ECONOMICS AND MATH OF TOKEN ENGINEERING AND DEFI

WRITTEN BY
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This book is dedicated to you.

Thanks for being curious enough to pick this book up.
Thank you for being interested to learn these fundamental pieces that are crucial to building the world of tomorrow.

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Introduction

Disclaimer: This textbook mentions various projects and protocols. Mentioning them is not an endorsement in any way, shape and form. The general rule of thumb is that the projects are mentioned because they have the highest market capital within the specific category or that they are most relevant to the mechanism discussed. At the time of writing, the projects and protocols were active with an active community.

Nothing is investment advice.

> *TLDR: This book is a guide. Jump into the chapters directly and it will still make sense. You are not obliged to read it from cover to cover to get each chapter.*

This textbook has been a work in progress for three years. It covers a significant range of topics from economics and finance to math and technology. As much as I would hope for you to read it from cover to cover, I have made each chapter of the book independent on its own. This makes it easier for you to jump into specific chapters and information.

This book serves as a guide and manual to help you navigate through the space and understand the fundamentals behind it. More details of "how to navigate the book" can be found in the next pages, depending on who you are and why you are reading this book.

At the end of the book, I created a glossary list with "human explanation". References for each chapter and additional notes can be found at the end of each chapter. You can find additional information like long-form reports under references too.

Enjoy!

Lisa JY Tan

How to Read This Book: Navigation Guide

This book covers the basic fundamentals of token economics. Thus, there are many chapters with plenty of information. This navigation guide serves as a map to find out how to best read the chapters that are most relevant to you.

This book can be split into two main sections. Chapters 1 to 13 focus on economics. Chapters 14 to 25 focus on DeFi and the mathematics of such mechanisms.

If you are a protocol creator

That means you have an idea and you want to turn that idea into a smart contract on blockchain. I recommend that you start this way:

- Understand foundations: 4, 6, 8, 10, 13
- Bonding curve introduction: 11
- DeFi introduction: 14
- Math for DeFi applications: 16 to 20
- Governance: 22

If you are a retail investor

You are probably looking for fundamental analysis before investing long-term with these protocols. Great job looking at fundamentals instead of only market analysis.

- Case study for analysis: 7, 9, 12, 25, 26
- DeFi introduction: 14
- Math for DeFi applications: 16 to 20
- Governance: 22

If you are looking to get educated about the space

Maybe because you want to get a job in the space, you want to learn more to be an investor, you want to consult for projects or you want to start your own project. That is all fantastic.

- Economics for token engineering: 1 to 13
- DeFi and Math: 14 to 25

If you are a regulator

Thank you for not just trying to squash a new evolving system into an old existing system, not trying to put "new wine into old wineskins". Regulation works hand in hand with innovation, to support new systems and new ways of doing things.

- Economic principles of these ecosystems: 6, 8, 10, 13
- Case studies: 7, 9, 12, 25, 26