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Aggregate Advertising Expenditures in the U.S. Economy: What's Up? Are They Real?

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The two components of the advertising industry -- the creative sector that develops and produces messages, and the communications sector that transmits messages via various media -- have each been greatly affected by advances in creative design and communications technologies. As the media composition of advertising has changed in the last century for both local and national advertising -- from newspapers, outdoor and radio advertising to network and cable television, and most recently to internet and digital media -- so too has the very concept of advertising, its functionality and its measurement been transformed.

We compare four sources of annual nominal U.S. aggregate advertising expenditure data -- from the public sector Internal Revenue Service and the U.S. Census Bureau Survey of Service Industries, and the private sector McCann Erickson and Magna Global advertising agencies -- that are available over various time periods. In nominal terms, we estimate the elasticity of advertising expenditures with respect to Gross Domestic Product (GDP), and find that this elasticity appears to have increased substantially beginning in the late 1990s -- from about 1.4 to 1.9. The timing of this structural break coincides roughly with the decline of print, radio and network and cable television, and the dramatic increase in digital and internet-based advertising.

To understand the forces underlying this structural break in nominal advertising expenditures, data on media-specific quality-constant advertising prices are needed, thereby converting nominal to real advertising. The availability of media-specific quality-constant price indexes would also facilitate contemporary and longstanding issues to be addressed surrounding the measurement of advertising effects, including how variations in the durability of response to advertising across media are related to inter-media price differentials, and why heterogeneity among firms and industries may arise with respect to the procyclicality of advertising policies.