

About the companion *The Mystery of Wealth- the first complete economic theory of entrepreneurship*:

“Many authors have suggested that capitalism, democracy and rule of law are important for economic growth, but CDR is the first mathematical model to predict approximately 90% of GDP. I was surprised so I obtained the data from the book and tested it myself. The results were astonishing. Finally, we have a sound scientific economic growth model. The implication is that the conversion of capital to GDP is determined by the laws of natural sciences and is the same in all countries in the world. What is commonly thought to be differences in productivity is actually the differences in the amount of capital that countries can attract for conversion to GDP. It is now clear that the true and only source of wealth is human capital ideas of imagination and creativity and it can only be converted in the presence of catalysts: democracy and rule of law. Poor countries can now focus on these features of society with confidence that life can get better. Noneffective strategies such as government spending can be put to bed. There is no good reason why the implementation of the CDR concept cannot serve to end poverty and build middle class societies all around the world.”

Pierre Ngnepieba, Ph.D. Mathematics, University of Grenoble-Alpes, France.

The CDR model quantifies the proposition “Every individual is continually exerting himself to find out the most advantageous employment for whatever capital he can command. It is his own advantage, indeed, and not that of the society that he has in view. But, the study of his own advantage naturally, or rather necessarily, leads him to prefer that employment which is most advantageous to society... He intends only his own gain, and he is in this, as in many other cases, led by an invisible hand to promote an end which was no part of his intention. By pursuing his own interest, he frequently promotes that of the society more effectually than when he really intends to promote it.” Adam Smith, LL.D., University of Glasgow, Scotland. Father of modern economics and capitalism.

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Wealth

explained by

Capitalism.Democracy.Rule of law

General theory of economics

**CDR supply side scientific growth law unveiled
from confusion to clarity**

Wealth & Poverty
Demystified

Collaboration permits rule of law...cooperation is an obstacle

Rule of law attracts capital and protects democracy. Democracy deploys capital optimally

The only source of wealth is human ideas of imagination and creativity

The value of ideas = 85% of capital

New ideas contribute 6X that of capital stock from old ideas.

The optimal tax rate is 21%

Capitalism, democracy & rule of law contribute 13 X natural resources

CDR index is global time invariant

Something from nothing

Return on Investment = 9.6%

Government spending, population size & appearance, location, natural resources, culture, effects on
GDP are negligible

The long run expected value of economic growth = 1.8%

Wealth is unlimited



Wealth
&
Poverty
Demystified
Econometrically

Wealth

explained by

Capitalism.Democracy.Rule of law

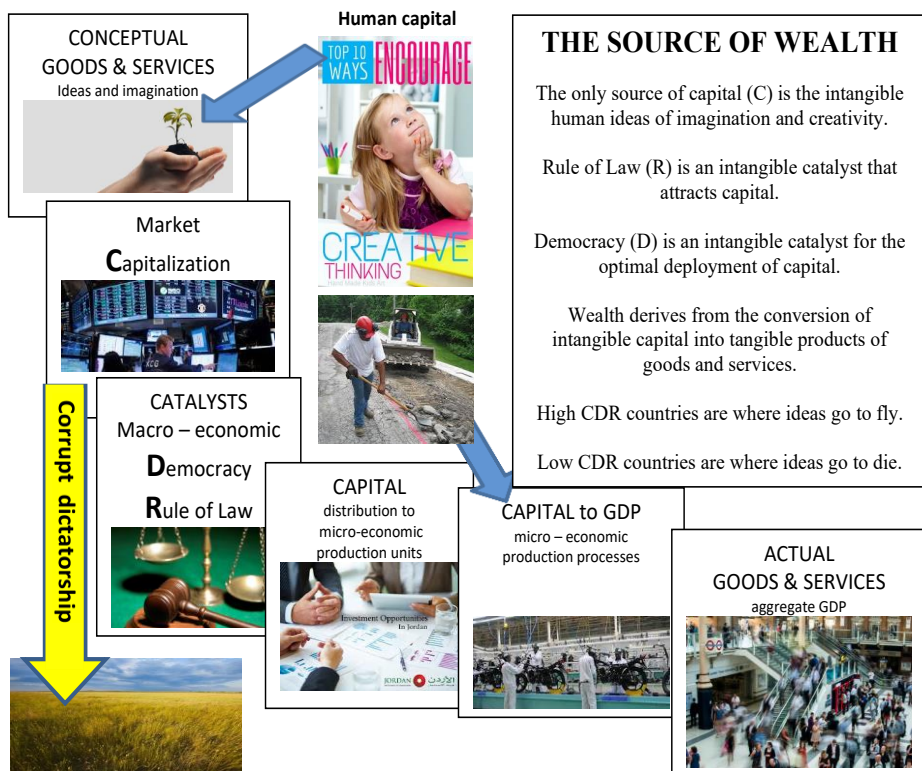


*One source
of wealth
watches
over
another*

General theory of economics

CDR supply side scientific growth law unveiled

From confusion to clarity



THE SOURCE OF WEALTH

Acknowledgements

Origins matter less than destinations.

In loving memory of my wife Pamela for proofreading the three books on this subject titled: The Mystery of Wealth, Collaboration trumps IQ, and The Wealth Gene.

Dennis Ridley, Ph.D. (Clemson)

Professor, Florida A & M University and Florida State University, Tallahassee, Florida

About the Author

Dr. Dennis Ridley studied Electrical Engineering at Middlesex University in England and the University of the West Indies, where he received the Master of Science degree in Computer Methods in Electrical Power Systems Analysis. He received his PhD degree in Engineering Management from Clemson University, USA. He has the distinction of a US patent, publication in the Journal of the Royal Statistical Society, Fellow of the Royal Statistical Society, US State Department Fulbright Senior Specialist at Kharkov University in Ukraine and Harvard Business School certificate in The Art & Craft of Discussion leadership.

Currently, he is a Professor in the School of Business & Industry at Florida A&M University, and a Faculty Associate in the Department of Scientific Computing at Florida State University. Previous appointments include Howard, George Mason, and Clemson Universities, Nekoosa Packaging Corporation, Radio Corporation of America, Jamaica Public

Service Co., and the International Atomic Energy Agency in Vienna, Austria.

He is widely published in the fields of electrical, industrial & biomedical engineering, economics, finance, management science, operations research, time series analysis, statistics, supply chain management and entrepreneurship. His professional societies have included the Institute for Operations Research and Management Science, the International Institute of Forecasters, the Institute of Business Forecasting, the American Statistical Association, and the Production & Operations Management Society.

He is the father of the computer-powered wire(less) ultra-intelligent real-time monitor, antithetic time series analysis, the moving window-spectral method, the CDR economic growth index, the professorial evaluation metric, live case study pedagogy, Andrew Ridley and Jon Ridley.

Dr. Ridley has served as an accreditation visitation team member in service to the University of the District of Columbia, Seton Hall University, State University of New York and Rutgers University.

Preface

This book is a companion to the textbooks: *The Mystery of Wealth* (Ridley, 2020a), *Collaboration trumps IQ* (Ridley, 2023) and *The Wealth Gene* (Ridley, 2025) – that together, present the first complete explanation of the economics of entrepreneurship. These three textbooks provide in depth mathematical models. The Source of Wealth summarizes these textbooks for an easier alternative math free reading by entrepreneurs and those interested in how wealth is created, and standard of living is increased. It completes the path to widespread and accelerated entrepreneurship to eliminate poverty and provide a living wage for the least among us. The purpose of the three prior books is to demystify the causes of wealth and poverty like never before done. *The Mystery of Wealth* is the seminal comprehensive presentation of the capitalism (C), democracy (D) and rule of law (R) CDR model. The CDR model and index is a mathematical model that jointly with natural resources and geography explain almost all economic growth. Rule of law attracts capital, and democracy creates additional pathways for the optimal deployment of capital. As the CDR index is raised so is the real per capita gross domestic product adjusted for purchasing power parity. So, the question is how to raise the CDR index of a country so as to raise wealth. *Collaboration trumps IQ* and *The Wealth Gene* drill down on the mechanisms for creating collaboration skills that permit rule of law that attracts capital and protects democracy that deploys capital optimally to produce gross domestic product of goods and services. While the point of beginning is collaboration, the source of wealth is human capital of imagination and creativity, hence the title *The Source of Wealth*.

The book will serve the needs of individuals who wish to gain a basic understanding of national wealth and the macro-economic growth and decision making that is responsible for wealth. The reader may start with a preliminary review of the information at CDRindex.blogspot.com. The blog is intended

for anybody, especially people with a high school education and beyond. This book explains wealth in general terms. It contains a summary of conclusions that flow from the basic CDR fact that the source of all wealth is human capital ideas of imagination and creativity. Cooperation is required for ordinary economic growth but through collaboration human capital is converted into capital stock of knowledge, machines, recordings, etc. that are used to create new products and services, and therefore extraordinary economic growth. It contains many conclusions that are counterintuitive and different from commonly held beliefs.

Contents

Acknowledgements.....	v
About the Author	v
Preface.....	vii
Chapter 1	11
The Origin of Wealth: From Confusion to Clarity	11
The Human Source of Capital	14
Collaboration: The Hidden Catalyst	15
From the Classroom to the Marketplace	16
The Biological Thread.....	17
The CDR Engine	17
A New Definition of Development.....	19
Chapter 2	Error! Bookmark not defined.
The Three Pillars of Prosperity	Error! Bookmark not defined.
The Framework of C·D·R	Error! Bookmark not defined.
The Interdependence of the Pillars.....	Error! Bookmark not defined.
Uncommon Sense	Error! Bookmark not defined.
Management Theory and CDR	Error! Bookmark not defined.
Where Ideas Fly and Where They Die ...	Error! Bookmark not defined.
Collaboration as the Binding Force.....	Error! Bookmark not defined.
The Moral Equation of Wealth	Error! Bookmark not defined.
Chapter 3	Error! Bookmark not defined.

Entrepreneurship	Error! Bookmark not defined.
The Engine of Transformation	Error! Bookmark not defined.
Chapter 4	Error! Bookmark not defined.
Mindsets, Education, and Empowerment	Error! Bookmark not defined.
Chapter 5	Error! Bookmark not defined.
The Human Capital Revolution	Error! Bookmark not defined.
Chapter 6	Error! Bookmark not defined.
Technology, Automation, and the Next Workforce Shift	Error! Bookmark not defined.
Chapter 7	Error! Bookmark not defined.
From Dictatorship to Development .	Error! Bookmark not defined.
Chapter 8	Error! Bookmark not defined.
CDR and the Future of the Human Enterprise...	Error! Bookmark not defined.
Chapter 9	Error! Bookmark not defined.
The Economics of Inclusion and Innovation .	Error! Bookmark not defined.
Chapter 10	Error! Bookmark not defined.
Collaboration Skill Recovery: Gene Therapy via Team Sport, Music Education, and Biology	Error! Bookmark not defined.
Summary findings	Error! Bookmark not defined.
Nomenclature	Error! Bookmark not defined.
Bibliography	Error! Bookmark not defined.
Index	Error! Bookmark not defined.

Chapter 1

The Origin of Wealth: From Confusion to Clarity

For centuries humanity has puzzled over one question: why are some nations rich while others remain poor? Is it resources, geography, intelligence, or luck? The answer, long hidden behind layers of ideology and statistics, turns out to be disarmingly simple. Wealth begins not in mines or machines but in the human mind. Ideas—products of imagination and creativity—are the only true source of capital. Everything else merely channels or multiplies them.

The research on which this book is based requires very precise definitions of terms used. These terms are often confused, leading to major misunderstandings. The definitions here are based on epistemological, metaphysical, and axiological insights. So for clarity of purpose we begin with the following definitions.

Intelligence is the ability to acquire and apply knowledge and skills.

Cooperation is a plan and execution thereof by participants, each with their own personal self-interest and economic gain in mind yet yielding unintended mutual benefits.

Collaboration is the plan and execution thereof by participants for their intentional mutual benefit of shared goals, objectives, and rewards.

Economic growth is the improvement in per capita real gross domestic product adjusted for purchasing power parity.

Economic development is the improvement in infrastructure and social wellbeing.

Entrepreneurship is the process of starting a business, typically a startup company offering an innovative product, process or service.

Capitalist is a person who deploys his or her personal capital so as to maximize his or her own benefit and includes all rational people.

Capitalism is the mechanism for the collection and assembly of capital, measured by total market capitalization that reflects entrepreneurship capital and capital stock.

Democracy is the private work force idea participation and periodic election of public representatives, and catalyst for the process of generating GDP from capital.

Rule of law is the reverse of corruption, the protection of shareholder and other property rights, and catalyst for the attraction of capital.

Corruption is the abuse of entrusted power for private gain and can be classified as grand, petty and political, depending on the amounts of money lost and the sector where it occurs.

Property (rights) is a legal expression of an economically meaningful consensus by people about assets, how they should be held, used and exchanged.

Real gross domestic product adjusted for purchasing power parity is the net product or value added that equates to standard of living.

Epigenetic generational psycho-sequela refers to heritable brain changes in gene expression that occur without modifications at the deoxyribonucleic acid (DNA) sequence level.

The historical development of economic growth models include mercantilism, physiocracy, classical theories, innovative growth theory of Schumpeter, Keynesian theories, post Keynesian theories, neoclassical theories and exogenous theory of Solow, and endogenous growth theory. The most recent and the theory that is presented in this book is the capitalism, democracy, rule of law (CDR) economic growth model. This is theory of innovation Economics, otherwise known as entrepreneurship.

Growth Concepts and Theories	Emerged
Mercantilism	15 th century
Physiocracy	2 nd half of 18 th century
Classical Theories	1776
Innovative Growth Theory of Schumpeter	1911
Keynesian Theories	1930s
Post-Keynesian (Neo-Keynesian) Theories	1950s
Neoclassical Theories and Exogenous Theory of Solow	1950s-1960s
Endogenous Growth Theory	1980s-1990s
Capitalism, Democracy, Rule of law (CDR) Innovation Economics growth model	2020 -

The CDR Framework—Capitalism (C), Democracy (D), and Rule of Law (R)—translates ideas into the visible prosperity we call economic growth. Each element performs a distinct function:

- **Capitalism** organizes resources and incentives so that ideas can be turned into enterprises.
- **Democracy** opens participation, allowing new voices and combinations of thought to emerge.
- **Rule of Law** provides trust and stability, protecting innovation from predation and fear.

When these three forces coexist and reinforce one another, a nation's ideas “take flight.” Where one or more are absent, they die on the runway.

C, D and R together with natural resources and latitude explain 90% of per capita real gross domestic product (GDP), adjusted for purchasing power parity (GDPppp). The contribution of Capitalism is 60%. Of this 85% is exogenous human capital ideas and 15% is endogenous capital stock. The contribution of natural resources is 6% and the contribution of latitude is 4%. Therefore, the contributions of natural resources and geography are far less than the commonly held belief. The model is called CDR because C, D, and R are policy variables that can be influenced by government. Natural resources and latitude are natural variables that are independent of government.

The Human Source of Capital

All tangible wealth—buildings, machines, software, music, vaccines—was once only an idea. A society that prizes curiosity, tolerates failure, and protects discovery will accumulate far more capital than one that silences or steals its thinkers. Human capital is therefore the most renewable and valuable asset on

earth. It appreciates education, expands through freedom, and decays under repression.

CDR explains roughly nine-tenths of the world's differences in living standards. That single fact means economics has finally reached a scientific footing. Prosperity is not a mystery of markets but a law of systems: raise CDR and you raise income; erode it and you invite decline.



Human creativity is the seed of wealth

Collaboration: The Hidden Catalyst

Cooperation is a plan and execution thereof by participants, each with their own personal self-interest and economic gain in mind yet yielding unintended mutual benefits. Collaboration is the plan and execution thereof by participants for their intentional mutual benefit of shared goals, objectives, and rewards. Animals can cooperate but they cannot collaborate. They can hunt together but their intention is strictly self-interest. Chimpanzees

are the animals closest to human beings. A little red monkey is a delicacy for them. If a chimpanzee chases the monkey, and another chimpanzee observes the chase it will cut off the escape routes in assistance to the hunt. Similarly, other chimpanzees will join the hunt. But the first Chimpanzee to catch the monkey will take off with it. There is no sharing. The next day, the same chimpanzees will hunt again with the same outcomes, and so on. Human beings will not continue to join in such a blatant act of selfishness.

Only human beings can collaborate. If CDR describes *what* creates wealth, collaboration describes *how* it happens. People cooperate when they pursue separate goals that happen to align; they collaborate when they pursue a shared goal together. Cooperation delivers ordinary growth—the steady hum of trade and exchange. Collaboration delivers extraordinary growth—the breakthroughs of invention.

Intelligence helps individuals solve problems, but collaboration enables societies to transcend them. It invented the rule of law itself: a collective agreement to restrain self-interest for the greater good. Every enduring institution—from Magna Carta to the United Nations—was born of collaboration, not coercion. Where people learn to collaborate, democracy strengthens, corruption recedes, and capital feels safe to land.

From the Classroom to the Marketplace

Modern research and classroom experience show that students who learn collaboratively not only score higher but think more creatively. Active learning replaces competition with shared discovery. Those same habits, multiplied across a workforce, explain why collaborative societies innovate faster and recover sooner from crisis. The world's most prosperous regions are, in essence, classrooms of collaboration on a national scale.

The Biological Thread

Recent studies hint that the impulse to collaborate is partly biological—a “wealth gene” expressed through trust, empathy, and shared intention. History’s injustices—forced labor, discrimination, chronic stress—may suppress this gene, producing generations of disengagement. Conversely, inclusive education, music, sport, and fair governance can switch it back on.

The CDR Engine

Seen together, the process of wealth creation unfolds like an engine:

1. **Human imagination** generates ideas.
2. **Collaboration** converts ideas into organized ventures.
3. **Rule of Law** protects those ventures and attracts capital.
4. **Democracy** disperses opportunity and feedback.
5. **Capitalism** allocates resources and rewards efficiently.
6. **Prosperity** funds further education, completing the cycle.

Break any link and the engine stalls. Strengthen each, and the cycle accelerates, lifting living standards across generations.



Cooperation paves the path for trade and ordinary economic growth



Collaboration and entrepreneurship transforms ideas into results

A New Definition of Development

Development, then, is not merely rising income or infrastructure. It is the widening of collaborative capacity—the ability of citizens to imagine together, to trust one another, and to turn ideas into reality. Nations prosper when they institutionalize that ability. They decline when fear, corruption, or exclusion extinguish it.



Capitalism organizes resources for society

The Task Ahead

The remaining chapters will explore this human engine in greater detail:

- how CDR emerged from centuries of trial and error;
- how collaboration became its missing catalyst;
- how biology and education intertwine to sustain it; and
- how policy can nurture a truly inclusive prosperity.

The mystery of wealth is no longer a mystery. It is a story of human imagination disciplined by freedom and trust. The challenge of our time is to ensure that every nation—and every child—can enter that story, collaborate within it, and make their ideas fly.



Prosperity
flourishes in
societies that
embrace CDR