At first sight, superheroes and economics seem to occupy completely different dimensions – but a clash of dimensions is a classic comic book storyline! In this first-of-its-kind book, an economist and a business writer assemble an A-team of academic talent to explore the intersection of superhero mythology and economic theory in ten accessible chapters.

_Superheroes and Economics_ uncovers basic economic truths that are integral to the comic stories from some of the genre’s most famous names. The authors of the chapters look at ways that economic principles can add authenticity to imagined universes, and how familiar superhero stories can demonstrate concepts used by economists to forecast the behavior of markets and individuals. If Spider-Man is so smart, why isn’t he rich? What are the economic implications of a tech entrepreneur like Tony Stark actually inventing Iron Man armor? What does the 80-year career of Wonder Woman tell us about the evolving role of women in the workplace?

This unique book extends the scope of comics studies to encompass social sciences. It offers a great way to introduce both fans and students to topics like opportunity cost, growth, inflation and cost benefit analysis, as well as more advanced concepts like moral hazard, utility functions and economic growth. This text can be used to supplement economics courses using colorful examples that any pop culture fan can relate to.

**Brian O’Roark** is a University Professor of Economics at Robert Morris University in Pittsburgh, USA. He is on the board of directors for the _Journal of Economics Teaching_ and serves in the role of associate editor. In 2014, Brian was given the Undergraduate Teaching Innovation Award by the Middle Atlantic Association of Colleges of Business Administration and in 2016 he received the President’s Award for Outstanding Teaching at RMU.

**Rob Salkowitz** is an author, consultant and educator focused on the impact of new technology on work, business and popular culture. He is author of four books as well as a contributor to FORBES and his work has appeared in Fast Company, Publishers Weekly, Entrepreneur, Bloomberg Business Week and ICv2, the trade publication of the comics and gaming industry. He teaches in the Communication Leadership Graduate Program at the University of Washington, USA and runs the consulting firm Fathom Fandom.
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SUPERHEROES AND ECONOMICS

The Shadowy World of Capes, Masks and Invisible Hands

Edited by Brian O’Roark and Rob Salkowitz
To those two kids who were talking about Green Arrow before class, and the girls in my life who have been watching ever since. Brian

To my teachers, students and colleagues for an education that never ends. Rob.
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**Patrick Holt** is a computer engineer and comic book fan. Introduced to comics by his older brother’s collection in the early 1970s, he was hooked. He has read and collected thousands of comics, noticing details in the art and story lines that piqued his curiosity about the economic and financial repercussions in that world. He is currently working on his degree in Economics and Finance at the University of Texas, San Antonio. He and his wife volunteer with animal rescue and live on a small hobby farm with too many dogs, cats, and not enough chickens.

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**Rob Salkowitz** is an author, consultant and educator focused on the impact of new technology on work, business and popular culture. He is author of four books including *Comic-Con and the Business of Pop Culture* (2012), *Young World Rising: How Youth, Technology and Entrepreneurship are Changing the World from the Bottom Up* (2010) and *Generation Blend: Managing Across the Technology Age Gap* (2008), and *Listening to the Future: Why It’s Everybody’s Business* (2008). He is a contributor to FORBES and his work has appeared in Fast Company, Publishers Weekly, Entrepreneur, Bloomberg Business Week and ICv2, the trade publication of the comics and gaming industry. He teaches in the Communication Leadership Graduate Program at the University of Washington, is founding partner in MediaPlant, a digital communications firm, and serves as a consultant and strategist for companies worldwide. Rob earned a BA in Political Science at Columbia University. He and his wife Eunice Verstegen live and work in Seattle, WA. Follow him on Twitter @robsalk.
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John R. Swinton is Professor of Economics and the Director for the Center for Economic Education at Georgia College. His areas of teaching and research are wide reaching. They span public finance, environmental economics and the economics of education. His work has been nationally recognized by groups such as the National Association of Economic Educators and the Freedoms Foundation at Valley Forge. He comes to a love of comic book characters from the ability of writers to embed discussions of important social issues within the context of fantastical characters. It is simply up to the reader to choose to contemplate the deeper messages.

William C. Wood is Professor of Economics and Director of the Center for Economic Education at James Madison University. Wood received his PhD in economics from the University of Virginia in 1980. His research awards include the Henry H. Villard Award from the National Association of Economic Educators (2016), the Best Paper award from the Journal of Private Enterprise (with David Kreutzer, 2001) and the Clifford D. Spangler Award from the American Risk and Insurance Association (1991). Wood was an inaugural winner of the Southern Economic Association’s Kenneth G. Elzinga Teaching Award in 2002. His research interests include industrial organization, behavioral finance and economic education.
It would be difficult to imagine two subjects further apart than economics and superheroes. Superheroes speak to our imagination, our idealistic belief in justice and the prospect of becoming more than human. Economics traffics in the more obscure. Realists complain that economic ideas are reduced to equations and human behavior flattened into coarse abstractions. The impulses that guide behavior at both the micro and macro levels are credited to such mystic forces as invisible hands and animal spirits.

And yet these two worlds influence and inform one another to a remarkable degree. As superheroes have become staples of the entertainment world in the 21st century, reaching an audience of billions through the media of film, television and videogames in addition to their native format of comics, they require at least a toehold in the world of ordinary experience to achieve a suspension of disbelief. In other words, we need the worlds inhabited by superheroes to resemble our own in superficial aspects so we can buy into the fantasy, action and drama of the stories.

Economics can help. Everyone experiences the economic world at some level. We buy tickets to see the movies, after all. When we see characters on screen or on the page who struggle to pay the rent, who must grapple with the opportunity costs of forgoing a date or a job opportunity because of their sideline as a costumed vigilante, or whose access to crime fighting equipment is funded by private or corporate wealth, it deepens our immersion in the storytelling world. It provides a veneer of plausibility to fantastic ideas, and grounds the motivations of the characters in forces we all recognize.

By the same token, superheroes can help demonstrate or explain economic concepts for which the ordinary student or citizen might not have a concrete frame of reference. The economic notion of “moral hazard” was interesting and important enough to win its exponents a Nobel Prize, but try explaining it without a relatable example. Superheroes have become a common language, a rare cultural

**PREFACE**
touchpoint that everyone across our fragmented ideological landscape can recognize. By using their well-known stories as springboards, we can broaden understanding of economic principles and add a little panache to a discourse that could use a few colorful costumes and big explosions.

The two editors of this volume also come from contrasting backgrounds. Brian O’Roark is University Professor of Economics at Robert Morris University in Pennsylvania who has written extensively on the use of superheroes and popular culture tropes to teach economics.

Rob Salkowitz teaches in the Communication Leadership Graduate Program at the University of Washington, but is better known as a writer about the comics and entertainment industry for FORBES and other publications, and as the author of the 2012 book *Comic-Con and the Business of Pop Culture*. While Brian approaches the subject from within the discipline of economics, looking for ways that superhero texts can illuminate the theories, Rob views comics as a storytelling medium informed by economic discourse, and as a business influenced by economic factors.

In this book, we’ve curated a range of chapters from scholars across the country who offer different perspectives on the intersection between economic and superheroes. Rob’s chapter, “Economic Realism in the Worlds of Alan Moore,” kicks things off with an exploration of some of the seminal works in the comics-superhero canon to deal explicitly with economic issues as a text or subtext. The British comic writer Alan Moore (most famous for *Watchmen*) anticipated and demonstrated sophisticated techniques of economic modeling to give his story universes a rigorous internal logic that has elevated them into recognized classics, not just of the superhero genre, but of contemporary literature. That storytelling style brought a heightened sense of sophistication to superhero comics and laid the groundwork for today’s shared universes.

**Micro stories**

The remaining chapters of the book are divided into sections to reflect the economic discipline. Economics is separated into two subsets: microeconomics and macroeconomics. In micro we examine the decision making at the individual or firm level. Micro does mean small, but it does not mean insignificant. As chapters two through four suggest, there are some substantial issues in the lives of individuals that are dealt with at the micro level, including how a hero deals with scarcity, how another hero deals with discrimination and how a third hero deal with poverty.

When the Flash asked Batman what his superpower was in the 2017 *Justice League* movie, the caped crusader replied, “I’m rich.” Just how rich? Clair Smith of St. John Fisher College cracks open the ledger books of Wayne Enterprises to tally up the high costs of being a Dark Knight in “The High Cost of Being Batman.”

Did you know that Wonder Woman, the mighty Amazon princess Diana, was once relegated to the role of “secretary” in the 1940s super group The Justice Society of America, because, by the logic of the time, that’s what women did? She’s come a long way, and her journey reflects the changing role of women in
the workplace and society. James Bryan traces the evolution of the Amazon princess in “Wonder Woman: Feminist and Economic Icon”.

Patrick Holt of the University of Texas at San Antonio explores one of the persistent questions in superhero fiction: if you’re so super, why aren’t you rich? His chapter, “Poor Peter Parker: Spider Sense Doesn’t Apply to Making a Living,” follows the long-suffering Peter Parker, aka Spider-Man, who swings freely from skyscrapers and wisecracks his way to victory over criminals, but constantly struggles to pay the rent and care for his dear Aunt May.

**Macro stories**

Macroeconomics involves economic analysis that focuses on larger decision making units. Activity that happens in the macro sphere is typically national or international in nature. The decision made at this level impacts far more people than those at the micro level. To that end, in chapters five through seven we examine three heroes whose stories are intertwined with the financial system, economic growth and economic institutions.

Since Captain America first appeared in the pages of comic books in 1941, he has commanded a lot of reader interest, but what about compound interest? James Madison University’s John Robinson and William Wood inquire into Captain America’s investment strategies to see how well his portfolio performed while he was frozen in ice for 80 years in “From Weakling to Superhero: The Economics of Captain America.”

The Black Panther has a leg up on Batman in terms of wealth. Bruce Wayne may be a billionaire industrialist, but T’Challa is absolute monarch of a fabulously wealthy country. J. Robert Subrick of James Madison University shines a spotlight on “The Political Economy of Black Panther’s Wakanda,” contrasting the mythical African nation with the very real issues of economic development and political dynamics in post-colonial Africa.

Superman is a systems guy. He fights for what is right and upholds the ideals of the country in which he lives. That means he supports the institutions that make society work. James Bryan tackles the question of why we should be thankful that the Man of Steel lands in Kansas and not the Ukraine in “Truth, Justice and the Economic Way”.

**Graduate studies**

The final three chapters move us beyond the basics to tackle a few more complicated subjects. Most people think that superhero stories are for kids, but the economics can be quite advanced as chapters eight through ten show us. Here we plunge into moral hazard, production optimization and risk tolerance.

In “From the Comic Book to the Real World: The Principal-Agent Problem and Moral Hazards When Iron Man Flies Over Your Backyard,” Deborah Kozdras and Antoinette Criss, University of South Florida, use Iron Man, the armored
The alter-ego of entrepreneur and inventor Tony Stark, to explore a host of economic issues including the tricky matter of eminent domain and moral hazard. At the heart of their inquiry is the balance between privately driven innovation and responsibility to the public. What, if anything, should the government do when an individual invents something to give them superpowers?

John R. Swinton of Georgia College uses the techniques of an economist and the encyclopedic knowledge of a true fan to compare the crime fighting styles of two of the original costumed vigilantes from comics’ Golden Age: Batman, and his pulp and radio inspiration, The Shadow, in “The Shadow vs. Batman: Contrasting Approaches to Producing Justice.” These two non-powered super-sleuths take two very different approaches, based on the personas of the heroes, to achieve the same ends.

One overlapping theme between comics and economics is the role of uncertainty and “wild cards.” Amanda Mandzik of Penn State University, in her chapter “The Avengers vs. The Incredible (but Unpredictable) Hulk,” tallies the costs and benefits of having someone on your team capable of winning a battle with a single blow, but who could just as easily turn against his teammates if the mood strikes.

Up, up and away

Comics and economics definitely make for strange bedfellows. So, do our dual objectives of delighting comic fans with a new perspective on some of our favorite characters while breathing life into economic concepts that don’t always light up the room. We hope the selections in this collection inform and entertain in equal measure, but we will, in the name of accessibility and better sales, resist the temptation to express that in the form of an equation.

Enjoy!

Rob Salkowitz and Brian O’Roark, January 2018