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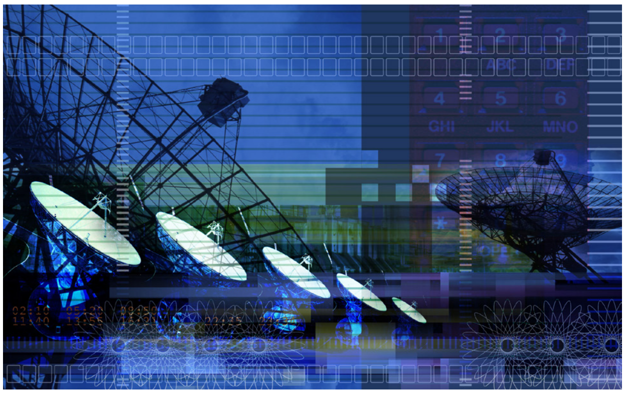

Advertising as an economic-growth engine

The new power of media in the digital age

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Advertising as an economic-growth engine: The new power of media in the digital age

"There are only two things in a business that make money—innovation and marketing. Everything else is cost."

—Peter Drucker

Introduction

The potential for advertising to boost a company's sales is well established. But can a company's decision to increase its media budget produce widespread benefits that help the economy as a whole? And will the growing popularity of online advertising, Internet videos, and other forms of digital media make advertising an even more powerful force? Faced with numerous economic challenges, both governments and industry leaders have been asking these questions with increasing frequency, but they are finding few answers. And while digital advertising has rapidly gained in popularity, McKinsey research from 2008 showed that many companies do not quantify its influence on sales, making it difficult to determine the greater macroeconomic impact.[1]

To gain clarity on these issues, we conducted extensive research on advertising trends. We began with a meta-analysis of numerous articles published in leading economic and marketing journals over the past 30 years, focusing on links between advertising and the performance of individual companies or economies as a whole. However, we found that most previous studies examined how GDP changes affect advertising spend, rather than the reverse. There was also little discussion of the influence of digital media at either the country or company level. As such, we decided to perform our own investigation into these topics. First, we examined the macroeconomic impact of advertising, including digital media, on G20 countries. We then focused on the microeconomic impact of digital media by looking at a sample of 440 Belgian companies. (See box on p. 4 for more information about our research methods.)

Among other findings, we discovered that advertising fueled about 15 percent of growth in GDP for the major G20 economies over the past decade because it generates new business. While some companies launched unsuccessful media campaigns and did not recoup their costs, such failures were outweighed by the companies with strong campaigns that increased sales, attracted new customers, or improved margins. On a microeconomic level, introducing digital media to the advertising mix helped companies increase their revenues, market share, and profit margins to a greater degree than traditional advertising alone. (Notably, digital media produced its effect by enhancing the impact of print and broadcast ads, rather than by replacing them.) Digital media also turbocharged advertising's effect at the macroeconomic level, provided that companies channeled the additional revenue that it generated into job creation.

We presented our findings at a 2011 conference for the European Parliament that focused on advertising's role in driving innovation and growth. Our investigation provides robust statistical evidence that advertising can contribute to a country's GDP and that digital media can boost advertising's typical contribution to performance for both individual companies and the economy as a whole.

Media spend: How economic activity affects advertising

Before considering how advertising might boost the economy, we first reviewed existing research on a well-known topic: how the economy drives advertising. Similar to patents and licenses, advertising is an important intangible investment, and companies are increasingly willing to allocate more of their budget to this area. According to recent estimates by ZenithOptimedia, spend on above-the-line advertising that is directed at mass audiences topped $465 billion globally in 2011, at the 2009 fixed exchange rate, or close to 1 percent of GDP.[2] This number would easily exceed $1 trillion, or more than 2 percent of GDP, if below-the-line promotional media for niche audiences—such as direct-to-consumer mailings, e-mail marketing, coupons, and product samples—were included.[3]

Much evidence accumulated over the years suggests that GDP influences advertising spend. For instance, a prominent 1985 study reported a close match between the expected change in gross national product and the change in advertising spend between 1961 and 1983.[4] Similarly, a

1 Jacques Bughin, Amy Shenkan, and Marc Singer, "How poor metrics undermine digital marketing," *McKinsey Quarterly,* October 2008.
2 "Underlying ad recovery continues despite shocks in Japan and the Middle East," *ZenithOptimedia*, April 2011 (www.zenithoptimedia.com).
3 See, for example, Andrew M. Gaerig, *The new economics of advertising: The principle of relative constancy reconsidered*, Knight Digital Media Center, 2010 (www.knightdigitalmediacenter.org). Another reference that discusses related issues is "Advertising and marketing communications forecast 2006–2009," Jack Myers Media Business Report, September 10, 2007 (www.marketingcharts.com); in this chart, it is estimated that above-the-line advertising (including print, television, radio, and so on) would account for only 32 percent of 2009 advertising spend in the United States.
4 John Philip Jones, "Is total advertising going up or down?" *International Journal of Advertising*, 1985, Volume 4, Number 1, pp. 47–64.

2005 study found that GDP strongly influenced advertising expenditure in most of the eight largest countries in the world during the late 1990s.[5]

Our analysis confirmed these results for 2002 through 2010—the period when digital advertising first became a major force.[6] Advertising spend was strongly influenced by GDP level in G20 countries, both in stable periods and times of economic growth, with a median correlation of 97 percent for all years combined. For digital advertising, the correlation was 95 percent.

For year-on-year growth in GDP and growth in total advertising expenditure, the correlation was still quite high, at 71 percent, but this figure decreased to 31 percent when growth in digital advertising was considered independently. We were not surprised to discover this reduction in correlation, since economic fluctuations have less influence on digital media. (Most growth in this area results from the powerful and ongoing shift of business and social activities from traditional venues to online channels.) Despite some economically turbulent years during the past decade—2002 and 2008, for example—digital advertising has grown as a proportion of total GDP every year except 2002, rising from 0.03 percent of GDP in the G20 countries in 2002 to 0.12 percent in 2010.[7]

Advertising leads to economic growth

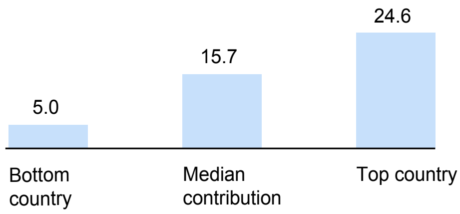
Advertising as an economic factor

We then set to work examining our hypothesis: that advertising spend can boost the economy at large. Some economists have argued that advertising contributes to growth by promoting competition, boosting consumption, and increasing consumer awareness about products. However, others maintain that advertising does not benefit the economy because it tends to increase prices, encourage nonessential investment, and help leading companies retain their market position.

We examined the effect of advertising on economic growth in great detail. The results of our statistical-variance models showed that advertising has fueled, on average, about 15 percent of growth in GDP for the major G20 economies over the past decade—and in some years, the contribution was as high as 20 percent (Exhibit 1).

Exhibit 1 Advertising stimulates GDP growth.

Contribution of advertising to GDP, G20 countries, %, 2002–10



Overall, the contribution that advertising, as a factor of production, made to the economy was slightly more than the contribution from employment. (We recognize, of course, that advertising growth during this period was partly driven by the rapid rise of digital media, while employment growth was rather limited in the same period.)

Total advertising represented 2 percent of total economic spend in the countries in our sample. Based on the confidence intervals used in our statistical analysis, the probability that advertising spend contributed to less than 2 percent of economic growth is very low—under 10 percent. Put another way, advertising contributes significantly more to economic growth than its share of spending.

The turbocharged effect of digital media

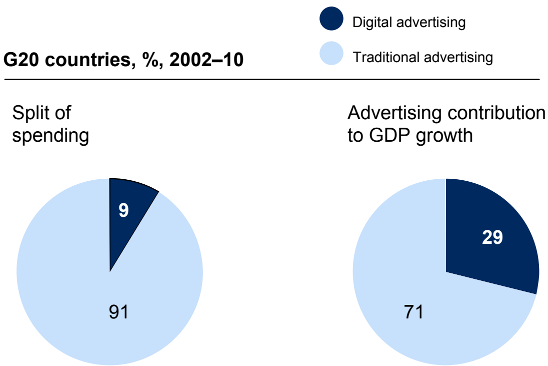
Digital media, as an advertising category, has grown strongly in recent years. It represented 17 percent of total media-advertising expenditure in G20 countries by 2010, up from less than 3 percent in 2002. Most research shows that half of the money spent on digital advertising is new investment; the other half represents a shift in spend from traditional print and broadcast media to digital media (for example, more online postings on eBay at the expense of newspaper classifieds).[8]

5 Adam Eisenberg, Dan Shaver, and Mary Alice Shaver, *Changes in the levels of advertising expenditures during recessionary periods: A study of advertising performance in eight countries*, June 2005, paper presented at the American Academy of Advertising's Asia-Pacific Conference.
6 We report on cross-country findings here, looking at yearly averages. The same results were found looking at GDP over time in all countries.
7 One might argue that the correlation between growth in GDP and growth in advertising expenditure is spurious, claiming that an increase in both variables results from the common observed trend of improved factor productivity in the G20 economies. However, when we examined advertising intensity—the level of advertising in direct proportion to GDP—there were still positive and significant correlations with GDP, although they were weaker.
8 Jacques Bughin, Amy Shenkan, and Marc Singer, "How poor metrics undermine digital marketing," *McKinsey Quarterly*, October 2008.

The move toward digital advertising occurred in part because it is less expensive than traditional media. However, companies are also attracted to online channels because surveys suggest that they are more effective than traditional media, at least for some product categories. In many cases, company-sponsored sites create a lot of buzz online and reach far more people than a typical print or broadcast advertisement. For instance, online discussions about the new iPhone on Apple Web sites led many people to replace their handsets sooner than they otherwise would have.

Given the growing importance of digital media, we wanted to examine its impact in isolation. We first determined the proportion of total advertising spend devoted to this category and then conducted the same statistical-variance analyses to quantify only this category's effect. We found that as the proportion of advertising spend devoted to digital media increased, economic growth also increased. This finding suggests that digital media can provide greater benefits to an economy than spending on offline media, such as print and broadcast ads, alone. Although digital media represented, on average, 9 percent of advertising expenditure over the past decade in our sample of countries, it was responsible for 29 percent of advertising's effect on economic growth (Exhibit 2). Our research is in keeping with McKinsey Global Institute (MGI) findings presented in 2011 at the first e-G8 Summit, a conference in Paris that focused on the Internet in relation to public policy. The MGI study demonstrated that the Internet contributed significantly to GDP in 13 countries and that its influence was expanding.[9]

Exhibit 2 Digital advertising boosts advertising's contribution to GDP.



There is, however, an important caveat to our findings: the addition of digital advertising to the media mix only produces greater macroeconomic benefits when companies channel the additional revenue that it generates into hiring. For instance, a company with greater profits might increase investment in new-project launches. These efforts would likely require more personnel, and the new jobs would create a macroeconomic boost. But if the launches proceeded without any new hires, only the company itself would benefit.

We are optimistic that digital advertising will promote employment, since previous research has shown that increased use of the Internet stimulates hiring in most sectors, especially the small- and midsize-enterprise segments and the B2B and B2B2C spheres. Given this evidence, it is reasonable to suppose that the employment benefits will intensify as digital media continues to grow.

Digital advertising improves company performance

Our meta-analysis of articles from the past 30 years showed that advertising spend improves company performance, typically offering significant financial benefits that can last for up to three years. However, limited statistical evidence is available on the role of *digital* advertising in spurring corporate growth, as well as the factors that contribute to its benefits. For instance, few researchers have investigated whether digital advertising boosts performance purely by giving companies a competitive advantage over rivals, perhaps by increasing margins, increasing share, or by attracting an outsize share of new customers.[10]

To address this gap, we examined online advertising at 440 Belgian companies, determining its effect on their revenues, market share, and new business. We found that digital media provided many benefits for the average company, contributing 16 percent to profitability, 25 percent to revenue growth, and 30 percent to gains in market share (see Exhibit 3 on p. 5).

9 For more, see Jacques Bughin, Michael Chui, Eric Hazan, James Manyika, Matthieu Pélissié du Rausas, and Rémi Said, *Internet matters: The Net's sweeping impact on growth, jobs, and prosperity*, McKinsey Global Institute, May 2011 (www.mckinsey.com).

10 Some researchers have investigated the return on investment (ROI) of digital-media tools, but few studies focused on digital advertising's role in stimulating growth. For a literature review on social media, see Alexis Barlow, Michael C. Bromby, David Broom, and Margaret McCann, *Return on investment: What literature exists on the use of social media and ROI?* September 1, 2011 (papers.ssrn.com).

Methodology

Our investigation involved complementary microeconomic and macroeconomic analyses.

Macroeconomic analysis. We focused on the G20 countries (considering the European Union in aggregate). We also performed a deep dive on the Benelux countries.

For each country, we collected data on GDP, its growth rate, and its components, including private and public consumption, exports and imports, and gross fixed investment, for the years 2001 to 2010. We also examined labor and employment trends, R&D spending, total advertising spending, and digital-media spending for the same period. All the data were obtained from well-known sources, such as the International Monetary Fund, the Organisation for Economic Co-operation and Development, and ZenithOptimedia (for advertising).

Our core hypothesis was that advertising is not merely an expenditure but an important intangible asset that can increase productivity and improve the economy. This hypothesis is based on a well-known theory popularized by Nobel Prize-winner Robert Solow, which postulates that factors other than labor and capital can contribute to macroeconomic growth.

We hypothesized that advertising could have positive spillover effects that benefit the economy as a whole. For instance, advertising may boost R&D efforts by generating more demand for new products. In other cases, it could increase purchases at multiple companies, even those that do not directly invest in advertising. Consider, for example, a restaurant that attracts customers through advertising. Diners who patronize the restaurant after hearing it advertised may try a new wine with their meal. Afterward, they may purchase the same wine to drink at home, thus increasing sales for liquor vendors.

Because links on search engines, digitally displayed advertisements, e-mail marketing, and other forms of digital media have rapidly gained in popularity in recent years, we wanted to examine their combined impact. Specifically, we wanted to determine if digital media could enhance the benefits of more traditional advertising, such as print and broadcast ads, when it is added to the mix.

Our hypothesis, if true, would mean that a two-way relationship exists between advertising and economic growth, making it difficult to determine causality when looking at changes in the two variables. Therefore, we ran a battery of econometric tests specifically designed to show the impact of advertising on economic growth, focusing on variance models that revealed the direction of causality. We were able to draw on existing research when designing our tests, since these variance models were originally applied in a 1980 study that demonstrated a two-way relationship between advertising and total economic consumption in the United States.[1]

Microeconomic analysis. Companies primarily invest in media to gain a competitive advantage. But any financial benefits that they obtain by taking market share from domestic rivals—their primary competitors—do not influence GDP and thus are not readily apparent in macroeconomic analyses. While previous research has shown that traditional advertising helps companies increase their revenue, there was little information on the impact of digital advertising. As such, our microeconomic analysis focused on this topic.

We examined a sample of 440 Belgian companies, weighted for their size in the local economy. We originally assembled this sample to investigate the link between company performance and investment in all types of Internet technologies for another study.[2] But for our present purposes, we examined how advertising spending at these companies affected their market share to gauge its competitive benefits and determine if it helped increase revenue by generating new business.

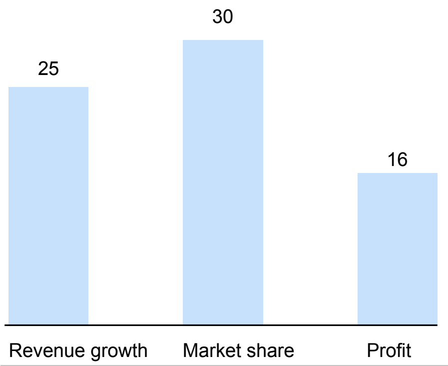
Our sample allowed us to collect a unique set of data that we could control to account for the many differences among companies, including size, business sector, location of markets (for example, exports), type of employment used, and investment levels.

1 For the original application, see Richard Ashley, Clive W. J. Granger, and Richard Schmalensee, “Advertising and aggregate consumption: An analysis of causality,” *Econometrica*, 1980, Volume 48, Number 5, pp. 1149–67.

2 Jacques Bughin, Tomas Keisers, James Manyika, and Steven Spittaels, *Internet matters: The transforming power of the Internet economy in Belgium*, McKinsey Global Institute, November 2011 (www.mckinsey.com).

Exhibit 3 Digital-media spending offers many benefits.

Online-advertising contribution to performance, Belgian companies, 2011
%



P = 0.000[1]	**P = 0.000**[1]	**P = 0.052**[1]

1 Statistical relevance of online-advertising intensity on company performance; sample of 440 Belgian companies.

While our analysis of Belgian businesses focused on benefits to individual companies, we also wanted to assess how those results could translate into macroeconomic benefits and determine if they were in line with our findings for G20 countries. Specifically, we wanted to know if revenue growth associated with digital marketing occurred solely because it helped companies take market share from domestic competitors—a change that would have no effect on GDP—or if the growth resulted from new business.

We found that 55 percent of the increased revenue resulting from digital advertising comes from an increase in market share; the remainder comes from new business or better margins. When we looked at the new business that all companies in our sample gained, we estimated that digital advertising had driven about 8 percent of total macroeconomic growth in Belgium over the last three years. This result is in keeping with our findings that digital advertising contributed 10 percent to economic growth in the G20 countries from 2008 to 2010.

• • •

Overall, evidence points to an economically meaningful contribution from advertising to company performance, as well as to the economy as a whole. As such, companies and governments should not view advertising only as a business expense; it is also an investment that promotes macroeconomic and microeconomic growth.

We also found that digital media adds to advertising's economic contribution when it is included in the mix. Notably, digital media does not act merely as a substitute for traditional media; instead, it adds economic value to other advertising categories—a promising finding, given that companies are increasingly devoting more of the advertising budget to this area. But to capture digital advertising's full potential, companies need to be savvier than they are today. Many lack a good understanding of digital formats and fail to fully leverage their benefits. For instance, in our Belgian survey, more than 80 percent of companies did not measure the effectiveness of online-advertising expenditure, and most did not incorporate brand-building elements into their online campaigns.

Governments that want to promote the use of digital media have numerous options. Many are considering creating coaching sessions for companies, especially small and midsize enterprises. Some government agencies are employing digital formats in their own advertising efforts and are celebrating success cases. It is important, however, to recognize the potential problems associated with the growth of digital advertising, particularly the possibility that companies or other parties could inappropriately use customer data obtained through online channels. It is not within the scope of this article to discuss the best solutions for handling this problem, but we hope that any new regulations will balance the benefits of digital advertising with potential drawbacks. After all, any factor that helps contribute to economic growth should be carefully promoted, especially during challenging times.

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