There have been developed various methodologies of measuring media concentration. The appropriate measure depends on the objective of the measurement which might be on the one hand the examination of economic power, or on the other an assessment of whether market structure might restrict diversity in the media industry. Frequently media academics borrow measures that have been developed by economists. Regarding the examination of economic power, economists have used companies' market share, shares of assets, value-added, sales, advertising revenue or even number of employees in forming an opinion of their bulk in the economy. These measures are more appropriate for industrial structure and manufacturing sector. In the media, because of their nature and their significant role in culture, society and politics measures examining the media firms' economic power alone seem to be inadequate. The special social significance attached to the media's role in disseminating information requires an investigation of whether a concentrated media market restricts the free flow of information.

To overcome this limitation of economic-based measures media analysts have proposed a number of media concentration measures which take into account their importance to the public. The view that was emerged in the 1990s from the debate on media concentration at European (initiated by the EU 1992 Green Paper *Pluralism and*
Media Concentration in the Internal Market – CEC, 1992) and national (Arthur Andersen's 1994 study UK Media Concentration – Shew, 1994) levels, is that it is possible to measure the 'influence' exerted by the media by applying audience-based criteria. It has been put forth that while financial units are close to the traditional systems of concentration measurement which permit assessment of media market concentration or even the existence of a dominant position (concentration of resources), audience-based methods are coherent with the cultural/political standpoint and can be held to be most effective for the measurement of pluralism and influence in the market-place for ideas. Nevertheless, influence over the audience cannot be assessed by using audience-based criteria, whether that is readership, audience reach, viewing or listenership share, and so on. Audience exposure to mass media is certainly not the same as influence over the audience. What end-user methods measure is market power and not ‘influence’ which is notoriously hard to establish.

This article focuses on the non-economic types of concentration measures and assesses their appropriateness in the broad context of media concentration's impact on the pluralism and diversity. It starts by providing an analysis of the current level of concentration of media ownership in the USA and Europe, particularly the UK, and then moves on to exploring the methodologies for measuring shares in the political and cultural market. The article suggests that assessing shares in the political/cultural markets is notoriously difficult and concludes that, given that economic power and pluralism (especially in the range of material offered) are closely linked, a combination of economic-based and culturally-based units apply.
The Level of Media Market Concentration

Concentration of media ownership has been a thorny theme. Undeniably the media have become central actors in world businesses; cable TV has increased the number of outlets, satellite TV has moved the media into the international arena, digitalization is increasingly providing the conditions for a global media market. In this context questions are raised about the consequences of media concentration on the traditional role of the media in democratic societies. The phenomenon of media concentration is certainly not a new one - Charles Havas' and Reuters news agencies dominated the international flow of information from the second half of the nineteenth century (Tunstall and Palmer, 1991) and the phonographic and cinematographic industries have experienced the phenomenon of oligopolistic competition from the beginning of the twentieth century. However, concentration of control over the media has intensified lately in both the USA and Europe due to technology (convergence) and regulation relaxation.

In the USA and Europe, merger and acquisition activity in the information and communications industries increased significantly after the deregulatory waves of the 1980s and intensified during the 1990s (Murdock, 1990; McQuail and Sinue, 1998; Iosifidis, 1999). Although the pace of convergence at the level of ownership and control differs greatly among countries, vertical and horizontal integration appear to be the two most common strategies that communications enterprises follow in order to survive in the digital age. Merger and other alliances can be horizontal, that is, between enterprises involved in the same sector, or vertical, involving firms operating in different sectors.
Vertical integration in the form of joint ownership of both distribution networks and audiovisual content has gained momentum in recent decades, with the flagship case being the January 2000 US$220 billion merger between the world leading Internet firm AOL (America Online) and the audiovisual giant Time Warner. The motives of such movements are well reported in a number of works (Iosifidis, 1997; McQuail and Sinue, 1998; Gibbons, 1998; McChesney, 1999; Tambini et al, 2001; Bagdikian, 2004). They range from increasing market power and sharing the high cost of digital technologies (especially regarding horizontal mergers), to gaining access to know-how, acquiring contents, and uncertainty of market demand (the case in vertical mergers).

The common aim of these alliances is to address the opportunities offered by technological convergence. However, it is the convergence between the Internet and mobile communication alongside the growth of broadband capacity that has prompted the development of networks of interactive communication that connect local and global spaces. There is clear evidence that corporate media are redirecting their strategies toward the Internet (Castells, 2007: 252-4). For example, Rupert Murdoch, owner of the global media group News Corporation, said in 2005 that his company had failed properly to engage with the online world - and risked losing its position in programming genres such as news. Murdoch had no doubt that radical change was coming and that News Corporation had to gear up for a wholesale revamp of its approach to the Internet. As a result in 2006 News Corporation acquired Intermix Media for approximately $580 million. The most well-known asset of Intermix Media was MySpace, a social networking site, which at the time was the fifth-ranked Web domain in terms of page
views. Other examples of alliances involving new media include Google’s 2006 $1.65 billion acquisition of YouTube, the consumer media company for people to watch and share original videos through a Web experience.

But is has been argued that the king of new media is Apple. Despite the global economic meltdown, Apple has converted consumers' appetite for convergence into the biggest profits in the company's history, selling more than 33 million iPhones since the device's introduction in 2007 - 21 million in the 2009 fiscal year alone. In the new-media gold rush, it is selling the picks and shovels: its media business model, much like Google's, is dedicated to making it easier for users to enjoy other people's content. The iPhone represents just the latest advance in Apple's convergence strategy, which dates back to the 2001 launch of the iPod music player and 2003 launch of the iTunes music store. James McQuivey, an analyst with Forrester Research, says that Apple can ‘deliver all kinds of content to you in a way that is so seamless that you cannot pass it up’, thereby defying the conventional wisdom that people will not pay for anything they can get online free says. McQuivey adds that ‘it's easier to buy media from iTunes than it is to steal it’ (see http://www.technologyreview.com/communications/24194).

Vertical Integration was once looked upon with alarm by governments because corporations which have control of a total process, from raw material to fabrication to advertising and sales, also have few motives for genuine innovation and the power to seize out anyone else who tries to compete. This situation distorts the economy with monopolistic control over prices. However, governments today have become sympathetic
to vertical corporations that have merged into ever larger total systems. This is evidenced by the passing of the US Telecommunications Act 1996 and the UK Communications Act 2003, which allowed more opportunities for companies to expand across sectors, as well as the 2003 EU legal framework for electronic communications, which provided an integrative step for convergent companies. As a result, media corporations have remained largely unrestrained and the trend toward increased integration continues unhindered.

USA

As a result of a liberalizing policy adopted by the US regulatory agency FCC, in 2005 the ten largest TV station group owners controlled 300 stations, up from 104 stations in 1995. Also group owners can now purchase TV stations with a maximum service area cap of 39 per cent, up from the previous limit of 35 per cent (it should be reminded that the limit was just 25 per cent in 1985). Further, with rules relaxed on cable ownership 90 per cent of the top 50 cable companies are owned by the same parent companies that own broadcast networks.

Renowned journalist Ben Bagdikian noted in 1983 that in the USA about 50 corporations controlled the vast majority of all news media. In his 4th edition, published in 1992, he wrote ‘in the U.S., fewer than two dozen of these extraordinary creatures own and operate 90% of the mass media’ - controlling almost all of America's newspapers, magazines, TV and radio stations, books, records, movies, videos, wire services and photo agencies. He predicted then that eventually this number would fall to about half a
dozen companies. This was greeted with skepticism at the time. When the 6th edition of *The Media Monopoly* was published in 2000, the number had fallen to six. Since then, there have been more mergers and the scope has expanded to include new media like the Internet market. In 2004, Bagdikian's revised and expanded book, *The New Media Monopoly*, shows that only five huge corporations -- Time Warner, Disney, News Corporation (owned by the Murdoch family), Bertelsmann (a German conglomerate), and Viacom (formerly CBS) -- now control most of the media industry in the US. General Electric's NBC is a close sixth (Bagdikian, 2004).

Source: Bagdikian, 2004
Eli Noam also examined the concentration trend in the US media from 1984 to the mid-2000s and attempted to establish ‘whether, where, and how American media are becoming more (or less) concentrate’ (2009: 4). The scholar analyzed the media, information, telecommunications and Internet industries, providing a comprehensive data analysis of the market shares in each segment. Like Bagdikian, Noam found that most mass media industries experienced gradual, but continuing increases in concentration during the two plus decades under review (from 13 per cent controlled by the top five firms in 1984 to 26 per cent in 2005). Noam also noted that despite a significant number of mergers, mass media concentration remains lower than in the information and telecommunications realms, but the gap is closing. Media subsectors that have greater electronic and digital emphasis tend to be more concentrated than in those that are less dependent on electronic and digital tools. Noam believes concentration is likely to continue to increase so that in the future media is likely ‘to be dominated by a few relatively focused integrator firms that put together elements provided by numerous smaller specialist firms’ (ibid: 6).

However, Noam argued that while mass media industries experienced a continuing increase in concentration, overall non-mass media sector concentration followed a ‘U-shaped path’. In many sectors, concentration declined markedly from 1984 to 1992, during the second Reagan and George H. W. Bush administrations. During Clinton’s presidency (1994–2002), concentration rose again, though not quite to the levels of 1984. Between 2001 and 2005 concentration again declined slightly. Nonetheless, only a few
sectors are approaching a monopoly situation with more 60 per cent market control by a single firm. Noam notes that oligopoly is far more common in non-mass media industries. According to Aronson (2010), who wrote a review of Noam’s work, ‘these finding may surprise those who presume that Democrats are tougher on big business than Republicans’. Another notable finding of Noam’s book is that despite the growing convergence, few companies active in one communication sector (mass media, telecom, and IT) have moved into other sectors. But most firms from these three sectors have moved into the Internet field.

UK

In the UK, the companies that are mostly having newspaper interests include:

- **News Corporation** (owned by the Murdoch family) (*The Sun, The Times, The Sunday Times, News of the World, 35% of BSkyB*).

- **Telegraph Media Group** (Sir Frederick and Sir David Barclay acquired the business in 2004 for £665m) (*Daily Telegraph, Sunday Telegraph, weekly magazine Spectator, The Scotchman quality daily newspaper, Scotland on Sunday quality Sunday title, and the Edinburgh Evening News*).

- **Daily Mail and General Trust** (*The Daily Mail, Mail on Sunday, Ireland on Sunday, Mail Today – compact size newspaper, Metro – urban national


- **Independent News and Media** (O'Reilly family had a controlling interest of over 29.5% at July 2008, whereas a significant shareholding of over 27% at May 2008 is owned by Irish entrepreneur, Dennis O’Brien) (*The Independent, Independent on Sunday*. The company also owns the *Belfast Telegraph group*).

- **Northern & Shell Network** (owned by Richard Desmond) (*Daily Express, Sunday Express, Daily Star*. It also owns magazines *New!* and *Star*).

- **Trinity Mirror plc** (the result of the takeover of *Mirror Group Newspapers* by *Trinity plc* in September 1999) (*Daily Mirror, Sunday Mirror, The People, Daily Record, Sunday Mail* – and about 120 regional daily and weekly newspapers).
• **Pearson plc** *(The Financial Times, The Economist)*

• **Gannett UK Ltd** (extensive local newspaper holdings).

Furthermore, the companies mostly having television interests include:

• **ITV plc** (previously known as Granada Limited after its former parent Granada Television). The name ITV plc followed the merger between Granada and Carlton Communications plc. It operates 11 of the 15 regional television broadcasters that make up the ITV Network. It owns the national terrestrial analogue television channel ITV1 and digital terrestrial television channels ITV2, ITV3 and ITV4.

• **British Broadcasting Corporation (BBC)** (public channel) (2 terrestrial analogue television channels BBC1 and BBC2, several digital terrestrial channels including BBC3, BBC4, CBBC, Cbeebies, BBC News and BBC Parliament. It has also launched the BBC iPlayer - catch-up channel on the last seven days of BBC TV and radio. The BBC owns 5 national radio stations and numerous local radio stations. It also owns many magazines.

• **SVT Group** (previously Scottish Media Group) (one ITV licence, SVT, in Central and Northern Scotland. In May 2008 it sold Virgin Radio and now concentrates on its TV channel.
• **Channel Four Television Corporation** (public body established in 1990, coming into operation in 1993) owns Channel 4, a UK public service television broadcaster, set up in 1982. Although commercially self-funded, it is ultimately publicly owned. It also owns digital terrestrial channels E4 and Film Four.

• Finally, **Five** (formerly Channel 5) is jointly owned by **RTL Group** (the result of a 2000 merger between Bertelsmann, GBL/Electrafina and Pearson) and **United Business Media** (which in 2000 sold its newspaper interests to Northern & Shell Network).

It can be seen that the level of media concentration is quite high in the UK. This could be attributed to the passing of The Communications Act 2003, which freed up the communications industry far more than was expected, removing most of the ownership regulations that characterized British broadcasting as it was thought these deprived companies of the economies of scale and scope required to expand into foreign markets. This provided for the removal of rules preventing

• Joint ownership of television and radio stations.

• Large newspaper groups (for example Murdoch’s *News Corporation*) from acquiring the minor commercial terrestrial broadcaster *Five.*
- Non-European ownership of broadcasting assets, effectively clearing the field for take-overs by the world’s corporate media giants.

- Single ownership of the main commercial terrestrial broadcaster *ITV*, opening the way for the creation of a single *ITV* company, which allowed *Carlton* and *Granada* to merge and form *ITV plc*.

**European Commission (EC)**

An analysis of some past competition decisions in the media sector reveals that the EC has become sympathetic to the formation of large European corporations in order to enable them to compete globally (Iosifidis, 2005). This can also be viewed as a lever to promote market liberalization that would nurture European champions. After all the predominantly pro-liberal and pro-competition provisions of the European Treaties reflect what Van Guilenburg and McQuail (2003) have dubbed as ‘new paradigm’ of media policy prioritizing economic goals over social and political welfare. Meanwhile, in the broader context of restructuring of the European audiovisual scene merger cases have become more complex and entail increased competition concerns, resembling the 1990s merger boom in the USA when the major TV networks were acquired by industrial interests. The complexity of mergers in both sides of the Atlantic is a result of a shift in the nature of industry concentration, from one based on horizontal mergers to those involving vertical integration, as operators sought out alliances which would enable them to acquire the broad set of skills needed to address new markets (Iosifidis, 2005).
Media Pluralism

Excessive media concentration can endanger media pluralism (the presence of a number of different and independent voices) and diversity in the media (different political opinions and representations of culture within the media). Therefore a pluralistic, competitive media system is a prerequisite for media diversity. Although pluralism and diversity are used interchangeably in this chapter it is worth going through some definitions of the concepts to establish why the lack of these ideals in a highly concentrated media market might be an issue of public concern. A broad definition of media diversity has been provided by Hoffmann-Riem (1987) who referring to the broadcasting scene a couple of decades ago distinguished four dimensions of diversity. For him there must be diversity of formats and issues, meaning that all the various fields and topics - entertainment, information, education and culture - have to be taken into account. Secondly, this should be complemented by a diversity or plurality of contents. This means that programmes should provide comprehensive and factual coverage of the different opinions expressed in a society. Thirdly, person and group diversity must exist. Programmes have to cater for the interests of all parts of the community. The main point here is access, but also representation. Finally, Hoffmann-Riem pointed out that broadcasters should include local, regional, national and supranational content. To sum up, a programme has to ensure that issue, content, person and geographical diversity is provided.
A similar identification of the dimensions of diversity has been provided by McQuail (1992: 144-5) who argued that the media can contribute to diversity, firstly by *reflecting* differences in society, secondly by giving *access* to different points of view, and thirdly by offering a wide range of *choice*. Diversity as reflection means that pluralistic mass media are expected to represent or reflect the prevailing differences of culture, opinion and social conditions of the population. Diversity as access refers to the channels through which the separate 'voices', groups and interests which make up the society can speak to the wider society, and also express and keep alive their own cultural identity. McQuail mentioned the most essential conditions for effective access, namely freedom to speak out, effective opportunity to speak (a prerequisite is the existence of many and different channels) and autonomy or adequate self-control over media access opportunities. Finally, diversity as more channels and choice for the audience represents a great deal of variety or range of products or services available to consumers, thereby giving them greater freedom.

In order to assess diversity in relation to media market structures and media concentrations in more particular one also needs to distinguish between *external* and *internal* diversity. The former, according to McQuail (1992: 145-7) refers to media structure because it is related to the idea of access. It relates to the degree of variation between separate media sources in a given sector, according to dimensions such as politics, religion, social class, and so on. In a given society, there are many separate and autonomous media channels, each having a high degree of homogeneity of content, expressing a particular point of view, and catering only for its own 'followers'. The latter,
McQuail adds, refers to the media content and connects with the idea of representation or reflection mentioned above. It relates to the condition where a wide range of social, political and cultural values, opinions, information and interests find expression within one media organisation, which usually aims at reaching a large and heterogeneous audience. A particular channel might be assessed according to the degree of attention given to alternative positions on topics such as politics, ethnicity and language and so on.

More recently and with regard to simplifying the complex issue of pluralism and diversity and putting the results of the research into operation, the Independent Study on Indicators for Media Pluralism in the Member States – Towards a Risk-Based Approach (2009)\(^2\) split the concept of pluralism into three normative dimensions – political, cultural, and demographic pluralism – as well as three operational dimensions – pluralism of media ownership/control, pluralism of media types, and genres. It is clearly mentioned in the study that the main threat to pluralism of media ownership/control is represented by high concentration of ownership with media which can have a direct impact on editorial independence, create bottlenecks at distribution level, and further interoperable problems. This affects pluralism not only from a supply point of view, but also from a distribution and especially an accessibility point of view (p. 75). The main threats to pluralism of media types include: lack of sufficient market resources to support the range of media, which causes a lack of/under-representation of/dominance of media types (p. 75). Threats to media genres and functions include lack of/under-representation of/dominance of some functions, or genres are missing (p. 76). Threats to political pluralism dimension are unilateral influence of media by one political grouping,
insufficient representation of certain political/ideological groups or minorities with a political interest in society (p. 77). Threats to the cultural pluralism dimension include insufficient representation of certain cultural, religious, linguistic and ethnic groups in society, and threat to national cultural identity (p. 77). Lastly, threats to the geographical pluralism dimension are lack or underrepresentation of various national geographic areas and/or local communities (p. 79).

To sum up, this study, which forms part of the European Commission’s three-step approach for advancing the debate on media pluralism within the EU, is a prototype for a European Media Pluralism Monitor – a risk-based, holistic, user-friendly and evolving monitoring tool that includes indicators of a legal, economic and socio-demographic nature. These indicators relate to various risk domains, including media ownership and/or control (the very subject of this chapter), media types and genres, political, cultural and demographic pluralism. The study makes it clear that while it urges the application of the same analytical framework in all Member States to ensure comparability of results obtained, it is not a call for harmonization of policies in this area. As in previous relevant EU documents and Treaties (see for example CEC, 1992; EU, 2007) it is repeated in this study that the sensitive matter of how to protect media pluralism is ultimately left to the discretion of Member States (p. viii). Paradoxically, even though the EU has substantially influenced market developments, principally on the basis of competition rules, where it enjoys direct powers, it nevertheless has no specific competence in cultural matters such as pluralism and broadcasting. By commissioning these studies though the EU has come to explicitly recognize the importance of socio-cultural policy objectives, citizen’s rights
and pluralism and diversity. This is a welcome development, although clearly the EU’s substantive policy output remains centered on economic and competition considerations.

**Methodologies of Measuring Media Market Concentration**

It should be spelled out from the outset that there have been developed no universal measuring methodologies. The reason is twofold. First, it is extremely difficult to develop a single unit of measurement capable of capturing the economic and socio-political power of media companies. Second, in media and communications policy there has always been a conflict between economic and cultural goals and it has been proved difficult to reconcile economic ideals (for example, promotion of fair and open competition, blockage of the formation of dominant positions) with cultural values (such as media pluralism and cultural diversity). This value conflict in media and communications policy - the need to cater simultaneously for economic and non-economic goals helps to explain differences between traditional media policies based on normative ideals and those recent policy reforms which seek sound empirical proof. As Just (2009) informs us, the most recent such approaches are the Diversity Index (DI) in the USA (2003), the public interest or plurality test in the UK (2003), the Integrated Communications Market (SIC) in Italy (2004), and a new approach to weighting the influence of various media by the German regulator KEK (2006). The task of developing a robust methodological approach which could result in a concentration measure equally catering for competition and pluralistic issues is further complicated by commercial and technological change and especially media convergence which has blurred the boundaries between different
communication sectors. Responding to this convergence trend companies have expanded their activities into various sectors, thereby making it even more difficult for regulators to develop an effective tool that could capture economic and political/cultural power.

The purpose of assessing levels of concentration in the media industry is to establish whether market structure restricts pluralism and diversity. Economic-based measures that are used in industrial structure and manufacturing sector, such as the Concentration Ratios, the Lorenz Curve and the Herfindahl-Hirschman Index (HHI), are not appropriate for measuring concentration levels in the media industry. In the media, because of their nature and significant role in culture, society and politics measures examining the media firms' economic power alone seem to be inadequate. The special social significance attached to the media's role in disseminating information requires an investigation of whether a concentrated media market restricts the free flow of information. As Karstens (2008) argues, ‘measuring pluralism by economy-based criteria runs the risk of falling short of what is desirable from the perspective of political culture, art and science, minority opinions, and cultural identity’. And he continues ‘paying only lip service to these values and assuming that free competition will take care of them anyway may not do justice to Europe’s cultural tradition and, indeed, competitive advantage’.

To overcome this limitation of economic-based measures a few media analysts have proposed a number of media concentration measures which take into account their importance to the public. The view that has emerged from the past debate on media concentration in Europe (initiated by the EU 1992 Green Paper) is that it is possible to
measure the 'influence' exerted by the media by applying \textit{audience-based criteria}. This approach has now been abandoned both because it has been proved difficult to design an audience-based methodology on a Europe-wide scale that would accurately calculate shares across sectors and construct weightings for each sector based on their relative influence or marker power, and because of differences of opinions within the European Commission and between different European bodies (see Iosifidis, 1997; Doyle, 2002).

Likewise in the UK, the May 1995 Green Paper on Media Ownership attempted to determine the thresholds of ownership in terms of the ‘\textit{total share of voice}’ for markets beyond which acquisitions would have to be referred to the media regulator (UK, 1995). The Green Paper’s approach was largely derived from a submission by the British Media Industry Group (BMIG, 1994) which advocated using consumer usage of media (newspaper circulation, TV/radio ratings) to calculate the total share of voice of any proprietor. Where ownership of a media outlet was shared between firms of proprietors the share of voice would be allotted in proportion to the percentage of ownership. But in mid-December 1995 the UK government published its Broadcasting Bill which did not contain any such proposals. The then National Heritage Secretary conceded that there was little agreement on the share of voice concept.

However the audience-share model has been used in Germany for over a decade now in order to determine concentration levels in the national television market – in 2008 a broadcaster could own unlimited number of TV services provided s/he did not achieve a dominant position in the cultural and political market (that is, more than 30 per cent
audience share). In the course of its review of the proposed merger between ProSiebenSAT.1 Media AG and Alex Springer Media AG, the German regulator responsible for ensuring media diversity (Commission on Media Concentration – KEK) developed a new weighting approach on diversity of opinions that considers potential influences of different media. According to Just (2009) this weighting approach has provoked criticism on manageability and validity grounds, alongside issues relating to KEK’s competence to intervene in broadcasting issues at a national level, given that Germany is a federal state but broadcasting issues are dealt with at a Laender (state) level.

In contrast, in the UK the Communications Act 2003 introduced a new approach to determine media diversity, the so-called ‘public interest test’ or ‘plurality test’, which applies to major players who wish to increase their interests in other areas of media, by buying newspapers, radio or television assets. The test examines whether such a deal would damage the plurality of media voices and owners. Office of Communications (Ofcom), the new super-regulator makes an initial assessment and if concerns arise it passes the case to the Competition Commission or Office of Fair Trading for an in-depth examination. However, the only media merger that was scrutinized on public interest grounds concerned satellite operator BSkyB’s November 2006 acquisition of 17.9 per cent of the ITN shares. In January 2008 the acquisition was allowed as the Competition Commission concluded that the resulting company is not expected to operate against the public interest.
Another recent attempt to define the total media market share (including radio, TV, cinema, the press, advertising and the Internet, but excluding telecommunications) was the ‘sistema integrato delle comunicazioni’ (Integrated System of Communication – SIC) in Italy. With this schema Italy entered the line of countries seeking to depart from commonly pursued market definitions in media and communications and instead start considering the media market as a whole. SIC’s market definition is too broad, thus making it unlikely that a firm will have a dominant position under this schema. But as Just (2009) argues, this newly introduced communication policy, verifies the trend (noticeable in both sides of the Atlantic) towards reduced ownership regulation and promotion of competition in the digitally converged communications market.

In the USA, media convergence required the FCC to rethink its media ownership regime. Since similar types of communications are available through multiple delivering platforms the FCC cannot no longer calculate media ownership simply by relying on the number of available outlets for any particular communications technology. On the contrary, it should integrate the various technologies into a single metric that allocates appropriate weight to each technology. However, creating such a metric has been proved difficult (Yoo, 2009). The Court of Appeals has struck down the FCC’s recent attempt to issue new media ownership rules, not least because of the lack of consistency in its methodology for determining the weight to allocate to the various media (Prometheus Radio Project v. FCC, 2004).

**Measuring Shares in the Political and Cultural Market: An Assessment**
Large companies' sales and turnover may be the best indicator of their economic power and reveal their ability to gain market advantages compared to the rest. In other words, very powerful firms can influence economic conduct, performance and pricing behaviors and have an impact on barriers to entry and limitation of output. Therefore, when the purpose is the traditional examination of market power then a high revenue company share may provide a useful guide. When it comes to the media however, the concern not only is over the impact of concentration on economic aspects but there is also the question of the social performance of the market (pluralism and diversity). Are measures tailored to assess economic concentration good enough to capture concentration levels in the political and cultural market, the so-called 'market-place for ideas'?

A follow-up question can be put: there is certainly a broad consensus in democratic societies that pluralism and diversity are important, but is there a practical or legal way to officially define and measure the vigor of a market-place for ideas? It has been argued that it is possible to identify a sort of relevant 'market for ideas', which does not coincide with the economic definition of relevant market; and that de facto restrictions of pluralism and diversity are the results of an abuse of power in such market (abuse of political and cultural power). There are three problems associated with such approach. Firstly, there are substantial difficulties in defining a suitable notion of relevant market in the political and cultural sense. As the relevant product tends to extend across different media, the cultural/political notion of the relevant market may be significantly broader than the economic one. The problem is bound to be exacerbated as multimedia
conglomerates expand their activities further, and ownership of complex transnational media chains becomes widespread. To illustrate, how does one assess the effective combined share of, say, News International in the broader market for information, culture and political opinion, comprising newspapers, TV outlets and Internet portals in several countries? Secondly, the exact nature of the potential abuse is not clear and explicable and cannot be specified in the same way as abuses of economic market may be specified. What then counts as an abuse of power in the political/cultural market? Beyond the general assumption that all media exercise some form of political and cultural influence on the public, there have emerged no satisfactory criteria so far for the definition of a broad political and cultural market in which spheres of influence by a single controller could be assessed.

The most serious reservation concerning this approach though has to do with the selection of the criteria for measuring diversity in the market place for ideas. It has been put forth that while financial units are close to the traditional systems of concentration measurement which permit assessment of media market concentration, audience-based methods are coherent with the cultural/political standpoint and can be held to be most effective for the measurement of pluralism and influence in the market-place for ideas. Nevertheless, influence over the audience cannot be assessed by using audience-based criteria, whether that is readership, audience reach, viewing or listenership share, etc. Audience exposure to mass media is certainly not the same as influence over the audience. In the end, these end-user measures are nothing but refinements of measures of market power. They measure market power, although in a more sophisticated way. They
Audience-based units are the equivalent of, say, measuring sales, that is, market share, which is a classic economic measure of market power.

**Economic Power and Diversity: A Symbiotic Relationship**

In any case, political/cultural diversity and economic power are closely linked. It might be worth at this point spelling out the arguments about the relationship between economic power and the range of material offered. There is a clear relationship between economic measures of media power and influence/pluralism because economic power determines the control over choices offered. In fact, in terms of the public interest and debates about regulation and concentration of media ownership, there are two wide-spread arguments. On the one hand, there is the argument saying that a highly concentrated market structure in the media sector is of concern not only for the possibility that it may lead to abuses of economic market power, but also for the potential effects on pluralism. A large media player who controls a substantial portion of at least one media sector (for example daily press, TV or the Internet) has the potential for forcing his/her views across a range of products (political/cultural bias), and thus for restricting the choice of products available to the public in political and cultural terms. In this sense, a competition policy decision aimed at curbing an abuse of economic market power (for example, excessive pricing or the creation of barriers to entry) may also increase pluralism, at least in the sense of reducing bias.
On the other hand, there is the argument saying that increased competition may lead to less pluralism in the market. Increasing the number of firms in an industry does not necessarily imply greater diversity in the quality and variety of products on offer - especially where price competition is weak. If firms compete on price, product differentiation provides a device for softening the intensity of competition: in a simplified world with only two companies, they will have an incentive to locate themselves as far as possible from each other on the product line (offer as diverse a product as possible in terms of product variety and quality). Proximity of location would mean that prices are gradually eroded as the companies compete for each other's business. However, if there is no explicit interaction in the firms' pricing decisions, the opposite result obtains: the firms will locate as close as possible to one another, as the 'market share effect' (the incentive to be where demand is, or to increase one's market share given the market structure) prevails over the 'strategic effect' (the interdependence of the two firms' pricing decisions). Thus the incentive to differentiate products is weaker when companies are able to operate in the near-absence of price competition. The tendency to converge on tried-and-tested formulae poses a potential danger to welfare in terms of the variety of products offered by the market. Hotelling (1929: 41), who originally discussed this effect, talked of 'an undue tendency for competitors to imitate each other'. Therefore, a more fragmented industry structure in the media sector may not necessarily deliver the socially desirable level of product differentiation because it may be more profitable for the companies to locate 'where demand is' (stick to the middle ground in order to catch the widest audience).
A further important question relates to the possibility that too much competition might display a bias in favor of certain types of products and neglect others. The particular bundle of commodities that are actually produced in the media market (the type of programmes/titles available) might be sub optimal from a social welfare point of view. When demand for products in a particular category is generally inelastic, the products which are being actually offered may end up positioning too close to each other (sub optimal product diversity); and those products for which the elasticity is comparatively lower may not be produced at all. The implication could be that some segments of tastes and preferences might systematically not be catered for, although there might be a large number of different media products (Dixit and Stiglitz, 1977). So, strictly from the point of view of pluralism, there might be no automatic advantage to be gained from a more diverse media structure. On the other hand, so the argument runs, a very concentrated industry structure might lead to great diversity, if the dominant firm(s) seeks to prevent entry in the market by filling all gaps in product space.

‘Best’ Criterion: An Illusion?

Having provided, to some extent, an argument that economic power affects the range of material offered, and having spelled out the arguments as to whether concentration or a fragmented industry can deliver best the desired diversity, we now turn to the question of which criterion is 'best' for measuring concentration levels for media pluralism purposes. The close relationship between economic power and pluralism/diversity indicates that criteria that are being used for the measurement of market power can also be used, at
least in principle, for the measurement of media influence and vice versa. Financial criteria, for instance, a long-established method for measuring market power, could also be adopted for measuring 'influence' (audience exposure to the mass media); and audience figures, supposed to be more efficient for measuring diversity in the market place for ideas, could also be a measure of economic power, especially as they are sold to advertisers.

The most common two different sets of methods (audience and revenue-based) are said to correspond to two levels of measurement of concentration in the information market: the political/cultural or pluralism and the economic or concentration of resources. It has been put forth that revenue-based methods are close to the traditional systems of concentration measurement which permit assessment of the existence of a dominant position (concentration of resources), whereas audience-based methods are coherent with the cultural/political standpoint and can be held to be most effective for measurement of pluralism. However, due to the close relationship between economic power and pluralism, audience figures could also measure market power. In fact, audience-based measures are a form of market share measurement, which is a classic economic measurement. 'Audience' are the equivalent of measuring sales (that is, market share), which is a classic economic measure of power. Therefore, the distinction between economic measures and cultural/political measures is irrelevant. Both sets of media market measurement assess market power. In the absence of a direct way of establishing 'impact', crude measures based on market power (criteria about market structure) are used
instead. And what the audience and revenue-based methods are doing is in fact that - they evaluate market power.

I would suggest that policymakers should not be obliged to choose between economic-based measures (measures of market power) and measures pluralism/diversity, but could instead incorporate them. In the absence of a direct measure of influence it is necessary to develop an approach combining the various sets of methods to establish impact. The propositions include a combined test involving advertising and/or subscription revenues and audience shares, the setting of a percentage of market share in terms of revenue/expenditure as a threshold for further examination of the position, and an approach combining more measures such as numerical criteria, revenue share, audience share and audience time spent consuming a medium. What all these suggestions have in common is that they attempt to mix different measures and develop an approach which is applicable to all information services with different characteristics. This is because establishing a method of measuring multimedia concentration for the purposes of ensuring pluralism and diversity on the basis of a single unit is impossible.

Combining different types of measurement is more likely to provide a valid method. The use of a combination of measures is essential since no single measure captures both the quantity and the quality of consumption which will tend to determine the degree of influence exerted and the extent of access and of content diversity offered. In the final analysis, it is the duty of regulators to use the measurement approaches they deem necessary to build up a complete picture of the market and the actions required to ensure
the outcomes the regulation aims to achieve. But the more information about the market position of media firms a regulator has the less disputed his/her judgment will be. Just as the Chancellor of the Exchequer receives a wide range of information to decide whether inflationary pressures are sufficient to justify a rise in interest rates, so any media regulator will need a great deal of information extracted from a wide range of indicators to help him/her decide whether the influence of a particular company is a cause of concern.

References


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1 This does not mean that all vertical merger cases have been successful, for the AOL has now been split from Time Warner and in 2010 it announced its first earnings report.
2 The objective of the study was to develop a monitoring tool for assessing the level of media pluralism in the EU Member States and identifying threats to such pluralism based on a set of indicators, covering pertinent legal, economic and socio-cultural considerations (p. vii), (see http://ec.europa.eu/information_society/media_taskforce/doc/pluralism/pfr_report.pdf, accessed 8 June 2008).