

In seven cases, the NOS broadcasts have an index which is lower than average (see figure C.7). In five of the cases, the indexes are influenced by a major event:

• 29th of January: Announcement of the Queen's abdication

• 28th of April: Economic information by the CPB

• 29th of April: The King's coronation

• 12th of August: Death of Prince Friso

• 10th of September: War in Syria

It can be seen that a 'major' event has a prominent position in both Dutch news broadcasts.

Hypothesis 2g is to be rejected as there is nog significant difference in the diversity between the two broadcasts. An argument which has to be made is that the percentage of short items (less than 30 seconds) is much larger within RTL broadcasts. The percentage of both long (180-300 seconds) and very long (longer than 300 seconds) is larger within NOS broadcasts. So although the diversity of the themes does not vary between the two broadcasters, there is a big difference between the average duration of items which can be seen as the NOS having a higher quality:

Hypothesis 2g: The diversity of subjects will be higher in the news provided by the NOS.

## 6.4.3.4 Conclusion

The conclusion with respect to the level of quality is less clear as was the case for the level of pluralism. It is clear that the percentage of hard news is higher within NOS broadcasts. This percentage combined with the fact that the RTL news broadcasts use a higher percentage of

voxpop<sup>20</sup> can lead to the conclusion that, when using these indicators for quality, the quality of the NOS news broadcasts is higher.

When analysing the international coverage of both broadcasters it can be said that the NOS provides a higher percentage of international coverage. The international coverage by the NOS however has a larger emphasis on neighbour countries (Belgium and Germany), which is not the case in RTL broadcasts. The thematical scope and the sources used within the international coverage do not differ between broadcasters. The analysis of the international coverage is thus not as clear as the level of tabliodisation. The fact that the percentage of international coverage is higher within NOS broadcasts can lead to the conclusion that the quality of the NOS news broadcasts is higher.

With respect to the diversity of subjects it can be said that there is no difference between the two broadcasters. There is however a large difference between the percentage of very short and long items. This again seems to be an argument towards the conclusion of the higher quality within NOS broadcasts.

The conclusion of this section is influenced by the same factor as was for pluralism, namely the sample size. A larger sample size gives a larger statistical power to the conclusion. A larger sample size was however not possible to obtain.

## 6.4.4 Independency

As already stated, there is no real variable with which the independency of the broadcasts can be analysed. One way of analysing the independency of the broadcasters is the difference between items which are broadcast by both the NOS and the RTL. There are 125 different items which are in the broadcasts by the NOS and the RTL. The subjective analysis of the same items on both broadcasts is that there were no real differences which could be seen as a result of falsification or deliberately forgotten.

The objective analysis is shown in tables C.25 and C.26. Table C.25 shows the percentages of the sources used by both broadcasters within the equal items. The most important difference between the two broadcasters is that the percentage of domestic businesses as source is almost twice as high within broadcasts by the RTL. This difference is interesting because of the fact that commercial broadcasters are likely to be influenced by commercial parties. The subjective opinion however is that the businesses used as source by the RTL are not a threat to the independency.

 $<sup>^{20}</sup>$ A domestic actor which is not directly involved by a certain event. e.g. an interview with a random person on the street. See Appendix B

Table C.26 shows the frequencies of the political party members which are used within the same items by both broadcasters. It can be seen that the items within the NOS news contain 77 percent of sources which are within the PvdA or VVD. As already mentioned this large percentage is not strange due to the fact that these two parties are in the political parliament. The percentage within the RTL news of these two parties is 61 percent, which is much lower. This difference may lead to the conclusion that the public broadcaster NOS is not politically independent. This conclusion is however not correct as can be seen in table C.12 which shows that within all the items the percentage of PvdA and VVD actors is just slightly higher (three percent) than within the RTL broadcasts.

There is no empirical evidence to accept or reject hypthesis 3. The subjective opinion is that both broadcasters seem to be independent of political and commercial influences. The broadcasts by the RTL do not seem to 'miss' certain information and do not contain information which is falsified.

Hypothesis 3: The news coverage provided by the NOS will be less influenced by political and commercial forces and therefore more independent than RTL news.

## 6.4.5 Accessibility

As was the case for independency, there is no real variable with which the level of accessibility can be analysed. It is possible to analyse the level of accessibility by analysing the sources which are used and the level of hard and soft news.

Tables 6.3 and C.13 show the diversity of the sources used within both broadcasts. With respect to the accessibility of the broadcasts the actors: experts, directly involved citizens, political actors, religious actors, social organisation and voxpop play an important role. An assumption which is most often stated is that the news provided by the NOS contains a high percentage of experts, whereas the news provided by RTL contains a lot of voxpop. The data in table C.13 shows that this assumption is partly true. The news by the RTL does indeed contain a higher percentage of domestic and foreign voxpop. It does however also contain a higher percentage of domestic experts, whereas the percentage of foreign experts is higher within broadcasts by the NOS. The news by the NOS contains a higher percentage of domestic politicians, whereas the news by the RTL contains a higher percentage of foreign politicians. This seems to lead to the conclusion that the accessibility of both the broadcasters is nearly the same.

Another way to analyse the level of accessibility is to analyse the percentage of hard and soft news. This was already done in section 6.4.3.2. The section shows that the percentage of hard news is higher within broadcasts by the NOS and thus the percentage of soft news higher within RTL broadcasts. Section 5.2.2 has addressed that the level of soft news might have a positive

affect with respect to the accessibility of news, because it interests people who are normally not interested in watching the news. The higher percentage of soft news might thus be seen as an indicator of a higher level of accessibility of the RTL news.

The information above leads to the rejection of hypothesis 4:

Hypothesis 4: The news coverage provided by the NOS contain a larger diversity of sources, which means that it is more accessible for the entire society.

The level of the accessibility of the NOS news is not higher than that of the RTL news.

## 6.5 Conclusion

This Chapter has provided quantitative information on the provision of news by public and commercial broadcasters. This quantitative information acts as evidence in favour or against the legitimitisation of the public broadcaster.

The conclusion of this Chapter is however influenced by certain factors. The first factor is the variables which are used. Especially with respect to quality, these variables are incomplete. A investigation using different variables could possibly find a different outcome. The second factor is that the broadcasts which are used are influenced by daily events. The 'major' news events influence the level of pluralism, the level of hard and soft news and the level of international coverage. The third factor is the measurement error which might have been made within the coding of the news broadcasts. The level of reliabilty does however not seem to be an issue within this content analysis. The last factor is the statistical power of sample which is used. A larger sample will ensure a larger statistical power. It is however stated that the data sample which is used, is likely to be representative for the whole 'population'.

So although there are a lot of factors which have influence on the results, it is possible to give a conclusion. The results show that with respect to the level of pluralism, independency and accessibility there is no significant difference between the broadcasts by the NOS and the RTL. The empirical research in this thesis shows no justification for the concerns of the government due to market failures within the most important news broadcast of the commercial broadcaster.

The indicators used to analyse quality show that, in this empirical research, the level of 'quality' is higher within the NOS broadcasts which seems in line with the concerns by the government.

The empirical analysis thus only supports the justification of government interference with respect to the level of quality of the news broadcasts. The analysis does not support the justification with respect to the level of pluralism, independency and accessibility of news broadcasts. The next Chapter will discuss what these results imply to the research question of this thesis.

## Chapter 7

## **Conclusion**

## 7.1 Conclusion

The Dutch government has described four important objectives with respect to media. The government finds that the broadcasters must have a supply which; is arranged in such a way that it gives a balanced view of the society (pluralistic), must not be biased or influenced by political or commercial powers (independent), must be composed so as to generate as many posititive externalities as possible (quality) and which has to be accessible for the whole society (accessibility). The most important reasons behind these objectives are a certain form of paternalism and the fact that these objectives increase the level of democracy within a society. The government finds that these objectives are of such importance that it justifies interference within the media landscape. It argues that because of a number of different market failures there is a certain justification for a public broadcaster which is paid by Dutch tax payers.

Many European governments have stated that the core task of the public broadcaster is the provision of news. The reason for the provision of news being the most imporant role is that news enables people to participate in this democracy and enhances democracy. In order to maximise this participation in the democracy it is necessary for news to have the same objectives as the media as a whole. These objectives are however not defined in the same way as is done for the media as a whole. The provision of news has to provide information on different levels and with different perspectives, is has to include all voices within the society, it has to be of a high quality (which is different from the quality of a movie or soap), it has to be understandable for the whole society and it has to be at such a price that everyone is able to consume it. In order to provide to all the objectives above, every Dutch citizens pays € 8 per year.

An amount of  $\in 8$  per year does not seem to be such a great problem. The tax levied by the government is however not the only cost which has to be taken into account. Levying a tax on

wages creates a tax distortion. By raising taxes to provide financial support for the public broadcaster, the government causes a loss in welfare. If this loss in welfare would be less than the gain in welfare which is generated by the public broadcaster there would not be a problem. A second cost is that, by providing public news, the government creates a distortion in the market. The public broadcaster competes in the same market as the commercial broadcasters. The commercial broadcasters do not receive public financing, but depend on revenue via advertisements which often depend on the number of viewers. The public broadcasters also causes a distortion because they are partly financed by advertisments. Without a public broadcaster these revenues would flow to the commercial broadcasters. The government however seems to find that these losses do not compare to the gain which is created by the public broadcaster. The question: why does the government intervenes in this market?, however still needs to be answered.

The reason for this interference is that the market is not likely to fulfill the objectives with respect to the provision of news, due to several market failures; (1) the costs structure of information goods leads to a concentration of suppliers which is likely to lead to an inefficient allocation of goods, (2) information asymmetry: it is unlikely that viewers are totally sure that a broadcast is correct and independent of certain market or political powers, (3) The non excludeability of news causes revenues to 'leak' away, causing an underprovidence of certain goods and (4) because of the difference between the public and private benefits due to positive externalities it is also likely that there will be a shortage of certain goods.

Economic theory provides arguments that might justify government interference. With respect to pluralism it can be said that competition is likely to lead to an insufficient level, the same is the case for the level of quality. The level of quality is also affected by the extra costs which come with a higher level of quality. Commercial broadcasters are likely to be dependent on large companies which influences the level of objectivity. A low level of objectivity combined with a low level of pluralism is said to be harmfull for the enhancement of democracy. The theoretical arguments are however not fully supported by empirical findings. The empirical research presentend in Chapter 5 show that although there is a certain role for the government, it is not sure which role. In order to analyse the question: What is the role for the government with respect to the provision of news?, this thesis uses an empirical analysis to compare a news broadcast by the public and the largest commercial broadcaster.

The empirical analysis shows that both news broadcasts have the same level of pluralism, are not likely to be affected by political and commercial parties and are accessible for the whole society. The level of quality of the RTL news broadcasters however seems lower level than the quality level of NOS news broadcasts.

The information above can be used to answer the main question of this thesis. The results of the analysis are however likely to be influenced by several factors (see Chapter 6). As a results of these factors some caution is need for drawing strong conclusions.

To what extent do market failures affect the governments media objective with respect to the provision of news and does this justify the interference by the government?

- With respect to the level of pluralism within television news broadcast there seems to be no significant difference between the public and the commercial broadcaster.
- With respect to the level of quality within television news broadcast there does seems to be a difference. The quality of the commercial news seems to be lower than the quality of public news.
- With respect to the indepenent provision of news there seems to be no difference between the two broadcasters.
- With respect to the accessibility of the news broadcasters there also seems no difference between the two broadcasters.

The answers above can be used to answer the second part of the main question: Does this justify the interference by the government? The empirical analysis show that only the level of quality of the news provision seems to be different between the public and the commercial broadcaster. The analysis neither fully supports the justification nor unjustification of the interference by the government with respect to the provision of news by a public broadcaster. It is therefore not possible to give a definite answer with respect to the justification of the interference by the government. This answer is however never likely to be answered because there seems to be no exact way to calculate if the welfare benefits of a public broadcaster are higher than welfare costs.

## 7.1.1 The future: digitisation of the media landscape

The conclusion given above has only focused on the current situation of the broadcasting landscape. This landscape is however influenced by several trends. These trends have influence on the objectives by the government.

Trends caused a change in news consumption. Smartphones make it possible to consume news where and when you want. The consumption of news is on demand, instead of at a set time. The fact that the consumption is not restricted to a certain time makes the consumed news more topical. Consumers also have the opportunity to choose which news they want to consume. They do not have to watch an entire broadcast but are able to pick the fragments they want to watch, read or listen to. The introduction of social media also enables people to consume news or share their opinion.

The supply of news is also influenced by trends. News is supplied by much more suppliers than was the case a few years ago. The internet makes it possible for global suppliers to reach consumers over the whole world. The internet also makes it possible to supply news in different forms like: texts, audio, video and interactive possibilities caused by the rise of social media.

The trends are likely to have a positive effect on the level of pluralism. Because people can choose which news they want to consume suppliers can create revenue. The internet enables suppliers to 'see' who their target group is. By supplying this information to commercial parties they are able to generate revenue. So rather than causing a low level of pluralism, a high number of suppliers on the internet cause a high level of pluralism.

The independent provision of news is likely to be affected in several different ways. All suppliers are dependent on a certain commercial party. The large amount of different suppliers however is likely to act as a reputation mechanism to control for news which is falsified [Baarsma et al., 2013]. It can be said that internet news website like e.g. www.geenstijl.nl and www.joop.nl are already very eager to present each others or outsiders mistakes. The suppliers are also likely to be objective because they have a certain target group. The large amount of suppliers, again, ensures that there is more than one 'voice' within the supply of news. It is thus likely that the trends have a positive effect on the independency of the provision of news.

The influence on the level of accessibility is likely to be positive and negative. The internet has made news which was not available several years ago accessible. The accessibility of 'normal' news is very high. The internet also enables people to watch illegal streams of certain sports events, which thus increase accessibility. Because of the fact that suppliers are able to exclude people of their sites it is likely that the accessibility to high quality news will decrease.

The quality of the news supply is however likely to increase because of the above mentioned fact that sites can exclude people. By excluding people from the content and charging a certain fee for an item, it is likely that the amount of high quality news content will increase. The amount of low quality content is however also likely to rise because of the, above mentioned, over supply of certain genres.

The conclusion to this section is that several trends are likely to have positive effects on all the objectives by the government. The trends are however also likely to have a negative effect on the accessibility of high quality news and on the amount of low quality news. With respect to the interference of the government within the broadcasting landscape it can be said that the digitalisation of the media landscape will likely provide news which has the level of pluralism, accessibility, independency and maybe quality which the government has in mind. The convergence of media infrastructures combined with research on the use of internet shows that for future governments it seems wise to focus on the provision of news on the internet instead of the provision of news by a public broadcaster [Tewksbury, 2005] and [Cloin et al., 2013].

# **Appendix A**

# **AppendixA**

FIGURE A.1: The value chain of news production.

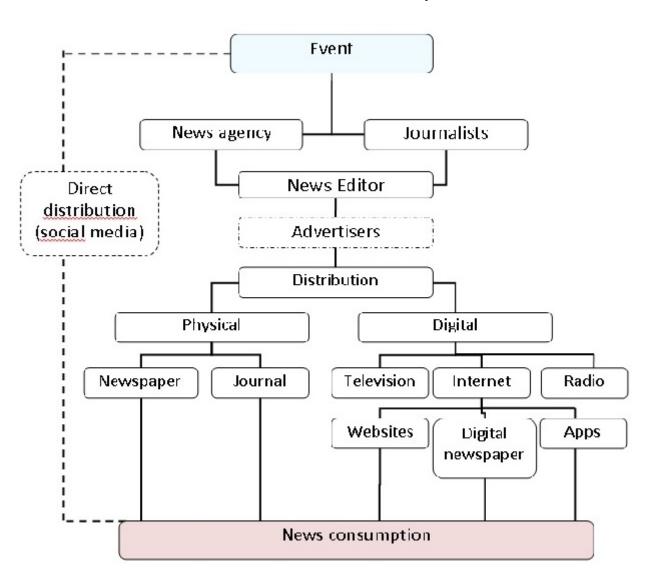
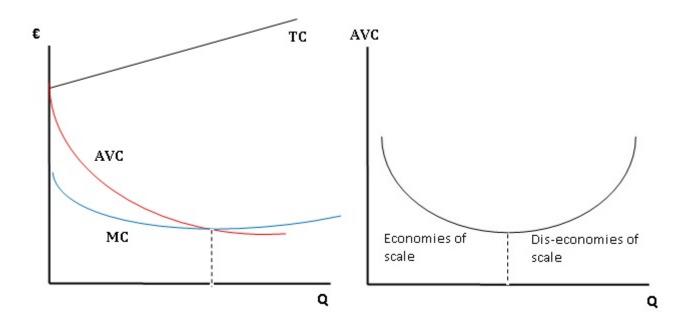
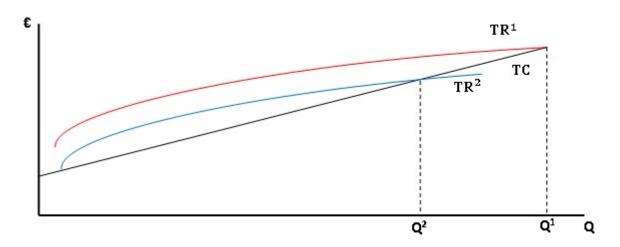


FIGURE A.2: Economies of scale



 $TC = Total\ cost,\ AVC = Average\ cost\ per\ Q,\ MC = Marginal\ cost\ per\ Q,\ where\ Q\ is\ the\ amount\ of\ news.\ Source:\ [Frank\ and\ Glass,\ 2008]$ 

FIGURE A.3: Non excludable goods and market failures



 $TC = Total\ cost,\ TR1 = Total\ revenue\ without\ leaking\ benefits,\ TR2 = Total\ revenue\ with\ leaking\ benefits,\ where\ Q\ is\ the\ amount\ or\ kinds\ of\ news\ Source:\ [Baarsma\ et\ al.,\ 2013]$ 

Q

MF

€ SR TC

FIGURE A.4: Positive externalities and market failures

TC = Total cost, SR = Social Revenue, PR = Private revenue, MF = Market failure and PE = Positive externalities, where Q is the amount of high quality news Source: [Baarsma et al., 2013]

 $Q^1$ 

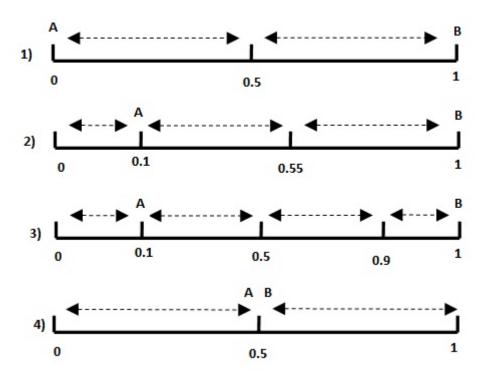


FIGURE A.5: Outcome hotelling model

Based on the model by [Spitzer, 1997]

# **Appendix B**

# **Appendix B: Codebook**

# **B.1** Item characteristics

Date:		
Day-month-year		
Time		
hh:mm		
Day of the week:		
1. Monday		
2. Tuesday		
3. Wensday		
4. Thursday		

# **Broadcaster**

5. Friday

6. Saturday

7. Sunday

- 1. NOS
- 2. RTL

#### **Duration of the broadcast:**

mm:ss

#### **Number of items**

x number of items

#### Item number

The count of the number of items.

- 1. First
- 2. Second
- 3. ...

# **B.2** Themes and subjects

## **Themes:**

- 1. Economics and Work
  - Agriculture and Industry
  - Business
  - Economics and finance
  - Labour market, work and employment

## 2. Other

- Celebrations
- Celebrity
- Consumer affairs
- Death of 'special' person
- Disasters, accidents and nuisance
- Entertainment, gossip, scandals and seks
- History and museum
- Human interest
- Other
- Religion

- Royalty
- Space exploration
- Sports
- Tourism
- Youth

#### 3. Media

- Culture, Media and Communication
- ICT, Multimedia and gadgets
- 4. Foreign policies and defence
  - Defence and security
  - Development / Third World
  - International relationships
  - Politics European
  - Politics Foreign
  - War, peace and terrorism

### 5. Social affairs

- Education and Science
- Elections
- Health issues
- Housing and housingmarket
- Immigration
- Politics Domestic
- Social Affairs and Health (health, pension, etc.)

#### 6. Crime and safety

- Security, Justice, crime and police
- 7. Traffic and environment
  - Infrastructure and traffic
  - Weather, Energy and environment

## **Subjects:**

- 1. Agriculture and Industry
- 2. Business
- 3. Celebrations
- 4. Celebrity
- 5. Consumer affairs
- 6. Culture, Media and Communication
- 7. Death of 'special' person
- 8. Defence and security
- 9. Development / Third World
- 10. Disasters, accidents and nuisance
- 11. Economics and finance
- 12. Education and Science
- 13. Elections
- 14. Entertainment, gossip, scandals and seks
- 15. Health issues
- 16. History and museum
- 17. Housing and housingmarket
- 18. Human interest
- 19. ICT, Multimedia and gadgets
- 20. Immigration
- 21. Infrastructure and traffic
- 22. International relationships
- 23. Labour market, work and employment
- 24. Other
- 25. Politics Domestic
- 26. Politics European

- 27. Politics Foreign
- 28. Religion
- 29. Royalty
- 30. Security, Justice, crime and police
- 31. Social Affairs and Health (health, pension, etc.)
- 32. Space exploration
- 33. Sports
- 34. Tourism
- 35. War, peace and terrorism
- 36. Weather, Energy and environment
- 37. Youth

#### **Hard or Soft**

- 1. Hard
  - Agriculture and Industry
  - Business
  - Defence and security
  - Development / Third World
  - Economics and finance
  - Education and Science
  - Elections
  - Housing and housingmarket
  - Immigration
  - International relationships
  - Labour market, work and employment
  - Politics Domestic
  - Politics European
  - Politics Foreign
  - Religion

- Social Affairs and Health (health, pension, etc.)
- War, peace and terrorism

#### 2. Soft/Sensational

- Celebrations
- Celebrity
- Consumer affairs
- Culture, Media and Communication
- Death of 'special' person
- Disasters, accidents and nuisance
- Entertainment, gossip, scandals and seks
- Health issues
- History and museum
- Human interest
- ICT, Multimedia and gadgets
- Infrastructure and traffic
- Other
- Royalty
- Security, Justice, crime and police
- Space exploration
- Sports
- Tourism
- Weather, Energy and environment
- Youth

## Geographical scope

- 1. Regional
- 2. National
- 3. European
- 4. Global

#### **B.3** Sources

#### **Qualification:**

- 1. Domestic business: An actor of a domstic firm.
- 2. Domestic directly involved citizen/streetinterview: A domestic actor which is directly affected by a certain event. e.g. a bystanders of an accident.
- 3. Domestic Expert / Specialist: A domestic expert which is independent of the broadcasters
- 4. Domestic journalist/media/reporter external: A domestic journalist or reporter which is independent of the broadcasters.
- Domestic journalist/reporter internal: A domestic journalist which works for the broadcasters
- 6. Domestic Justice / police / army: A domestic actor within the practice of justice, the police/firebrigade or the army
- 7. Domestic political actor: A domestic political actor
- 8. Domestic presenter: A domestic presenter within the broadcast
- 9. Domestic religious actor: A domestic religious actor
- 10. Domestic royal actor: A domestic royal actor
- 11. Domestic social organisation / social actors: A domestic actor within an social organisation or advocacy.
- 12. Domestic Voxpop: A domestic actor which is not directly involved by a certain event. e.g. an interview with a random person on the street.
- 13. Domestic other: All other domestic actors
- 14. Foreign business: An actor of a foreign firm.
- 15. Foreign directly involved citizen/streetinterview: A foreign actor which is directly affected by a certain event. e.g. a bystanders of an accident.
- 16. Foreign Expert/specialist: A foreign expert which is independent of the broadcasters
- 17. Foreign journalist/media/reporter external: A foreign journalist or reporter which is independent of the broadcasters.
- 18. Foreign journalist/reporter internal: A domestic journalist which works for the broadcasters within a country that is different than the home country of the broadcasters

- 19. Foreign Justice / police / army: A foreign actor within the practice of justice, the police/firebrigade or the army
- 20. Foreign political actor: A foreign political actor
- 21. Foreign presenter: A foreign presenter within the broadcast
- 22. Foreign religious actor: A foreign religious actor
- 23. Foreign royal actor: A foreign royal actor
- 24. Foreign social organisation / social actors: A foreign actor within an social organisation or advocacy.
- 25. Foreign Voxpop: A foreign actor which is not directly involved by a certain event. e.g. an interview with a random person on the street.
- 26. Foreign other: All other foreign actors

#### Gender

- 1. Male
- 2. Female

# **Nationality:**

- 1. African
- 2. American
- 3. Asian
- 4. Australian
- 5. Belgian
- 6. Brasilian
- 7. British
- 8. Canadian
- 9. Chinese
- 10. Dutch
- 11. Dutch Antils

12. Eastern-European

13. French

14. German

15. Indian

16. In	donesian
17. Ita	alian
18. Ja	panese
19. M	exican
20. M	iddle Eastern
21. Ot	ther
22. Rı	ussian
23. Sc	eandinavian
24. Sc	outern European
25. Sc	outh African
26. Sc	outh American
27. Sc	outh-korean
28. Sp	panish
29. Tu	urkish
Politicia	nn:
1. Ye	es es
2. No	o
Minister	r:
1. Ye	es
2. No	o ·
Political	l party:

- CDA
   CU
   D66
- 4. Groenlinks
- 5. Other
- 6. PvdA
- 7. PvdD
- 8. PVV
- 9. SGP
- 10. SP
- 11. VVD

## **Political color:**

- 1. Left
  - Groenlinks
  - PvdA
  - PvdD
  - SP
- 2. Center
  - CDA
  - CU
  - D66
  - SGP
- 3. Right
  - PVV
  - VVD
- 4. none

# **B.4** International coverage

# **Country**

15. Italy

16. Japan

17. Mexico

18. Middle East

19. Netherlands

22. Scandinavia

23. Soutern Europe

20. Other

21. Russia

1.	Africa (developing countries)
2.	Antils
3.	Asia
4.	Australia
5.	Belgium
6.	Brasil
7.	Canada
8.	China
9.	Eastern-Europe
10.	European Union
11.	France
12.	Germany
13.	India
14.	Indonesia

- 24. South Africa
- 25. South America
- 26. South-korea
- 27. Spain
- 28. Turkey
- 29. United Kingdom
- 30. United States

## **Domesticated:**

- 1. Dutch
- 2. Domesticated
- 3. Foreign
- 4. Mixed

#### More countries

- 1. Yes
- 2. No

# **Appendix C**

# **Appendix C: Content Analysis**

TABLE C.1: Descriptive Statistics Broadcasts

	NOS	RTL
Broadcasts (n)	24	24
Items total (n)	241	269
Average broadcast (sec.)	1248	1163
Minimum (sec)	693	1001
Maximum (sec)	1602	1381
St.dev	228	74
Average number items	10.13	11.7
Minimum	7	5
Maximum	14	19
St. dev.	1.754	3.309
Average item duration (sec)	118.7	101.3
Minimum (sec)	10	8
Maximum (sec)	1092	1266
St. dev	129.4	106.6

TABLE C.2: Subject diversity

	Frequency NOS	Percent NOS	Frequency RTL	Percent RTL
Agriculture and Industry	1	0.4	1	0.4
Business	16	6.6	11	4.1
Celebrations	3	1.2	3	1.1
Celebrity	0	0.0	0	0.0
Consumer affairs	6	2.5	11	4.1
Culture. Media and Communication	0	0.0	1	0.4
Death of 'special' person	10	4.1	7	2.6
Defence and security	3	1.2	3	1.1
Development / Third World	0	0.0	0	0.0
Disasters. accidents and nuisance	18	7.5	27	10.0
Economics and finance	8	3.3	9	3.3
Education and Science	9	3.7	6	2.2
Elections	4	1.7	3	1.1
Entertainment. gossip. scandals and sex	6	2.5	5	1.9
Health issues	6	2.5	9	3.3
History and museum	4	1.7	3	1.1
Housing and housingmarket	4	1.7	5	1.9
Human interest	8	3.3	16	5.9
ICT. Multimedia and gadgets	3	1.2	3	1.1
Immigration	4	1.7	4	1.5
Infrastructure and traffic	6	2.5	7	2.6
International relationships	1	0.4	3	1.1
Labour market. work and employment	3	1.2	4	1.5
Other	2	0.8	2	0.7
Politics Domestic	9	3.7	9	3.3
Politics European	5	2.1	0	0.0
Politics Foreign	9	3.7	11	4.1
Religion	5	2.1	7	2.6
Royalty	14	5.8	12	4.5
Security. Justice. crime and police	29	12.0	35	13.0
Social Affairs and Health (health. pension. etc.)	7	2.9	7	2.6
Space exploration	1	0.4	0	0.0
Sports	4	1.7	14	5.2
Tourism	0	0.0	1	0.4
War. peace and terrorism	22	9.1	15	5.6
Weather. Energy and environment	11	4.6	15	5.6
Youth	0	0.0	0	0.0

TABLE C.3: Fractionalisation index

Date	NOS	RTL
14-Jan-2013	0.875	0.876
29-Jan-2013	0.840	0.776
13-Feb-13	0.876	0.860
28-Feb-13	0.840	0.864
15-Mar-13	0.876	0.903
30-Mar-13	0.814	0.861
14-Apr-13	0.864	0.909
29-Apr-13	0.612	0.727
14-May-13	0.833	0.857
29-May-13	0.861	0.760
13-Jun-13	0.880	0.860
28-Jun-13	0.892	0.840
13-Jul-13	0.876	0.847
28-Jul-13	0.864	0.870
12-Aug-13	0.816	0.750
27-Aug-13	0.857	0.800
11-Sep-13	0.814	0.889
26-Sep-13	0.840	0.876
11-Oct-13	0.875	0.903
26-Oct-13	0.864	0.893
10-Nov-13	0.816	0.864
25-Nov-13	0.902	0.893
10-Dec-13	0.864	0.815
25-Dec-13	0.875	0.864

TABLE C.4: Theme diversity

	Frequency NOS	Percent NOS	Frequency RTL	Percent RTL
Economics and Work	28	11.618	25	9.293
Other	81	33.609	108	40.148
Media	3	1.244	4	1.486
Foreign policies and defence	40	16.597	32	11.895
Social affairs	43	17.842	43	15.985
Crime and safety	29	12.033	35	13.011
Traffic and environment	17	7.053	22	8.178

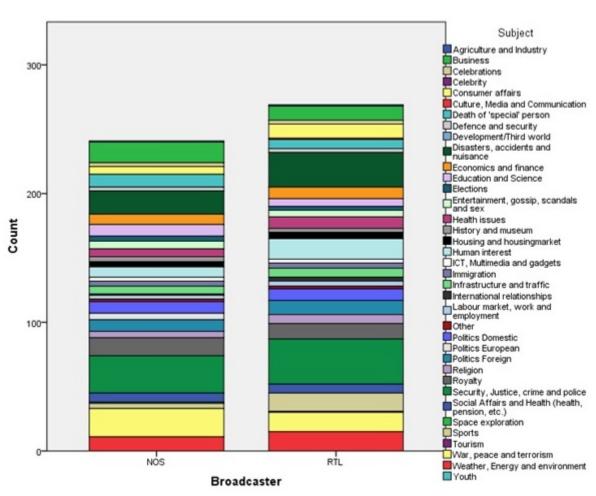


FIGURE C.1: Subject diversity.

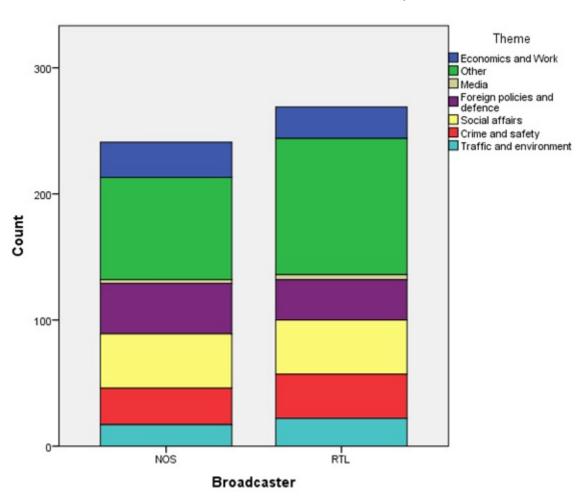


FIGURE C.2: Theme diversity.

TABLE C.5: Fractionalisation index Themes

14-Jan-2013     0.819     0.744       29-Jan-2013     0.640     0.448       13-Feb-13     0.777     0.776       28-Feb-13     0.660     0.617       15-Mar-13     0.743     0.791	
13-Feb-13 0.777 0.776 28-Feb-13 0.660 0.617	
28-Feb-13 0.660 0.617	
15-Mar-13 0.743 0.791	
30-Mar-13 0.691 0.694	
14-Apr-13 0.716 0.620	
29-Apr-13 0.255 0.561	
14-May-13 0.777 0.775	
29-May-13 0.805 0.720	
13-Jun-13 0.800 0.680	
28-Jun-13 0.776 0.674	
13-Jul-13 0.760 0.722	
28-Jul-13 0.666 0.728	
12-Aug-13 0.734 0.625	
27-Aug-13 0.816 0.720	
11-Sep-13 0.691 0.722	
26-Sep-13 0.780 0.793	
11-Oct-13 0.791 0.805	
26-Oct-13 0.740 0.628	
10-Nov-13 0.693 0.659	
25-Nov-13 0.722 0.760	
10-Dec-13 0.716 0.716	
25-Dec-13 0.656 0.639	

TABLE C.6: Subject diversity excluding equal items

	Frequency NOS	Percent NOS	Frequency RTL	Percent RTL
Agriculture and Industry	1	0.847	1	0.70
Business	9	7.627	4	2.82
Celebrations	2	1.694	0	0.00
Celebrity	0	0	0	0.00
Consumer affairs	4	3.389	9	6.334
Culture. Media and Communication	0	0	0	0
Death of 'special' person	5	4.237	2	1.41
Defence and security	1	0.847	1	0.70
Development/Third world	0	0	0	0.00
Disasters. accidents and nuisance	6	5.084	15	10.563
Economics and finance	5	4.237	4	2.82
Education and Science	5	4.237	2	1.41
Elections	2	1.694	1	0.70
Entertainment. gossip. scandals and sex	3	2.542	3	2.11
Health issues	2	1.694	5	3.52
History and museum	3	2.542	2	1.41
Housing and housingmarket	2	1.694	3	2.11
Human interest	3	2.542	12	8.45
ICT. Multimedia and gadgets	2	1.694	3	2.11
Immigration	2	1.694	2	1.41
Infrastructure and traffic	1	0.847	2	1.41
International relationships	0	0	2	1.41
Labour market. work and employment	2	1.694	3	2.11
Other	1	0.847	1	0.70
Politics Domestic	4	3.389	5	3.52
Politics European	5	4.237	0	0.00
Politics Foreign	5	4.237	7	4.93
Religion	0	0	1	0.70
Royalty	7	5.932	4	2.82
Security. Justice. crime and police	10	8.474	15	10.56
Social Affairs and Health (health. pension. etc.)	4	3.389	6	4.23
Space exploration	1	0.847	0	0.00
Sports	2	1.694	13	9.15
Tourism	0	0	0	0.00
War. peace and terrorism	13	11.016	6	4.23
Weather. Energy and environment	6	5.084	8	5.63
Youth	0	0	0	0.00

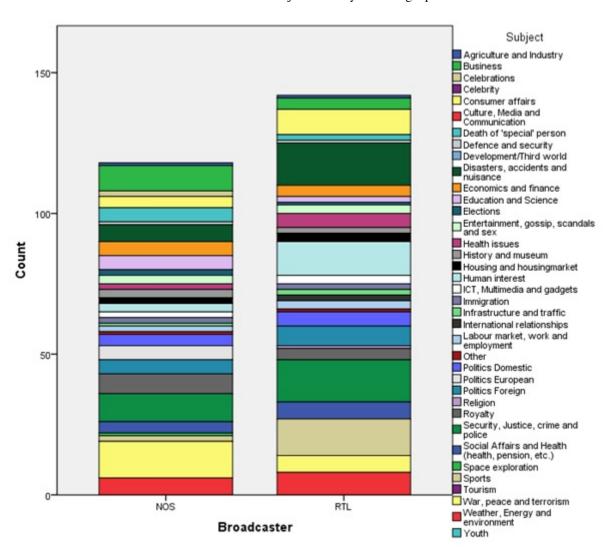


FIGURE C.3: Subject diversity excluding equal items.

TABLE C.7: Fractionalisation index subject excluding equal items

Date	NOS	RTL
14-Jan-2013	0.84	0.82
29-Jan-2013	0.67	0.00
13-Feb-13	0.75	0.63
28-Feb-13	0.63	0.80
15-Mar-13	0.83	0.75
30-Mar-13	0.78	0.86
14-Apr-13	0.72	0.90
29-Apr-13	0.58	0.80
14-May-13	0.78	0.50
29-May-13	0.75	0.38
13-Jun-13	0.75	0.67
28-Jun-13	0.83	0.82
13-Jul-13	0.83	0.82
28-Jul-13	0.72	0.86
12-Aug-13	0.63	0.00
27-Aug-13	0.50	1.00
11-Sep-13	0.75	0.82
26-Sep-13	0.75	0.80
11-Oct-13	0.67	0.75
26-Oct-13	0.75	0.83
10-Nov-13	0.67	0.88
25-Nov-13	0.80	0.63
10-Dec-13	0.75	0.72
25-Dec-13	0.67	0.82

TABLE C.8: Theme diversity excluding equal items

	Frequency NOS	Percent NOS	Frequency RTL	Percent RTL
Economics and Work	17	0.144	12	0.084
Other	37	0.313	62	0.436
Media	2	0.017	3	0.021
Foreign policies and defence	24	0.203	16	0.112
Social affairs	21	0.177	24	0.169
Crime and safety	10	0.085	15	0.105
Traffic and environment	7	0.059	10	0.07

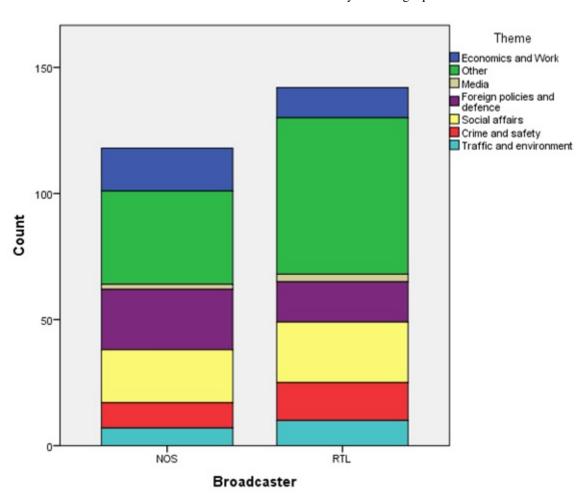


FIGURE C.4: Theme diversity excluding equal items

TABLE C.9: Fractionalisation index themes excluding equal items

Date	NOS	RTL
14-Jan-2013	0.781	0.571
29-Jan-2013	0.5	0
13-Feb-13	0.375	0.375
28-Feb-13	0.625	0.56
15-Mar-13	0.722	0.625
30-Mar-13	0.611	0.691
14-Apr-13	0.64	0.524
29-Apr-13	0.18	0.72
14-May-13	0.75	0.5
29-May-13	0.625	0.375
13-Jun-13	0.625	0.444
28-Jun-13	0.611	0.571
13-Jul-13	0.722	0.693
28-Jul-13	0.56	0.765
12-Aug-13	0.625	0
27-Aug-13	0.5	1
11-Sep-13	0.625	0.612
26-Sep-13	0.75	0.72
11-Oct-13	0.666	0.625
26-Oct-13	0.75	0.666
10-Nov-13	0.444	0.679
25-Nov-13	0.64	0.625
10-Dec-13	0.75	0.56
25-Dec-13	0.444	0.693

TABLE C.10: Geographical scope

	Frequency NOS	Percent NOS	Frequency RTL	Percent RTL
Regional	10	0.041	13	0.0483
National	116	0.481	136	0.505
European	52	0.215	53	0.197
Global	63	0.261	67	0.249

TABLE C.11: Fractionalisation index Geographical scope

Date	NOS	RTL
14-Jan-2013	0.652	0.545
29-Jan-2013	0.580	0.245
13-Feb-13	0.595	0.595
28-Feb-13	0.620	0.494
15-Mar-13	0.628	0.597
30-Mar-13	0.494	0.611
14-Apr-13	0.642	0.598
29-Apr-13	0.449	0.744
14-May-13	0.541	0.490
29-May-13	0.625	0.480
13-Jun-13	0.640	0.580
28-Jun-13	0.678	0.461
13-Jul-13	0.678	0.625
28-Jul-13	0.642	0.592
12-Aug-13	0.571	0.625
27-Aug-13	0.449	0.320
11-Sep-13	0.493	0.611
26-Sep-13	0.64 0	0.661
11-Oct-13	0.694	0.694
26-Oct-13	0.667	0.545
10-Nov-13	0.490	0.576
25-Nov-13	0.569	0.645
10-Dec-13	0.642	0.494
25-Dec-13	0.719	0.710

TABLE C.12: Political scope

	Frequency NOS	Percent NOS	Frequency RTL	Percent RTL
CDA	5	0.057	7	0.075
CU	3	0.034	3	0.032
D66	7	0.080	11	0.118
Groenlinks	3	0.034	3	0.032
PVDA	23	0.264	27	0.290
PVV	5	0.057	7	0.075
SGP	5	0.057	0	0.000
SP	4	0.046	7	0.075
VVD	32	0.368	28	0.301
Left	28	0.333	37	0.406
Center	20	0.238	20	0.219
Right	36	0.429	34	0.373

TABLE C.13: Diversity in Source Qualification

	Frequency NOS	Percent NOS	Frequency RTL	Percent RTL
Domestic business	23	0.030	49	0.051
Domestic directly involved citizen/streetinterview	56	0.073	67	0.070
Domestic Expert / Specialist	45	0.059	64	0.067
Domestic journalist/media/reporter external	5	0.007	3	0.003
Domestic journalist/reporter internal	152	0.198	181	0.189
Domestic Justice / police / army	19	0.025	36	0.038
Domestic political actor	88	0.115	95	0.099
Domestic presenter	104	0.136	117	0.122
Domestic religious actor	2	0.003	2	0.002
Domestic royal actor	7	0.009	9	0.009
Domestic social organization / social actors	29	0.038	25	0.026
Domestic Voxpop	50	0.065	90	0.094
Foreign business	9	0.012	6	0.006
Foreign directly involved citizen/streetinterview	30	0.039	34	0.035
Foreign Expert/specialist	13	0.017	9	0.009
Foreign journalist/media/reporter external	14	0.018	23	0.024
Foreign journalist/reporter internal	43	0.056	34	0.035
Foreign Justice / police / army	7	0.009	5	0.005
Foreign social organization / social actors	4	0.005	6	0.006
Foreign political actor	21	0.027	37	0.039
Foreign presenter	1	0.001	0	0.000
Foreign religious actor	3	0.004	5	0.005
Foreign royal actor	0	0.000	2	0.002
Foreign Voxpop	37	0.048	61	0.064
Foreign other	4	0.005	0	0.000

TABLE C.14: Fractionalisation index Qualification source

NOC	DTI
	RTL
	0.891
0.869	0.841
0.865	0.905
0.836	0.907
0.867	0.878
0.858	0.898
0.908	0.766
0.834	0.931
0.872	0.902
0.878	0.888
0.835	0.816
0.898	0.809
0.896	0.920
0.876	0.758
0.861	0.896
0.899	0.904
0.890	0.898
0.858	0.902
0.854	0.919
0.882	0.836
0.839	0.780
0.881	0.843
0.870	0.880
0.735	0.901
	0.836 0.867 0.858 0.908 0.834 0.872 0.878 0.835 0.898 0.896 0.876 0.861 0.899 0.890 0.858 0.854 0.882 0.839 0.881 0.870

TABLE C.15: Diversity in Source Nationality

	Frequency NOS	Percent NOS	Frequency RTL	Percent RTL
African	5	0.007	24	0.025
American	18	0.023	31	0.032
Asian	5	0.007	8	0.008
Belgian	5	0.007	8	0.008
British	8	0.010	18	0.019
Chinese	7	0.009	9	0.009
Dutch	617	0.805	772	0.806
Dutch Antils	7	0.009	0	0.000
Eastern-European	0	0.000	1	0.001
French	12	0.016	9	0.009
German	13	0.017	5	0.005
Italian	3	0.004	19	0.020
Japanese	0	0.000	1	0.001
Middle Eastern	33	0.043	23	0.024
Other	2	0.003	5	0.005
Russian	2	0.003	3	0.003
Scandinavian	3	0.004	2	0.002
Soutern European	0	0.000	2	0.002
South American	9	0.012	8	0.008
South-korean	0	0.000	2	0.002
Spanish	7	0.009	5	0.005
Turkish	10	0.013	3	0.003

FIGURE C.5: Fractionalisation index by date



TABLE C.16: Fractionalisation index Nationalitysource

Date	NOS	RTL
14-Jan-2013	0.373	0.180
29-Jan-2013	0.264	0.086
13-Feb-13	0.300	0.342
28-Feb-13	0.156	0.162
15-Mar-13	0.310	0.145
30-Mar-13	0.000	0.482
14-Apr-13	0.495	0.206
29-Apr-13	0.448	0.371
14-May-13	0.299	0.292
29-May-13	0.183	0.235
13-Jun-13	0.435	0.562
28-Jun-13	0.464	0.045
13-Jul-13	0.458	0.128
28-Jul-13	0.601	0.670
12-Aug-13	0.169	0.373
27-Aug-13	0.426	0.443
11-Sep-13	0.314	0.316
26-Sep-13	0.270	0.396
11-Oct-13	0.359	0.535
26-Oct-13	0.295	0.176
10-Nov-13	0.254	0.317
25-Nov-13	0.313	0.326
10-Dec-13	0.256	0.433
25-Dec-13	0.444	0.388

TABLE C.17: Diversity in Source Gender

	Frequency NOS	Percent NOS	Frequency RTL	Percent RTL
Male	522	0.68	697	0.73
Female	244	0.32	263	0.27

TABLE C.18: Fractionalisation index Gender source

Date	NOS	RTL
14-Jan-2013	0.456	0.343
29-Jan-2013	0.489	0.494
13-Feb-13	0.464	0.388
28-Feb-13	0.486	0.245
15-Mar-13	0.457	0.295
30-Mar-13	0.278	0.463
14-Apr-13	0.293	0.320
29-Apr-13	0.495	0.375
14-May-13	0.500	0.375
29-May-13	0.414	0.460
13-Jun-13	0.400	0.263
28-Jun-13	0.301	0.422
13-Jul-13	0.435	0.366
28-Jul-13	0.473	0.429
12-Aug-13	0.298	0.418
27-Aug-13	0.326	0.291
11-Sep-13	0.477	0.432
26-Sep-13	0.397	0.361
11-Oct-13	0.428	0.229
26-Oct-13	0.366	0.490
10-Nov-13	0.444	0.440
25-Nov-13	0.415	0.430
10-Dec-13	0.451	0.349
25-Dec-13	0.475	0.455

FIGURE C.6: Fractionalisation index by date



TABLE C.19: Countries in the News. all items

	Frequency NOS	Percent NOS	Frequency RTL	Percent RTL
Africa (developing countries)	13	0.038	12	0.033
Antils	2	0.006	0	0.000
Asia	5	0.015	9	0.025
Australia	0	0.000	1	0.003
Belgium	7	0.020	3	0.008
Brasil	1	0.003	1	0.003
Canada	0	0.000	1	0.003
China	5	0.015	3	0.008
Eastern-Europe	10	0.029	7	0.019
European Union	8	0.023	6	0.017
France	8	0.023	15	0.041
Germany	11	0.032	4	0.011
Italy	13	0.038	15	0.041
Japan	1	0.003	1	0.003
Middle East	26	0.076	19	0.052
Netherlands	170	0.494	191	0.526
Other	6	0.017	6	0.017
Russia	8	0.023	8	0.022
Scandinavia	3	0.009	2	0.006
Soutern Europe	6	0.017	4	0.011
South Africa	0	0.000	1	0.003
South America	5	0.015	7	0.019
South-korea	1	0.003	1	0.003
Spain	2	0.006	4	0.011
Turkey	3	0.009	2	0.006
United Kingdom	9	0.026	13	0.036
United States	21	0.061	27	0.074

TABLE C.20: Countries in the News. equal items excluded

	Frequency NOS	Percent NOS	Frequency RTL	Percent RTL
Africa (developing countries)	5	0.031	6	0.034
Antils	2	0.012	0	0.000
Asia	2	0.012	5	0.028
Australia	0	0.000	1	0.006
Belgium	4	0.025	1	0.006
Brasil	1	0.006	0	0.000
China	4	0.025	3	0.017
Eastern-Europe	6	0.037	5	0.028
European Union	3	0.019	3	0.017
France	2	0.012	6	0.034
Germany	7	0.043	0	0.000
Italy	3	0.019	4	0.022
Japan	1	0.006	1	0.006
Middle East	16	0.099	7	0.039
Netherlands	82	0.506	98	0.547
Other	2	0.012	3	0.017
Russia	1	0.006	4	0.022
Scandinavia	3	0.019	1	0.006
Soutern Europe	4	0.025	3	0.017
South America	0	0.000	2	0.011
Spain	1	0.006	2	0.011
Turkey	1	0.006	0	0.000
United Kingdom	4	0.025	8	0.045
United States	8	0.049	16	0.089

FIGURE C.7: Fractionalisation index by date

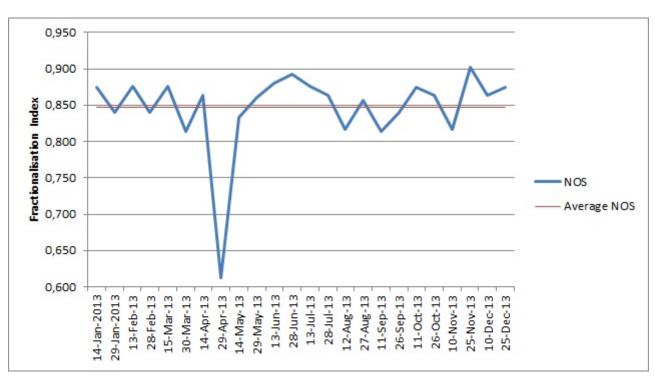


TABLE C.21: Subjects domesticate/mixed news

	Frequency NOS	Percent NOS	Frequency RTL	Percent RTL
Agriculture and Industry	0	0.000	0	0.000
Business	5	0.106	4	0.085
Celebrations	0	0.000	0	0.000
Celebrity	0	0.000	0	0.000
Consumer affairs	0	0.000	1	0.021
Culture. Media and Communication	0	0.000	0	0.000
Death of 'special' person	0	0.000	0	0.000
Defence and security	1	0.021	1	0.021
Development/Third world	0	0.000	0	0.000
Disasters. accidents and nuisance	2	0.043	2	0.043
Economics and finance	2	0.043	2	0.043
Education and Science	1	0.021	0	0.000
Elections	0	0.000	0	0.000
Entertainment. gossip. scandals and sex	2	0.043	2	0.043
Health issues	2	0.043	2	0.043
History and museum	0	0.000	0	0.000
Housing and housingmarket	1	0.021	0	0.000
Human interest	0	0.000	4	0.085
ICT. Multimedia and gadgets	2	0.043	0	0.000
Immigration	0	0.000	1	0.021
Infrastructure and traffic	2	0.043	2	0.043
International relationships	1	0.021	3	0.064
Labour market. work and employment	0	0.000	0	0.000
Other	2	0.043	1	0.021
Politics Domestic	1	0.021	0	0.000
Politics European	2	0.043	0	0.000
Politics Foreign	1	0.021	1	0.021
Religion	1	0.021	1	0.021
Royalty	2	0.043	3	0.064
Security. Justice. crime and police	10	0.213	8	0.170
Social Affairs and Health (health. pension. etc.)	0	0.000	0	0.000
Space exploration	1	0.021	0	0.000
Sports	1	0.021	3	0.064
Tourism	0	0.000	1	0.021
War. peace and terrorism	4	0.085	4	0.085
Weather. Energy and environment	1	0.021	1	0.021
Youth	0	0.000	0	0.000

TABLE C.22: Subjects Foreign news

	Frequency NOS	Percent NOS	Frequency RTL	Percent RTL
Agriculture and Industry	1	0.014	1	0.013
Business	1	0.014	1	0.013
Celebrations	0	0.000	0	0.000
Celebrity	0	0.000	0	0.000
Consumer affairs	0	0.000	0	0.000
Culture. Media and Communication	0	0.000	0	0.000
Death of 'special' person	4	0.055	4	0.052
Defence and security	2	0.027	1	0.013
Development/Third world	0	0.000	0	0.000
Disasters. accidents and nuisance	9	0.123	13	0.169
Economics and finance	3	0.041	1	0.013
Education and Science	0	0.000	0	0.000
Elections	4	0.055	3	0.039
Entertainment. gossip. scandals and sex	2	0.027	2	0.026
Health issues	0	0.000	0	0.000
History and museum	0	0.000	0	0.000
Housing and housingmarket	0	0.000	0	0.000
Human interest	2	0.027	5	0.065
ICT. Multimedia and gadgets	0	0.000	0	0.000
Immigration	2	0.027	2	0.026
Infrastructure and traffic	0	0.000	0	0.000
International relationships	0	0.000	0	0.000
Labour market. work and employment	1	0.014	0	0.000
Other	0	0.000	0	0.000
Politics Domestic	0	0.000	0	0.000
Politics European	3	0.041	0	0.000
Politics Foreign	8	0.110	10	0.130
Religion	4	0.055	6	0.078
Royalty	2	0.027	1	0.013
Security. Justice. crime and police	2	0.027	8	0.104
Social Affairs and Health (health. pension. etc.)	0	0.000	1	0.013
Space exploration	0	0.000	0	0.000
Sports	2	0.027	2	0.026
Tourism	0	0.000	0	0.000
War. peace and terrorism	18	0.247	11	0.143
Weather. Energy and environment	3	0.041	5	0.065
Youth	0	0.000	0	0.000

TABLE C.23: Sources domesticate/mixed news

	Frequency NOS	Percent NOS	Frequency RTL	Percent RTL
Domestic business	14	0.092	13	0.081
Domestic directly involved citizen/streetinterview	16	0.105	12	0.075
Domestic Expert / Specialist	5	0.033	7	0.044
Domestic journalist/media/reporter external	1	0.007	1	0.006
Domestic journalist/reporter internal	25	0.164	29	0.181
Domestic Justice / police / army	3	0.020	3	0.019
Domestic political actor	13	0.086	14	0.088
Domestic presenter	16	0.105	16	0.100
Domestic religious actor	0	0.000	1	0.006
Domestic social organization / social actors	6	0.039	3	0.019
Domestic Voxpop	8	0.053	7	0.044
Foreign business	1	0.007	2	0.013
Foreign directly involved citizen/streetinterview	3	0.020	10	0.063
Foreign Expert/specialist	6	0.039	1	0.006
Foreign journalist/media/reporter external	5	0.033	7	0.044
Foreign journalist/reporter internal	10	0.066	9	0.056
Foreign Justice / police / army	3	0.020	1	0.006
Foreign social organization / social actors	3	0.020	3	0.019
Foreign political actor	8	0.053	10	0.063
Foreign Voxpop	9	0.059	24	0.150

TABLE C.24: Sources Foreign news

	Frequency NOS	Percent NOS	Frequency RTL	Percent RTL
Domestic business	0	0.000	0	0.000
Domestic directly involved citizen/streetinterview	2	0.011	1	0.004
Domestic Expert / Specialist	2	0.011	2	0.009
Domestic journalist/reporter internal	13	0.068	17	0.075
Domestic Justice / police / army	1	0.005	2	0.009
Domestic political actor	7	0.037	2	0.009
Domestic presenter	38	0.200	46	0.203
Domestic religious actor	1	0.005	0	0.000
Domestic Voxpop	1	0.005	0	0.000
Foreign business	8	0.042	7	0.031
Foreign directly involved citizen/streetinterview	31	0.163	24	0.106
Foreign Expert/specialist	7	0.037	8	0.035
Foreign journalist/media/reporter external	9	0.047	16	0.070
Foreign journalist/reporter internal	33	0.174	24	0.106
Foreign Justice / police / army	4	0.021	4	0.018
Foreign social organization / social actors	1	0.005	3	0.013
Foreign political actor	13	0.068	27	0.119
Foreign Presenter	1	0.005	0	0.000
Foreign religious actor	3	0.016	5	0.022
Foreign royal actor	0	0.000	2	0.009
Foreign Voxpop	28	0.147	37	0.163
Foreign other	4	0.021	0	0.000

TABLE C.25: Quantity sources within equal items

	Frequency NOS	Percent NOS	Frequency RTL	Percent RTL
Domestic business	12	0.039	29	0.069
Domestic directly involved citizen/streetinterview	22	0.072	32	0.076
Domestic Expert / Specialist	26	0.086	34	0.081
Domestic journalist/media/reporter external	1	0.003	0	0.000
Domestic journalist/reporter internal	57	0.188	71	0.169
Domestic Justice / police / army	7	0.023	11	0.026
Domestic political actor	19	0.063	25	0.059
Domestic presenter	48	0.158	68	0.162
Domestic royal actor	1	0.003	1	0.002
Domestic social organization / social actors	14	0.046	13	0.031
Domestic Voxpop	12	0.039	50	0.119
Foreign business	7	0.023	3	0.007
Foreign directly involved citizen/streetinterview	14	0.046	13	0.031
Foreign Expert/specialist	8	0.026	5	0.012
Foreign journalist/media/reporter external	3	0.010	8	0.019
Foreign journalist/reporter internal	23	0.076	21	0.050
Foreign Justice / police / army	3	0.010	1	0.002
Foreign social organization / social actors	1	0.003	1	0.002
Foreign political actor	4	0.013	11	0.026
Foreign presenter	1	0.003	0	0.000
Foreign royal actor	0	0.000	2	0.005
Foreign Voxpop	17	0.056	22	0.052
Foreign other	4	0.013	0	0.000

TABLE C.26: Quantity political parties within equal items

	Frequency NOS	Percent NOS	Frequency RTL	Percent RTL
CU	0	0.000	1	0.048
D66	0	0.000	3	0.143
Groenlinks	1	0.056	1	0.048
PVDA	4	0.222	8	0.381
PVV	0	0.000	1	0.048
SGP	2	0.111	0	0.000
SP	1	0.056	2	0.095
VVD	10	0.556	5	0.238

TABLE C.27: Percentage within a certain age group which watch the NOS broadcast

Date	6-12	13-19	20-34	35-49	50+
15-3-2014	9.5	30.1	14.7	22.8	38.6
16-3-2014	18.2	17	18.5	23.4	50.9
17-3-2014	14.8	9.8	13	26	38.2
18-3-2014	26.1	7.5	16.5	32.5	38.3
19-3-2014	20.7	14.6	17.3	31.6	42.8
20-3-2014	19.8	16.3	17.8	29.9	40.9
21-3-2014	17.1	24.6	18.2	27.4	42.1
22-3-2014	15.9	30.7	18	29	42.5
23-3-2014	17.2	20.4	16.8	26.7	50.7
24-3-2014	19.7	27	22	38.8	46.7
25-3-2014	16.8	19.2	16.9	26.7	41.7
26-3-2014	21.1	19.8	16.7	35.3	43.4
27-3-2014	22.4	9.7	18.2	32.9	39
28-3-2014	17.7	22.9	13	35.6	44.5

TABLE C.28: Percentage within a certain age group which watch the RTL broadcast

Date	6-12	13-19	20-34	35-49	50+
15-3-2014	4.3	17	31.1	27.3	19.4
16-3-2014	20.2	10.4	17.1	20.9	15.3
17-3-2014	6.1	13.6	21.7	19.9	21.8
18-3-2014	7.8	20.6	18.6	22.9	23.9
19-3-2014	8.1	19	21.9	25.2	22.5
20-3-2014	5	15.5	18.5	19.6	18.5
21-3-2014	8.9	7.4	19.3	19.5	20.9
22-3-2014	8.8	17.3	16.9	22.7	19.3
23-3-2014	16.1	16.1	21.4	25.9	25.3
24-3-2014	8	17.7	16.8	24.8	22.6
25-3-2014	12.7	13	16.3	26.4	25.1
26-3-2014	5.9	9.3	21.8	27.1	24.2
27-3-2014	11.5	13.2	24.8	21.8	21
28-3-2014	8.4	13.9	18.6	17.5	20.6

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