Summary Statement on:

A New Source of Capital for Solving the Needs of Society and the Environment

Todd Cort[1]
Cary Krosinsky[2]

July 22, 2020

[1]Lecturer, Yale School of Management
Faculty Co-Director, Yale Initiative on Sustainable Finance
[2]Lecturer, Brown University
Executive Fellow, Yale Initiative in Sustainable Finance

Abstract

Addressing the needs of society and the environment will require adequate funding. Over the last decade, there have been increases in the amount of capital flowing towards social and environmental challenges as well as in the variety and types of capital. A large portion of this funding has flowed from governments and public institutions, but capital from corporations and private investors play an increasingly important role and have the potential to do more while adding value to their businesses.

This paper presents estimates of the need for capital from the private sector to address social and environmental impacts and the current funds available. We then explore a novel model of moving funds towards social and environmental impact using business transactions first proposed by Paul Polizzotto and put into practice by the company Givewith. The model identifies pools of capital, such as those used for client acquisition, that have low efficiency and return and where additional value can be created by linking it to social and environmental impact. This model has significant potential to make meaningful strides toward closing the gap while also creating significant new value for companies.

The Need

The world today is faced with enormous social and environmental challenges. From poverty and equality to climate change and food security, social and environmental challenges comprise existential risks to people, the environment and business. Failing to resolve these issues will result in significant costs from climate change-induced disrutptions to the collapse of ecosystems and the services they provide, to social and political unrest from poverty, inequality, hunger and mass migration.

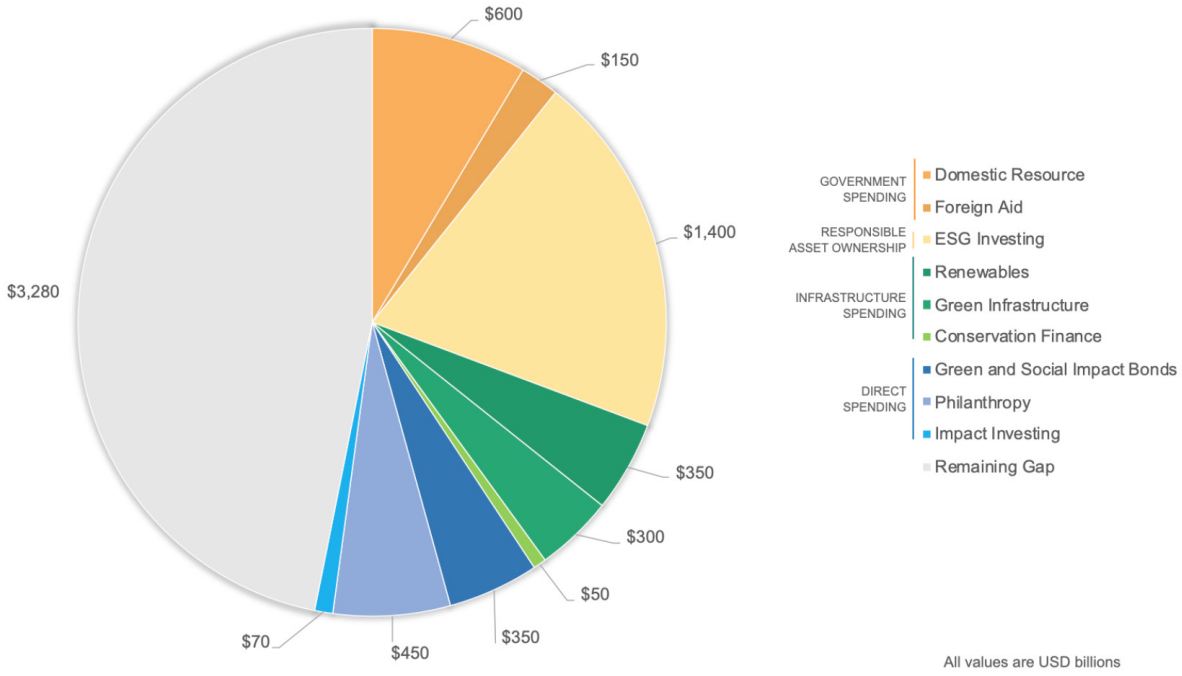
While estimates vary, there is an expected need of $5-7 Trillion of spending per year to address the environmental and social challenges we face as a planet[1]. Of this, it is likely that roughly half ($3 Trillion per year) of this need is in low income and emerging economies. This $5-7 trillion represents slightly less than 10% of Gross World Product and about 3% of global asset value[2].

It will be challenging to rely on any one source of capital or revenue to fully meet this need. Rather, a number of different funding sources, or wedges, must be brought to bear. Based on our research and calculations, we estimate the current total global funds available for social and environmental impact to be around $3.7 Trillion per year distributed across a number of existing wedges including Government Resources, Real Assets, New Financial Models (NFM) and Fixed Income Assets (Figure 1). Adding these existing wedges leaves a remaining gap of approximately $1.3 - 3.3 Trillion to meet social and environmental needs.

[1] United Nations Conference on Trade and Development (UNCTAD) World Investment Report 2014, Investing in the SDGs: An Action Plan, https://unctad.org/en/PublicationsLibrary/wir2014_en.pdf

[2] Gross World Product was reported as $80 Trillion in 2017 by The UN Secretary General Roadmap for Financing the 2030 Agenda for Sustainable Development 2019-2012, https://www.un.org/sustainabledevelopment/wp- content/uploads/2019/07/UN-SG-Road-map-Financing-the-SDGs-July-2019.pdf, pp1. Global asset Value was reported as $200 Trillion in 2019 by the Allianz Global Wealth Report, https://www.allianz.com/content/dam/onemarketing/azcom/Allianz_com/economic- research/publications/specials/en/2019/AGWR_2019.pdf

Figure 1: Estimated Wedge Values (in $ Billions) in Comparison to $7 Trillion Estimated Need



This gap is not evenly distributed. The current wedges are predominantly available in high income countries. Therefore, while the total funding gap appears to be between $1.3 – 3.3 Trillion per year, a larger proportion of this gap is being felt by low income countries and emerging economies. This is important as the different pools of capital represented by the wedges have varying levels of flexibility to move into those regions of the world with the greatest need. ESG Investing, for example, is concentrated in developed markets because of the preponderance of publicly traded companies in those markets. In identifying mechanisms to address this gap, it is therefore important that we not just look at the magnitude of the pool of capital, but also how efficiently and fluidly the capital can be deployed into these economies. Determining the most important wedges, in terms of the value they will bring to social and environmental impacts, depends on several factors:

1. The size of the pool of capital. Larger pools of capital will have greater impact more generally than smaller pools.
2. High Risk/Return Tolerance. Wedges that have lower requirements on return and risk tolerance will be more available in emerging economies overall.
3. Flexibility in distribution. Pools of capital that can be moved between social and environmental needs more fluidly will tend to have greater impact.
4. Fluidity. Pools of capital that are tied up in fixed assets or long-term investment vehicles and contracts will be less available to move toward social and environmental needs.

The Model

Relatively few pools of capital are sufficiently large and flexible to address the remaining need. However, global business transactions hold enormous potential in this regard. We estimate global transactions to be on the order of $96 Trillion per year[3]. While this calculation should be considered a very rough estimate, it suggests that transactions as a potential wedge holds great promise, in terms of size, to address social and environmental need. Moreover, business transactions meet the other criteria for effectiveness as well in that they are highly fluid, highly flexible and have a range of risk/reward tolerance. The key challenge then is to develop a model to orient a portion of business transactions to underwrite investments in social and environmental benefit.

Such a model has been developed by Paul Polizzotto[4]. Termed Social Value Economics, or the "Abundance Model", it describes a mechanism for companies to underwrite environmental and social impacts as part of the buyer – seller transaction, particularly in business to business transactions. The model argues that there is more abundant capital available to companies at the level of the transaction (pre-distribution of costs) that can be made available for social and environmental benefit compared to capital available from profit (post-distribution of costs). Therefore, a more effective mechanism of moving capital toward social and environmental impact is one that links those benefits to the transaction. In order to realize this model, it is necessary that both the buyer and seller benefit by linking social and environmental benefit to the transaction, i.e. that the value of the transaction increase to both buyer and seller because of the link to social and environmental impact. The Social Value Economic Model is distinctly different from philanthropy as the pool of capital tied is to top-line revenues, not to net flows from other line items.

The model is best described by looking at two forms of transaction (Figure 2). The first is the traditional model in which a buyer and seller exchange a good or service at a given value. The second is the Social Value Economic Model. For example, a given sale of equipment would have an associated percentage committed to social or environmental nonprofit organization (NPO) and the remainder to the third party that organizes, vets and produces content and experiences to create value for buyer and seller.

[3] Global Business Transactions are calculated as the sum of Business to Business (B2B) Output and Government to Business (G2B) output.
- GDP is $90 Trillion per year (https://www.thebalance.com/components-of-gdp-explanation-formula-and- chart-3306015)
- B2B Intermediate Transactions are estimated as $38 Trillion per year (https://www.billtrust.com/resources/blog/on-the-look-out-b2b-payments-trends-in-2019-part- 3/#:~:text=The%20global%20B2B%20payments%20market,in%20reach%20than%20ever%20before.)
- Global Gross Output is the sum of GDP and B2B Intermediate Transactions = $128 Trillion per year
- Government spending is approximately 40% of GDP, or $36 Trillion per year. Subtracting that from the Global Gross Output gives a total B2B Output of $92 Trillion per year.
- G2B Is estimated at approximately 11% of government spending based on recent government contracts as a percentage of US Federal budget (https://tenderspage.com/how-much-money-does-the-u-s-give-out-in-government-contracts/; https://www.usaspending.gov/#/).
- G2B is therefore $36 Trillion per year (based on percent of GDP above) * 11% = $4 Trillion per year.
- Global Business Transactions are therefore calculated as $92 Trillion + $4 Trillion = $96 Trillion per year

[4] Mr. Polizzotto has described his model in a variety of interviews and media: https://impactpodcast.com/episode/2013/10/helping-nonprofits-tackle-social-issues-cbs-ecomedia-paul- polizzotto/; https://www.linkedin.com/pulse/what-world-needs-now-social-impact-economics-paul- polizzotto/?articleId=6651097556564742144

Figure 2: Example of Traditional vs Social Value Economic Model of Transactions

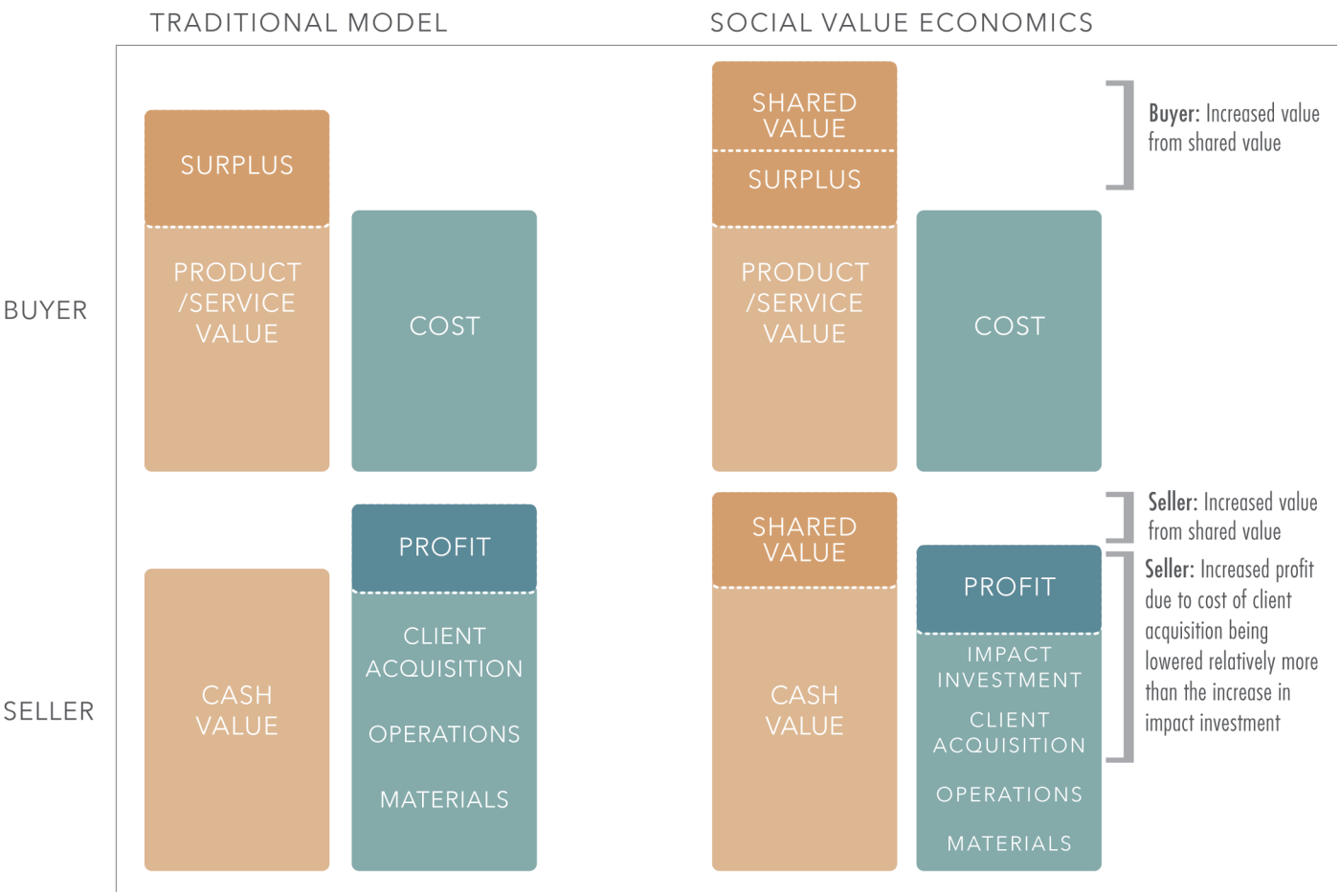


Figure 2 demonstrates three differences between the traditional and Social Value Economic Model transactions. First, an intangible or reputation benefit accrues to both Buyer and Seller when the transaction is linked to social and environmental benefit. This is a critical benefit as intangible has grown steadily over the last 50 years and now makes up over 80% of enterprise value today.
Second, the Client Acquisition Cost for the Seller is smaller because the environmental/social impact contributes to customer acquisition. Third, there is an additional cost of the environmental/social contribution and associated transaction fee, whose value is less than the amount of reduction in Client Acquisition Cost.

[5] This model draws on the concept of pre-distribution, rather than redistribution; tapping into money at the top of the funnel rather than waiting to address social inequities via taxes and philanthropy. The local multiplier effect, often used to describe the impact of local spending on regional economic growth, applies here; social impact spending will have a spillover effect, creating additional value for both private and the social sector. This model is an example of a pareto efficient construct, one in which all parties are better off.
[6] https://www.visualcapitalist.com/intangible-assets-driver-company-value/

The model in which social and environmental benefit is underwritten by buyer-seller transactions requires several factors to be true:

1. Additional financial value needs to be generated because of the presence of the environmental and social benefit. This increase in value must be inherently the result of the social and environmental impact.
2. Both buyer and seller must benefit from this increase in transaction value. This value can be tangible, intangible, direct, indirect or a combination, but it must be positive for both the buyer and seller.
3. The benefit to society and the environment must be demonstrable.

A literature review provides compelling evidence that social impact investments that result in demonstrable social and environmental impact create value for buyers of goods and services. Buyers benefit from intangible and reputation-based impacts such as greater customer loyalty, more effective employee recruitment, increased employee productivity and improved innovation[7]. There is also compelling evidence for greater social license to operate and reduced cost of capital.

7

Potential Buyer Value,	State of the Literature,		Citations
Business Strategy	Strategic Clarity	Mixed	Malnight et al (2019), Chang et al (2018), Hull & Rothenberg (2008), Salzmann et al (2005), Eccles and Sarafeim (2013)
	Reputation Management	Mixed	Eisenegger & Schranz (2011), Gardberg et al (2019), Schneitz & Epstein (2005)
	Growth	Compelling	Kurapatskie & Darnall (2013), Lev et al (2010), Fry et al (1992), Porter & Kramer (2006)
Employee	Recruitment and Pay	Compelling	Albinger & Freeman (2000), Fisman et al (2006), Tonin & Vlassopoulos (2014), Vitaliano (2010), Ferreira & Real de Oliveira (2014)
	Retention	Compelling	Albinger & Freeman (2000), Fisman et al (2006), Tonin & Vlassopoulos (2014), Vitaliano (2010), Ferreira & Real de Oliveira (2014)
	Productitvity	Compelling	Albinger & Freeman (2000), Fisman et al (2006), Tonin & Vlassopoulos (2014), Vitaliano (2010), Hasan et al (2018)
	Innovation	Mixed	Gartenberg et al (2019)
Investors and Operations	Cost of Capital	Mixed	Albuquerque et al (2018), Attig et al (2013), Bramer and Millington (2006), El Ghoul et al (2011), Liang & Renneboog (2016), Shahzad & Sharfman (2015), Clark et al (2015)7
	Social License to Operate	Compelling	Cahan et al (2015), Du et al (2007), Fombrun & Shanley (1990), Fry et al (1992), Porter & Kramer (2006), Porter & Kramer (2002) Porter et al (2011), Wang et al (2008)
Sales	New Product Trial	Mixed	Chang et al (2018), Hull & Rothenberg (2008), Vogel (2005), Godfrey et al (2009)
	Product Loyalty	Compelling	Kurapatskie & Darnall (2013), Lev et al (2010), Fry et al (1992), Porter & Kramer (2006), Torres et al (2012)
	Product Advocacy	Mixed	Chang et al (2018), Hull & Rothenberg (2008), Vogel (2005), Godfrey et al (2009)7, Torres et al (2012)
	Price Premium	Compelling	Kurapatskie & Darnall (2013), Lev et al (2010), Fry et al (1992), Porter & Kramer (2006)

This value stems from sell-side efficiency as a result of linking the transaction to social and environmental benefit and the third-party services. Prior to most transactions, the seller must incur significant client acquisition costs up to the point of the sale. These include advertising and marketing costs, search costs, costs to maintain customer loyalty etc. In fact, sales is typically a highly inefficient process[8]. As noted above, there is compelling evidence that association with demonstrable social and environmental benefit creates customer loyalty, and product advocacy for sellers – both of which represent significant sell side cost efficiencies. The second source of value is that the presence of the third party (that organizes and vets the list of nonprofits and then creates communication and marketing materials on the back of the giving) creates additional value when compared to giving directly by the buyer or seller themselves.

While it is difficult to estimate how much of the $96 Trillion in global business transactions might be available for applying to the Social Value Economic Model Wedge, there are some market indicators that may provide. As discussed above, between a quarter and a third of global assets under management are estimated to include some ESG factors in the investment strategy and this value has climbed steadily over the last decade[10]. Taking the global business transaction value of $96 Trillion per year and using the low-end estimate of the current state of global assets under management that include ESG factors (25%) provides a conservative estimate of the potential pool of capital of $24 Trillion per year for the Social Economic Value Model wedge. Even if only a small portion of those transactions was pre-distributed to social and environmental impacts, this scale has the potential to meet the majority of the remaining estimated need.

The Application

The company Givewith has actualized the Social Value Economic Model through four business principles[10]:

- Funds flow directly from economic transactions as a percent of the gross transaction amount to support social programs, creating additional value for both entities;
- Businesses advance their economic goals (e.g., increased sales, new customers) while generating social impact to benefit society;
- Funding is directed to rigorously vetted social programs able to generate, measure and report positive social outcomes;
- Business performance is a key driver; businesses must achieve business goals to be incentivized to utilize the Model.

Givewith has conducted a number of studies to quantify the buy-side and sell-side value associated with the Model. The results show clear benefits to sales, market growth potential, stock price performance, risk-weighted returns, improved perception amongst rating agencies, and human capital.

[8] Graff, R., & Webb, J. (1997); Sheth, J. N., & Sisodia, R. S. (2002).
[9] GSIA (2019) 2018 Global Sustainable Investment Review, http://www.gsi-alliance.org/wp- content/uploads/2019/03/GSIR_Review2018.3.28.pdf
[10] These principles have been paraphrased from Givewith's website for Enterprises

While the data is derived primarily from buyer and seller company perceptions, the results are statistically significant and provide substantial evidence that social and environmental impact funding creates direct and indirect economic value to the buyer and seller in the Givewith model transaction. Moreover, the Givewith results agree with estimates in literature.

The Takeaway

The takeaway is that the Social Economic Value/Givewith model is a potentially scalable solution to address the remaining social and environmental need. To reach the scale of the remaining gap, however, will require scaling of the Givewith business model as well as new entrants to the market that can adopt a similar model of linking transactions to social and environmental impact. Based on our analysis, there are a number of factors that new business models should uphold:

1. The environmental and social impact must be demonstrable.
2. The environmental and social impact must create net positive value to the buyer and seller. We have outlined a wide variety of potential values from intangible reputation benefits to operational efficiencies.
3. A pool of capital that is either inefficient or ineffective must be identified and linked.

Givewith has identified a mechanism to reduce client acquisition costs (a large pool of capital underlying transactions) by underwriting social and environmental benefit. There have been a number of recent models for how businesses can better align financial performance with social and environmental benefits[11]. All of these frameworks point to common characteristics of aligned or integrated companies: that the 'top lines' of profit, shareholder value and sales are derived from and dependent on benefits to society and the environment as opposed to donations or philanthropy. However, the Social Value Economic Model and the application of this model by Givewith is one of the first demonstrable and quantified examples in which the funding of social and environmental impacts is underwritten by traditional economic activity.

Givewith, and by extension the Social Value Economic construct, represents a potential breakthrough in creating business models that create social and environmental benefit by integrating social and environmental impact as a component of transactions. As such, we believe that the model represents an enormous potential to harness the economic scale of business for good.

[11] Frameworks such as "Shared Value" (Porter & Kramer, 2006), Total Societal Impact (BCG, 2018) and the IIRC Integrated Reporting Framework https://integratedreporting.org/resource/international-ir-framework/) based on multi-capital valuations all point to these alignments.

Citations

Albinger, H. S., & Freeman, S. J. (2000). Corporate social performance and attractiveness as an employer to different job seeking populations. Journal of Business Ethics, 28(3), 243-253.

Albuquerque, R., Koskinen, Y., & Zhang, C. (2018). Corporate social responsibility and firm risk: Theory and empirical evidence. Management Science.

Attig, N., El Ghoul, S., Guedhami, O., & Suh, J. (2013). Corporate social responsibility and credit ratings. Journal of business ethics, 117(4), 679-694.

BCG (2018) Total Societal Impact, https://www.bcg.com/publications/2017/total-societal-impact-new-lens-strategy.aspx

Brammer, S., & Millington, A. (2006). Firm size, organizational visibility and corporate philanthropy: An empirical analysis. Business Ethics: A European Review, 15(1), 6-18.

Cahan, S. F., Chen, C., Chen, L., & Nguyen, N. H. (2015). Corporate social responsibility and media coverage. Journal of Banking & Finance, 59, 409-422.

Chang, K., Jo, H., & Li, Y. (2018). Is there Informational Value in Corporate Giving?. Journal of Business Ethics, 151(2), 473-496.

Clark, G. L., A. Feiner & M. Viehs (2015) From the stockholder to the stakeholder: How sustainability can drive financial outperformance. Available at SSRN 2508281.

Du, S., Bhattacharya, C. B., & Sen, S. (2007). Reaping relational rewards from corporate social responsibility: The role of competitive positioning. International journal of research in marketing, 24(3), 224-241.

Eccles, R.G., I. Ioannou & G. Serafeim (2014) The impact of corporate sustainability on organizational processes and performance. Management Science, 60 (11), 2835-2857.

Eisenegger, M., & Schranz, M. (2011). Reputation management and corporate social responsibility. The handbook of communication and corporate social responsibility, 129-146.

El Ghoul, S., Guedhami, O., Kwok, C. C., & Mishra, D. R. (2011). Does corporate social responsibility affect the cost of capital?. Journal of Banking & Finance, 35(9), 2388-2406.

Ferreira, P., & Real de Oliveira, E. (2014). Does corporate social responsibility impact on employee engagement?. Journal of Workplace Learning, 26(3/4), 232-247.

Fisman, R., Heal, G., & Nair, V. (2006). A model of corporate philanthropy. Columbia University and

University of Pennsylvania.

Fombrun, C., & Shanley, M. (1990). What's in a name? Reputation building and corporate strategy. Academy of management Journal, 33(2), 233-258.

Fry, L. W., Keim, G. D., & Meiners, R. E. (1982). Corporate contributions: Altruistic or for-profit?. Academy of management Journal, 25(1), 94-106.

Gardberg, N. A., Zyglidopoulos, S. C., Symeou, P. C., & Schepers, D. H. (2019). The impact of corporate philanthropy on reputation for corporate social performance. Business & society, 58(6), 1177-1208.

Godfrey, P. C., Merrill, C. B., & Hansen, J. M. (2009). The relationship between corporate social responsibility and shareholder value: An empirical test of the risk management hypothesis. Strategic management journal, 30(4), 425-445.

Graff, R., & Webb, J. (1997). Agency costs and inefficiency in commercial real estate. Journal of Real Estate Portfolio Management, 3(1), 19-36.

Hasan, I., Kobeissi, N., Liu, L., & Wang, H. (2018). Corporate social responsibility and firm financial performance: The mediating role of productivity. Journal of Business Ethics, 149(3), 671-688.

Hull, C. E., & Rothenberg, S. (2008). Firm performance: The interactions of corporate social performance with innovation and industry differentiation. Strategic management journal, 29(7), 781-789.

Kurapatskie, B. & N. Darnall (2013) Which corporate sustainability activities are associated with greater financial payoffs?. Business strategy and the environment, 22(1), 49-61.

Lev, B., Petrovits, C., & Radhakrishnan, S. (2010). Is doing good good for you? How corporate charitable contributions enhance revenue growth. Strategic Management Journal, 31(2), 182-200.

Liang, H. & Renneboog, L. (2016) Corporate Donations and Shareholder Value. Finance Working Paper No 491/2016. European Corporate Governance Institute, December 2016.

Malnight, T. W., Buche, I., & Dhanaraj, C. (2019). Put purpose at the core of your strategy. Harvard Business Review, 97(5), 70-78.

Porter, M. E., & Kramer, M. R. (2006). The link between competitive advantage and corporate social responsibility. Harvard business review, 84(12), 78-92.

Porter, M. E., & Kramer, M. R. (2002). The competitive advantage of corporate philanthropy. Harvard business review, 80(12), 56-68.

Porter, M. E., G. Hills, M. Pfitzer, S. Patscheke, & E. Hawkins (2011) Measuring shared value. How to Unlock Value by Linking Social and Business Results, 10-11.

Salzmann, O., Ionescu-Somers, A., & Steger, U. (2005). The business case for corporate sustainability::

literature review and research options. European Management Journal, 23(1), 27-36.

Schnietz, K. E., & Epstein, M. J. (2005). Exploring the financial value of a reputation for corporate social responsibility during a crisis. Corporate reputation review, 7(4), 327-345.

Shahzad, A. M., & M. P. Sharfman (2015). Corporate social performance and financial performance: Sample-selection issues. Business & Society, 0007650315590399.

Sheth, J. N., & Sisodia, R. S. (2002). Marketing productivity: issues and analysis. Journal of Business research, 55(5), 349-362.

Tonin, M., & Vlassopoulos, M. (2014). Corporate philanthropy and productivity: Evidence from an online real effort experiment. Management Science, 61(8), 1795-1811.

United Nations Conference on Trade and Development (UNCTAD) World Investment Report 2014, Investing in the SDGs: An Action Plan, https://unctad.org/en/PublicationsLibrary/wir2014_en.pdf

Vitaliano, D. F. (2010). Corporate social responsibility and labor turnover. Corporate Governance: The international journal of business in society, 10(5), 563-573.

Vogel, D. J. (2005). Is there a market for virtue?: The business case for corporate social responsibility. California Management Review, 47(4), 19-45.

Wang, H., Choi, J., & Li, J. (2008). Too little or too much? Untangling the relationship between corporate philanthropy and firm financial performance. Organization Science, 19(1), 143-159.

World Trade Organization (2019) Press Release: Global trade growth loses momentum as trade tensions persist; https://www.wto.org/english/news_e/pres19_e/pr837_e.htm