Intangible Marketing Capital
(outline)*

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1 Introduction

At least since Shaw (1912, p.756), economists have acknowledged the quantitative importance of *marketing* – advertising, branding, promoting, "selling" and trademarking – to firms and industrial output. Coase (1937) argues that "the introduction of the firm was primarily due to the existence of marketing costs." Similarly, Braithwaite (1928, p.16) notes that "goods cost as much to market as they do to manufacture," including the communication costs associated with advertising and branding. In an early quantification of the US marketing sector, Galbraith and Black (1935) stress the large role of demand for convenience and service. Surprisingly, the extant literatures in industrial organization and macro-productivity have largely abstracted away from the role of marketing investments on industry structure and output.

Brand capital is recognized as a critical economic competence for a firm and, accordingly, a key component of intangible capital Corrado et al. (e.g., 2005) . Brand capital generates incremental revenue streams (i.e., marginal revenue product) through various sources such as (a) the awareness and consideration of a product, and (b) the reputation and beliefs about quality. It is also persistent and associated with loyalty, either through learning and taste formation (Bronnenberg et al., 2012, 2020) or through habits and inertia in buying behavior. Findings suggest much longer-lived effects for branding than for advertising. While this disparity might merely reflect a flaw in ad studies that measure marginal effects that are local to the firm's optimal advertising level (i.e., curves are flat near FOCs and reflect small effect sizes), there is good reason to think brand capital is broader than mere advertising. Branding reflects marketing expenditures that build

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various complementary capital stocks such as consumer knowledge or expertise, and relations with retailers, which all create persistent advantages to firms who create (or acquire) them.

By the early 2000s, fixed investment in intangible capital[1] in the U.S. was estimated at nearly $1 trillion (10-11% of U.S. GDP), almost none of which appears in National Income Product Accounts (NIPA) in spite of being roughly comparable to the rate of investment in tangible capital. Close to 20% of this intangible capital investment ($235 Billion annually) was attributed to marketing expenditures to build and sustain brand equity (Corrado et al., 2005). We believe the economics literature has unduly neglected intangible marketing and brand capital and its micro and macro implications. In this article, we will first present several facts about the size of the marketing investment in the United States (section 2). We will also present data regarding the perceived corporate value of brands created by these investments. We next discuss in section 3 several theoretical justifications for the striking magnitude of marketing outlays. Finally, in section 4, we comment on the private and social returns of marketing investments and give meaning to intangible marketing capital.

2 Marketing spending and intangible branding capital

Marketing spending is substantial and has been the subject of considerable debate in economics and business research. For instance, economists have debated the economic relevance of marketing expenditures since as early as the 1930s: "Clearly, in any case, our future appraisals of gains and losses in economic efficiency must include and emphasize marketing not less than industry, agriculture and like components of the economy. The importance of marketing would alone justify such inclusion and emphasis; the fact that increased marketing or commercial costs may be a direct result of increased industrial efficiency [...] makes it essential."(Galbraith and Black, 1935, p.413) In this section, we present several stylized facts about marketing spending on advertising and wages for the marketing professionals that manage these outlays. We then present two sets of estimates of intangible brand capital to motivate its broad economic importance.

2.1 Advertising outlays

We report advertising outlays here, taken from national accounts. We may also report distribution costs based on the share of GDP due to ISIC G (retail and wholesale).

[1] Intangible capital can be classified broadly as databases, R&D, new copyrights & licenses, *brand equity* and better organizational structures (Corrado et al., 2005).

2.2 Investments in labor in marketing-related professions

A large share of the labor force is dedicated to creating and curating brand capital. While related to McCloskey and Klamer (1995)'s finding that 25 percent of GDP reflects persuasion, we view brand capital formation as distinct. Using BLS occupation-by-industry data, we determine that X% of the US labor force is employed in marketing or marketing-related professions.

2.3 Brands and estimates of brand value

We now report two sets of estimates of capitalized brand values and the associated intangibles created through marketing effort. First. we re-create (and update) the intangible brand capital time series as in (Corrado and Hao, 2013). The ISO 20671 Norm on brand evaluation states that "Brand valuation refers to the estimation of the monetary value of a brand to a company in a transaction whether it is internal or external (as with an investment, purchase, sale or licensing agreement). It is the financial equity the company has in the brand as a transferrable asset." So we also report industry estimates of the financial valuations of brands based on royalty relief: the net present value of money saved by owning the brand as opposed to paying a licensing fee that is typical in a given industry for selling under a brand name. In spite of imperfections, these data reflect the manner in which many marketing professionals and investors measure the market value of their brands and returns to branding.

3 Why are marketing investments large?

In this section, we discuss established academic theories that justify the magnitude of marketing investments reported in section 2. We first discuss various mechanisms through which marketing investments affect consumer demand and industrial market structure along with the persistence in these effects, reflecting the role of marketing-related intangible capital stocks. We focus on three mechanisms suggested in the literature: (1) reducing transaction and search costs, (2) reputation and the role of prestige and/or quality, and (3) competition and the role of strategic interaction and investment escalation.

3.1 Raising demand by reducing transaction and search costs

Product evaluation and effort to search for product attributes prior to purchase require time, a scarce resource to consumers. Typically, consumers only consider a subset of the product variety available to them, and may not fully understand all attributes of those options about which they are aware. Firms can invest in brands and branding to reduce search and evaluation costs and to influence consumer consideration and awareness at the point of purchase.

3.2 Reputation and the Role of Prestige and/or Quality

Consumers often face ex-ante uncertainty about the quality of products. In addition, they may be risk averse. They may therefore prefer brands with which they are familiar or that have a reputation for supplying high quality products. In equilibrium, such reputations can emerge if consumers have a willingness-to-pay for quality and a firm with a strong reputation is incentivized to continue to supply high-quality goods in the future to maintain its price premium.

Additionally, consumers may derive consumption utility from the brand itself. According to the "persuasion" or "prestige" view, marketing expenditure in advertising and other forms of branding can create a consumable intangible service (e.g., prestige, lifestyle) that is complementary to the branded good or service (Becker and Murphy, 1993; Kamenica et al., 2013).

3.3 A Strategic Choice Affecting Competition

Marketing expenditures confer private gains to firms in the form of profits, through e.g., price premia or incremental sales. Constant (or even increasing) returns to branding that can sustain a high marginal impact of these investments even at high levels of investment can lead to escalation in advertising or other forms of marketing in equilibrium (e.g., prisoner's dilemmas). When branding costs are fixed and sunk, strategic interaction can also lead to an escalation in marketing investments that creates barriers to entry, sustaining market power and concentration (Sutton, 1991).

4 What Are the Social Welfare Effects of Marketing?

In this section, we focus on the social welfare effects of marketing. Some economists have argued that marketing constitutes a zero-sum game in which firms use branding to steal market share from one another, creating no inherent social benefit and potentially generating a wasteful duplication of resources. However, the literature has found that marketing may increase the overall market size, toughen price or quality competition, and reduce search and transaction costs, all of which potentially increase social welfare.

4.1 Lowering transaction and time cost

At a societal level, marketing involves a transfer of consumers' (time and information processing) costs of buying to firms' (money) costs of selling. We discuss contexts in which this relationship creates a social benefit through the creation of intangible capital.

While the extant literature finds substantial economies of scale in the supply of information to consumers through mass media, society's cost from consumers privately searching for product information is likely to scale linearly in the extensive consumer margin. It follows that mass media can reduce the social cost of informing large markets about the existence of products and their qualities. We expect a similar argument to apply to distribution. It is very expensive for consumers to travel independently to far-away sellers as opposed to around-the-corner retailers.

4.2 Building brands

Recent research finds that consumers form persistent preferences for brands, brand capital stocks, over their lifetime (Bronnenberg et al., 2012, 2021) and even across generations (Anderson et al., 2015). These capital stocks serve as a highly persistent source of product differentiation for the firms that own the corresponding trademarks, enabling them to sustain a profitable price premium (Scherer, 1970; Bronnenberg et al., 2015).

The literature has also found that brands and branding can act like complementary goods to the advertised brands, with consumers deriving an intrinsic utility from the consumption of the brand itself especially when in conjunction with the consumption of the branded product. For example, the conspicuous consumption of branded luxury goods may create a direct "prestige" benefit, or an indirect consumable signalling benefit. This literature tends to default to the view that all utility is welfare. Howevcr, one might question the surplus associated with a consumer paying a substantial price premium for branded Fiji water or a Mexican worker paying a 25% load to put money into a retirement account. Reputational capital is another mechanism through which brands can drive demand if consumers believe the brand proxies for quality/reliability and are willing to pay a price premium. The combination of product uncertainty and the high costs of product evaluation and search for information increase the scope for misinformation, with consumers paying a price premium even if the branded good is actually undifferentiated (Bronnenberg et al., 2015; McDevitt, 2011). Such brand misinformation seems potentially socially harmful if it allows firms to charge a price premium without generating any incremental surplus to consumers.

4.3 Competition

On the supply side, strategic marketing investments in persistent brand capital have been shown to lead to sustainable competitive advantage and profits (Doraszelski and Markovich, 2007; Sutton, 1991). The effects of branding on social welfare depend, in part, on the extent to which brand capital stocks merely generate business-stealing effects between rivals or genuinely expand markets. We discuss the role of strategic complementarity in branding, pricing and the supply of quality in understanding the potential social benefits of brands and branding. We also discuss the potential role of marketing expertise (human capital) and its complementarity with marketing investment.

4.4 Productivity and Growth

We will measure implications of intangible brand capital stocks for productivity and GDP growth.

4.5 Bottom line

We lean towards the conclusion that marketing expenditures are typically more than a zero-sum game and that they build persistent intangible capital stocks that should be valued as outputs when produced and inputs into production when employed.

5 Areas ripe for future work

1. We discuss the debate in accounting regarding the logic and practicality of capitalizing investments in intangible brand capital on companies' balance sheets instead of treating them as operating expenses.

2. We discuss the debate regarding the inclusion of intangible brand capital in National Income Accounting and the fact that marketing produces intangible capital that is an (uncounted in national accounts) output when made and an (uncounted) input when put into production (Erik Brynjolfsson, 2021).

3. We recommend more testing of LR effects of advertising to balance against the extant literature which mostly focuses on SR and MR. We conjecture that typical findings of small advertising effects on demand are due to empirical strategies that rely on local perturbation to advertising in the SR for a firm that already has a very high level of goodwill (the usual diminishing returns concern). After all, it's hard to ignore the co-existence of Coca Cola and Pepsi, which sell almost undifferentiated Colas but for the brand names, which invest heavily in branding and which both boast market capitalizations in excess of $200 Billion as of October 2021.

4. We also recommend more research into the measurement of marketing human capital and the ability for some firms (e.g., P&G, Coca Cola etc) to produce brand goodwill more efficiently than others (e.g., a new entrant). This implies a potential complementarity between brand capital and marketing expertise capital. This discussion includes

   (a) the transferability of brand capital and the economic logic of the on-going, recent wave of acquisitions of new brands by large incumbent brand conglomerates (e.g., Budweiser, P&G etc).

   (b) the role of brand capital in models of macro growth and firm/industry productivity.

5. We recommend more focus on the supply side and the measurement of brand value to firms. In principle with enough data, one could use a bottom-up approach that aggregates the brand equity to consumers. Alternatively, productivity methods start with firm-level data.

6. As we show above, distribution is also a major area for marketing expenditures. While there is some evidence for relationship capital with the "trade", the academic literature has not analyzed the long-term value of these expenditures. A related topic is the brand capital associated with a corporate, as opposed to product, brand.

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