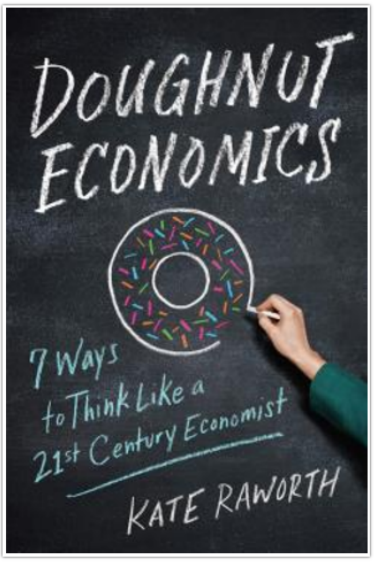

BOOK REVIEW

***Doughnut Economics*; Chelsea Green Publishing, 2017, 320 pp., $21 (hardcover)**

http://www.chelseagreen.com/doughnut-economics

Reviewed by Alex Bernhardt, Principal, US Responsible Investment Leader, Mercer

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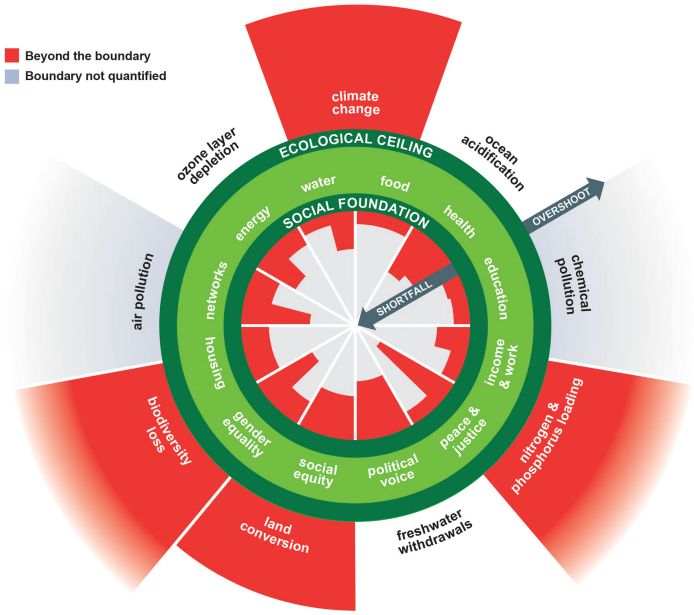
An array of alternative economic theories is vying for attention on bookshelves today. The list of adjectives describing the economic approach of each theory is long and includes: behavioral, sustainable, regenerative, adaptive, resilient, low-growth, no-growth, long-term, circular, feminist, sacred, ecological, and even just 'new.' So if this is the first you are hearing of "Doughnut Economics" a bit of skepticism is understandably warranted.

However, after only a short investigation it should become clear that the book does not mean to address our modern eating habits (at least not directly); rather it contains an excoriating critique of neoclassical economic theory and proposes a compelling and elegant alternative to the growth-at-any-costs mentality pervading political-economic thinking and practice today. Author Kate Raworth argues convincingly that this mentality has led to increasingly severe environmental degradation and social inequity rendering it unsustainable, and that the so-called "free market" is not equipped to solve these problems independently. She argues that environmental and social issues are not "peripheral" but of "critical concern" and only currently deemed as "external costs" because "we've made no provision for them in our economic thinking."

Raworth does not charge into this scrum lightly; according to her, confronting the current hegemony of economic theory is absolutely necessary if we are going to render our current political-economic systems sustainable since "economics is the mother tongue of public policy, the language of public life and the mindset that shapes society." The "doughnut" which she prescribes as a solution is a straightforward visual guide to 21st century economic thinking. Stated simply it argues for the economy to operate within the "safe and just" space between an ecological ceiling and a social foundation.



Raworth quantifies the ecological boundaries using science-based targets. For instance, the planetary boundary for climate change is determined to be 350 parts per million (ppm) of CO2 in the atmosphere, the scientifically agreed "safe" level of atmospheric CO2 concentration. As we are currently past 400 ppm, and climbing, the red bar for this particular earth system indicates overshoot.

The social indicators are more illustrative insofar as they are not scientifically but rather ethically based. However, this does not give them any less credence. For instance the indicator used for food is the percentage of the global population which is malnourished (11%) with the threshold for this indicator appropriately being set at 0%.

There is much to be said for the practicality of this framework from the standpoint of global policymakers and their economic advisors. And it is not hard to see its appeal for impact investors either; if an investment serves to increase the portion of the population living in substandard housing or to increase the amount of fertilizer being used by farmers and running off into streams then the doughnut suggests the investment should be foregone. While the visual of the doughnut is by far the most compelling takeaway of the book, this isn't to say the remainder of the text is unworthy of a read. To the contrary, it is rife with interesting and rarely told anecdotes about the history and development of modern economic theory and practice which should prompt readers of many different persuasions to pause and examine their assumptions about the "dismal science" and its influence on investment decisions and outcomes.

Some of the most interesting historical observations include:

- Sir Isaac Newton, whose physics spawned "physics envy" among many an economist, fell victim to market exuberance leading up to the collapse of the South Sea bubble and lost a small fortune in the process. The deep irony of this occurrence is difficult to miss – economists, in their deep desire to be treated as scientists, overlooked the capacity for human beings to act irrationally; a fact not lost on Sir Isaac who once said "I can calculate the motions of the heavenly bodies, but not the madness of the people."
- Adam Smith moved back in with his mother to complete the *Wealth of Nations*. She cooked, cleaned and did his laundry while he hammered away at his manuscript. Yet, despite her obvious contribution to her son's work, she got not so much as a mention in the final publication – not in the liner notes or by inference in its influential economic theories. To this day unpaid caregiving remains a social necessity which mainstream economics ignores. But if this labor were to be fully valued at market prices it would represent an astounding sum without even considering its "intangible" social benefits.
- The board game *Monopoly* was originally created by Elizabeth Magie with two sets of rules. The first set of rules – 'Prosperity' – outlined a collaborative object whereby the game was won once the player with the least starting capital had doubled their money and the utilities were jointly owned. Only the second set of 'Monopolist' rules survives today. Imagine the influence this ubiquitous game might have had on the young minds of yesteryear if the Prosperity rules had survived?
- Simon Kuznets, the Nobel Prize-winning inventor of Gross Domestic Product (GDP) warned in presenting the results of his work to the U.S. congress in 1934 that the "the welfare of a nation can scarcely be inferred from a measurement of national income." Many years later he elaborated further and said "goals for more growth should specify more growth of what and for what."[1] These footnotes to Kuznet's great contribution have been all but lost in political-economic decision making since, which speaks to the seductiveness of relying on a single, simple progress indicator.

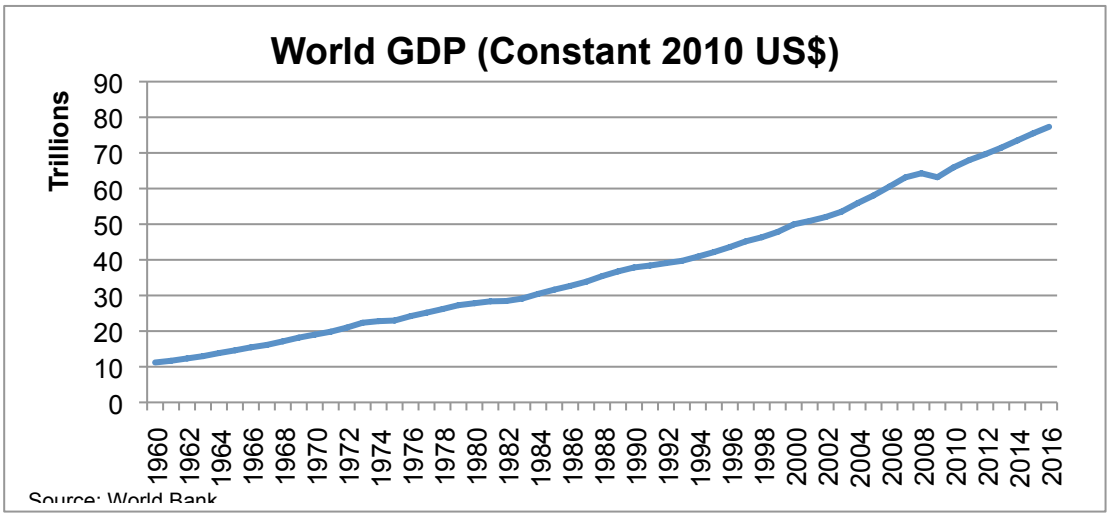
Leaving GDP Behind

Having learned from her study of history, Raworth's doughnut notably ignores Gross Domestic Product (GDP) altogether. In fact the only doughnut indicator involving monetary or other traditional economic measures of any kind is the indicator related to "income and work" and in this context the focus is not on growth but rather on poverty alleviation, job access and equity.

[1] Simon Kuznets in: (1962) *The New Republic* Vol. 147. p. 29

Indeed it is the conspicuous lack of focus on economic growth – or GDP at all – which is the primary underpinning of Raworth's revolutionary economic thesis. While she does fully describe "seven ways to think like a 21st century economist", the two of the seven which really resonate (and are most likely to rankle free-market purists) are her suggestions that: we change the goal of economic policy decisions from a unilateral focus on growth to a focus on outcomes which support planetary and human well-being (#1); and that we seek to be agnostic about growth (#7).

The doughnut is meant to be a tool to enable #1 and it succeeds in conveying its message in a powerfully direct way. However, in questioning the growth imperative Raworth pushes up against a great many preconceptions we all may hold (including readers of the *Journal of Environmental Investing*!) about growth as a necessary condition for healthy economies, individual wealth creation and positive investment results. After all, even the Sustainable Development Goals (SDGs) include economic growth as an explicit aim[2] and for the last 60+ years GDP has only ever increased (with the brief exception of the financial crisis), lifting millions out of poverty in the developing world in the process.



But what if this assumption is wrong? What if growth is not a precondition for economic (or social or environmental) well-being? Based on the current state of the doughnut, with red bars protruding sharply through its ceiling and floor, the track-record of our global growth-based economy has been pretty poor when it comes to finding solutions to problems related to ecology or equity. Intuitively it would seem that the inverse may be true – in order to solve these problems we need to curb economic growth and focus instead on what matters.

Based on the historically low growth rates of developed economies in recent years and increasingly pessimistic long-term growth projections by economists it appears the

[2] e.g. SDG #8 – Decent Work and Economic Growth: https://sustainabledevelopment.un.org/sdg8

decision to switch to a low- or no-growth economy may be made for us. In which case, irrespective of policymakers' stance towards the environment or society, investors better be prepared to answer the above questions and a few others, such as: how exactly does economic growth affect investment returns across asset classes? Are these relationships fixed or fluid? If economic growth is a precondition for high investment returns how in a low- or no-growth economy can retirement goals be met, educations be funded, insurance claims be paid and bank loans be financed?

Raworth spends due time exploring whether "green growth" is possible and concludes that the answer to this question is irrelevant; in her compelling theoretical economic framework GDP growth is a second-order outcome which is unrelated to the primary goals of planetary and human wellbeing. However, Raworth's exploration and explanation of the potential impacts of growth agnosticism on investment outcomes is unfortunately lacking in detail. She ignores an abundant research base describing the influence of macroeconomic variables on investment risk and return[3] and only mentions institutional investors (pensions specifically) in the context of their potential interest in Evergreen Direct Investing (EDI), a concept espoused by John Fullerton and the Capital Institute[4]. While EDI may well be a useful tool for investors to capture long-term predictable return streams and address principal-agent issues brought about by time horizon differentials in the investment value circle, this solution alone can hardly be considered a means for pension schemes to meet their return objectives and improve liability funding ratios.

The social crisis of pension underfunding is no small matter which slower economic growth could exacerbate. Recent estimates by the World Economic Forum place the retirement savings gap at $70 trillion in eight major developed and developing countries and project this gap will increase to $400 trillion by 2050 based on current trends. While this estimate already presumes "equities are expected to perform ~5% below historic averages and bond returns are expected to be ~3% lower"[5], a switch to doughnut thinking and action might further amplify this return deficiency.

On the other hand, a true doughnut economy may, through its heightened focus on issues related to equity, serve to improve the strength of public social safety nets and alter

[3] See for example http://people.hss.caltech.edu/~bcornell/PUBLICATIONS/2010%20Cornell%20-%20Equity%20Growth%20and%20Equity%20Investing.pdf which finds: "The long-run performance of equity investments is fundamentally linked to growth in earnings. Earnings growth, in turn, depends on growth in real GDP. This article demonstrates that both theoretical research and empirical research in development economics suggest relatively strict limits on future growth. In particular, real GDP growth in excess of 3 percent in the long run is highly unlikely in the developed world. In light of ongoing dilution in earnings per share, this finding implies that investors should anticipate real returns on U.S. common stocks to average no more than about 4–5 percent in real terms."

[4] http://capitalinstitute.org/wp-content/uploads/2014/09/EDI-CAPITALINSTITUTE.pdf

[5] http://www3.weforum.org/docs/WEF_White_Paper_We_Will_Live_to_100.pdf

working definitions of retirement[6] thereby alleviating some savings pressure. It would be useful to better understand the potential dynamics of these countervailing forces as they could have significant and lasting impacts on asset-liability management and related long-term investment decisions, but to gain this understanding interested readers will need to look elsewhere.

Embracing Systems Thinking

In addition to her growth challenge, Raworth's urging of economists to "get savvy with systems" (#4) may be of particular relevance to "universal owners" such as large pensions. She contends that dominant economic models do not adequately consider systemic risk, an insufficiency which stems from "ECON 101" where the Circular Flow diagram of money moving through the economy is inevitably drawn and taught; this visual was so pervasive and affecting it was even physically built as a board with various tanks attached and water passing between them to represent monetary flows[7]. Yet in constructing this model its designers treated the economy more or less as a closed loop between households and businesses – with occasional allowance for the role of government – and failed to notice the economy's reliance on natural materials (which derive their energy ultimately from the sun) or to account for non-market-based goods/services (which have tremendous value even if not monetized).

Raworth argues that the economy is not linear, mechanical and predictable and it cannot be summed up in the prevailing macroeconomic theory of market equilibrium. Instead we need to let go of controls that aim to pull markets back into an imaginary state of equilibrium and instead adopt an approach more consistent with the natural world which acknowledges the interplay between stocks and flows but also the existence of feedback loops and delays. An increasing focus on approaches to understanding complexity through system dynamics would help economists and investors to better understand key hubs and leverage points in the financial system which could lead to contagion or collapse.

This line of thinking has begun to take hold in investments with industry leaders like Andrew Lo[8] and Richard Bookstaber[9] articulating potential alternatives to the Efficient Market Hypothesis and embracing complexity. A number of sophisticated institutional investors are additionally confronting the systemic risk posed by climate change head on by taking specific measures to expand their governance, risk assessment and risk management protocols to render their portfolios more resilient to a potential low carbon

[6] See page 10 of: https://www.mercer.com/content/dam/mercer/attachments/private/glb-2017-bold-ideas-for-mending-the-longterm-savings-gap.pdf
[7] https://en.wikipedia.org/wiki/MONIAC
[8] https://papers.ssrn.com/sol3/papers.cfm?abstract_id=728864
[9] https://seekingalpha.com/article/4068311-bookstaber-end-theory

economic transition[10]. While these advances are not discussed directly in Doughnut Economics they are nevertheless included by inference.

All told Raworth proposes few practical solutions for investors, yet, this shortcoming aside, she tells a captivating story (which is saying a lot for a book essentially about economic theory) and proposes an astute and potentially revolutionary challenge to dominant modes of practice in the economic discipline. Simply by questioning the necessity of GDP growth Raworth raises a number of important questions with significant potential ramifications which economists and investors alike ought to take seriously. The book serves as a timely reminder that economic theory underpins our policy and investment decisions and current interpretations and applications of this theory should not be taken for granted.

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[10] http://investorsonclimatechange.org/