Sustainable Prosperity

CAPTURING UNDERUTILIZED BUSINESS CAPACITY TO
REVITALIZE THE ECONOMY AND TRANSFORM OUR QUALITY OF LIFE

A WHITE PAPER ON *BUSINESS DOLLARS*™ AND DUALCURRENCY COMMERCE

PREPARED FOR THE *FUTURE OF MONEY SUMMIT*

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DualCurrency Systems (DCS) holds the first U.S. patent for DualCurrency Pricing, Accounting and Transaction Settlement Systems. (Patent 5,687,323) DCS seeks strategic alliance partners to develop a number of business applications for DualCurrency Commerce. If you are interested in investigating such a partnership, please contact us at:

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Thank you to my team for holding the vision together and setting things in motion.

Thank you to Anni, my wife, for partnership, courage, love and support.

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SUSTAINABLE

Sustainable \Sus*tain"a*ble\, a. {Cf. F. soutenable, OF. soustenable.} **1.** Capable of being sustained or maintained; **2.** Supplied with necessities or nourishment; provided for; **3.** A system, ecological or of human creation, that utilizes renewable resources for growth and maintenance.

PROSPERITY

Prosperity \Pros*per"i*ty\, n. {F. prosp[‘e]rit[‘e], L. prosperitas. See Prosperous.} **1.** The state of being prosperous, wealthy or fulfilled; **2.** Advance or gain in anything good or desirable; successful progress in any business or enterprise; attainment of the object desired; good fortune; success; as, commercial prosperity; national prosperity.

SUSTAINABLE PROSPERITY

1. A state of economic development, where individuals, families and communities enjoy a high standard of living and a high quality of life, while respecting and preserving the natural environment;

2. A new balance of economic competition with economic cooperation that promotes the efficient use and sharing of natural resources, technologies, knowledge and capital at the local, national and global levels;

3. The highest expression of a free-enterprise system, which affords social, economic, political, cultural and artistic freedoms, side by side with individual responsibility, mutual respect and special consideration for people truly in need.

Forward

As the United States progresses from an industrial economy to a post-industrial information economy, we continue to experience severe economic dislocations. Millions of Americans have lost their jobs, somewhat akin to when factories replaced farms as the dominant form of production. Many communities are in decline, and many families face difficult times.

It may provide insight and some reassurance to recall the earlier transition from an agricultural to an industrial economy. Initially, many people lost their livelihoods on the land and few had needed skills for the industrial economy. Child labor, long hours of work, low wages, sweatshops and crippling industrial accidents were all commonplace. It is not surprising, that some of today's difficult economic conditions remind people of "the bad old days." As much of the suffering facing individuals, families and communities is heartrending, it may prove valuable to stop and ask, "Are the dislocations and hardships more painful and more protracted than is really necessary?"

An economic program that can speed the transition and soften the dislocations, as the Information Economy unfolds, would be of great value to businesses and their stakeholders — employees, customers, shareholders, vendors and communities alike. This White Paper introduces such a program for rapid, sustainable economic development. It challenges us to rethink a number of economic assumptions that once served us well, but which every day are proving more inadequate.

An innovative application of banking and transaction technologies has been devised to bridge the large and growing gap between the standard of living and quality of life that the global Information Economy makes possible and that which we currently experience. This new form of exchange is called DualCurrency Commerce. The simple premise is that dollar financial resources, whether for commerce or community development, can be augmented through use of an additional non-dollar medium of exchange. Similar non-cash instruments have been well received in the airlines industry, as the worldwide growth of frequent flyer mile programs documents. We will explore how a new financial instrument, as an incentive for more than consumer spending, can be utilized for economic revitalization.

DualCurrency Commerce is a business-led, market-based, profit and values-driven approach to sustainable economic development. As such, it offers to transcend the current left versus right polarization and stalemate that keeps both politics and economics from delivering effective solutions to longstanding social and economic challenges.

The appeal to conservatives is private sector, market-based and profit-driven solutions. There is no need and no call for "redistribution of wealth." DualCurrency Commerce produces and distributes new wealth from currently underutilized resources. As well, the proposals contained herein require neither government regulation nor government funding to succeed. The appeal to liberals is that new economic resources do not "trickle down." They are already at our fingertips, if only we can open our eyes and see them. What will appeal to both sides is a way out of our current economic dilemmas, which includes a new level playing field for those willing and able to help themselves, combined with additional community resources for those truly in need of a helping hand. Lastly, there is a deep commitment to environmental sensitivity and long-term sustainability, along with extensive local autonomy to address local concerns.

The proposals contained in this White Paper do not break any rules of free enterprise, market economics. In fact, DualCurrency Commerce improves market efficiencies, wherever businesses have underutilized productive capacities side by side with individuals, families and communities with unmet wants and needs.

The economic and business insights shared in this White Paper began with a simple inquiry: "Why don't continuous advances in technology and labor skill result in commensurate, across-the-board improvements in our standard of living and our quality of life?" I questioned what might be behind the money-chasing rat race that seems to have engulfed modern American life.

I could not be convinced that economic suffering — unemployment, homelessness, poverty, disease and global famine — or, what seemed to be the social consequences of such suffering — alcoholism, drug addition, domestic violence and despair — had to characterize life in the twenty first century. I never believed the explanation/justification of a greedy human nature, and I wondered if instead there wasn't merely a hidden flaw in our economic thinking. One result of my unfolding inquiry was the discovery of certain mysteries and anomalies in modern economics and the design of several practical business tools to address them.

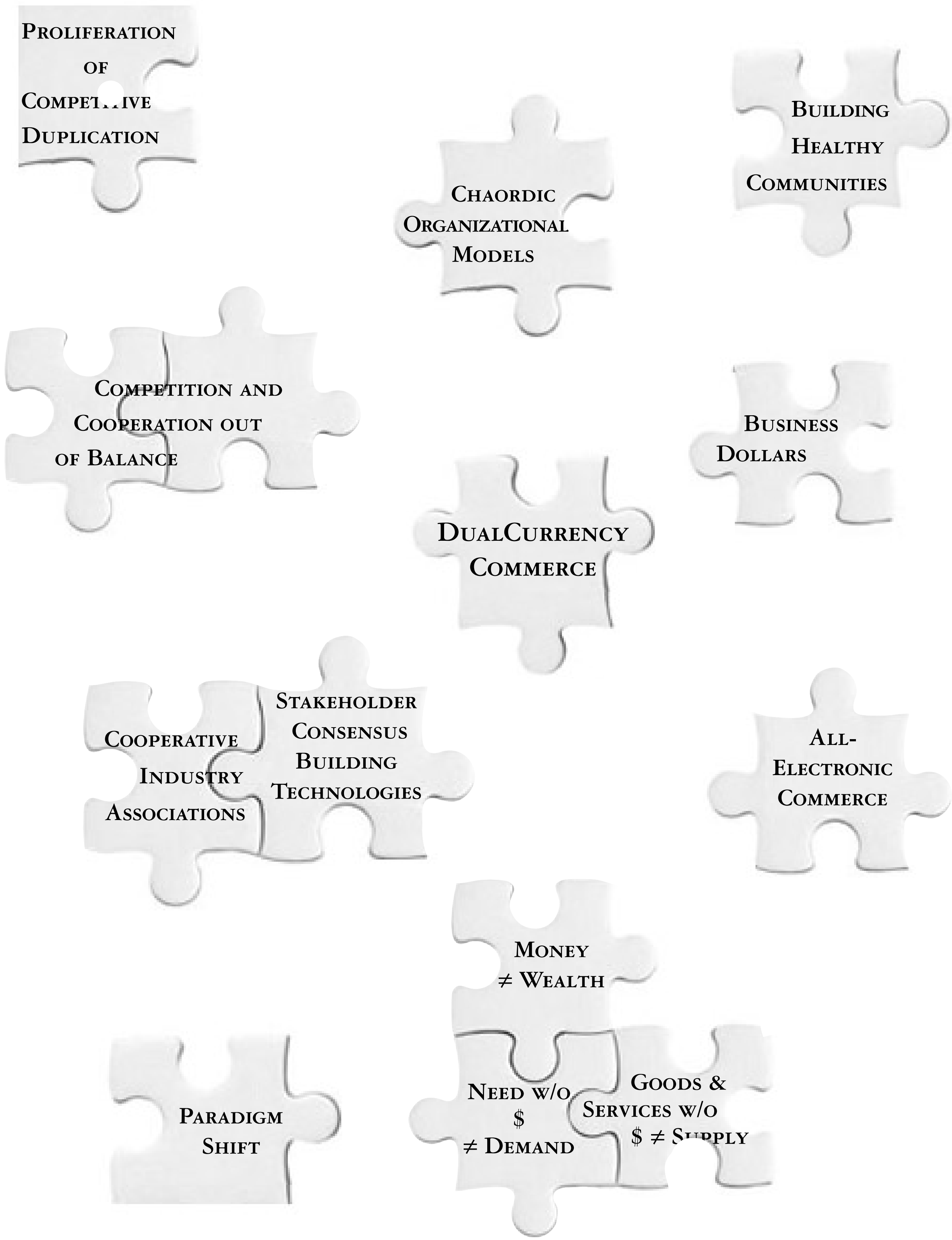
This White Paper is a work in progress. It is a first modest exploration into a new economics for a new economic era. As such, it is destined to be enriched by discussion, debate, and most importantly, by real world applications of the concepts.

The White Paper is divided into three major sections. The first section explores a number of my discoveries about money, wealth, competition, cooperation and economics. The second section introduces new tools for transaction banking and commerce that apply the DualCurrency solution. The third section is comprised of appendices, which suggest applications of DualCurrency Commerce.

Joel Hodoff
October 2003

Solving the Puzzle

OF MONEY AND SUSTAINABLE PROSPERITY



Assumptions and Insights

OF DUALCURRENCY COMMERCE

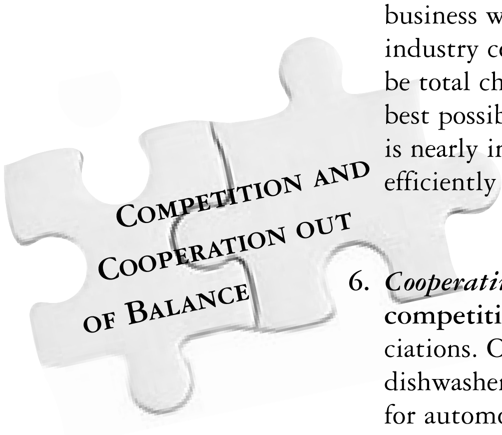
1. **The possibility of *Sustainable Prosperity* calls into question the long-held theory of "scarce resources and unlimited wants and needs" as a foundation for modern economics and commerce.** Every day the Information Economy produces more and better goods and services with fewer materials, less energy, less labor and less capital. These trends should be driving a continuously higher standard of living and quality of life, with ever-less detrimental impact from production on the environment. For some mysterious reason, this is not happening.

2. **At the same time, underutilized business capacity — or wasted wealth — can be seen everywhere in the economy:** from empty restaurant tables, empty airline seats, and empty college desks; to excess inventories at auto dealerships, big-box retailers, neighborhood shops and shopping malls; to off-hours at such venues as movie theaters, health clubs and beauty salons. This underutilized capacity and excess inventory represents inefficiency in the market and a significant business opportunity.

3. **Only a lack of consumer purchasing power keeps many willing buyers and willing sellers apart.** Countless individuals, families and communities in the U.S. and around the world yearn to buy the very products and services that businesses seek to sell. A lack of consumer purchasing power is nothing more than a lack of money, thus, only a lack of money keeps buyers and sellers apart. The anomaly that begs a paradigm shift in our thinking is that money was created to promote commerce, rather than to inhibit it.

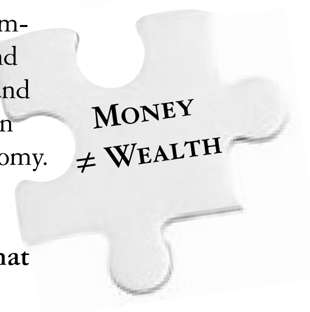
4. **Much confusion exists in economics and commerce involving money (the tool) and wealth (the objective).** If economic competition were strictly to distribute more and better goods and services, then there is plenty of capacity to produce and distribute more. In contrast, observe how businesses downsize and fail, merely for lack of cash paying customers, while there is still plenty of unmet wants and needs for their product or service. This gap between available business capacity and unmet consumer wants and needs is a classic example of paradigm blindness.

5. **An underlying problem is that *competition and cooperation are out of balance*.** Imagine a business where every department in the company competed the way that businesses within an industry compete, with no management or authority to reduce the competition. There would be total chaos. Yet, we fully expect unbridled competition between businesses to produce the best possible economic results. Until we can better distinguish between money and wealth, it is nearly impossible to discern how competition over money undermines needed cooperation to efficiently produce and distribute goods and services.



6. ***Cooperating industry associations* are an important way to improve the balance between competition and cooperation.** Competitive businesses often cooperate through industry associations. One example is jointly setting product specifications and standards, such as 24" wide dishwashers, address protocol on the World Wide Web, or standard-sized spark plugs and tires for automobiles. Competitors also cooperate in industry associations such as the American Manufacturers Association, the American Medical Association or Chambers of Commerce. An important precedent for this discussion is the 1969-70 creation of the VISA processing system, where a large number of competing banks cooperated to build the system, while still competing to acquire individual cardholders. All these examples represent a constructive balance of competition and cooperation.

7. **Because Economics confuses money and wealth, it also confuses “productivity” and “profitability.”** Productivity results from advances in technology and improvements in labor skill. Productivity is clearly improving daily in the Information Economy. Profitability, on the other hand, is a money matter. Profitability generally declines as industries mature and competition increases. When economists call for greater productivity through lowering labor and other production costs, they are ignoring the already vast productivity of our technologies and work force and overlooking that every cut in labor costs translates directly into reductions in consumer purchasing power. This of course drives down sales and profits elsewhere in the economy.



8. **Much of the mystery, confusion and controversy linked to economics stems from what might be termed the dual nature of money and competition.**

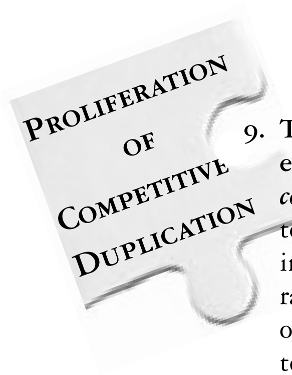
   A) **The Dual Nature of Money: Money simultaneously encourages cooperation in the production of goods and services, while encouraging competition over their distribution.** On the one hand, the dollar functions as a universal unit of measure and accounting, i.e.; a symbol or icon. Dollars are used to measure the value of goods and services — including the value of labor — for exchange in the market, as well as to keep account of financial transactions. This is how money promotes economic cooperation.

   Yet, every other unit of measure and accounting, such as an inch, a gallon, a pound or the number eight, is *purely symbolic*. They cannot be owned, loaned, invested, exchanged, stolen or hoarded. Everyone shares them freely and equally.

   Money, on the other hand, descended from scarce commodities, such as gold and silver coins, and functions as a semi-scarce unit of exchange (an object passed between buyer and seller). This *semi-scarce, commodity-like nature* allows money to be the only symbol that is bought and sold and which commands interest and dividends in the market. In this way, money promotes competition in the distribution of *scarce resources, one of which is money itself*. It matters not that economists call modern money *fiat*, for symbolic, or that electronic debits and credits are infinitely available. Money — itself a scarce commodity — becomes the missing ingredient between otherwise eager sellers and buyers.

   B) **The Dual Nature of Competition: Economic competition simultaneously promotes and hinders commerce and economic growth.** Moderate competition increases consumer choice, creates jobs, holds down prices and pushes up quality. Extreme competition or what might be termed *proliferation of competitive duplication*, places severe downward pressure on market share, profits and wages. Because employee wages are the single greatest source of consumer purchasing power, there becomes a large and growing gap between business capacity and consumer purchasing power or between what the economy can produce and what consumers can afford to enjoy.

   Unraveling these dualities within money and competition helps us to understand that while dollars may be ideal for managing competition in the distribution of relatively scarce goods and services, they are less than ideal for the distribution of goods and services that are relatively abundant. Because the Information Economy produces an ever-greater abundance of more and more products and services, it behooves us to consider the possible role of a new financial instrument.



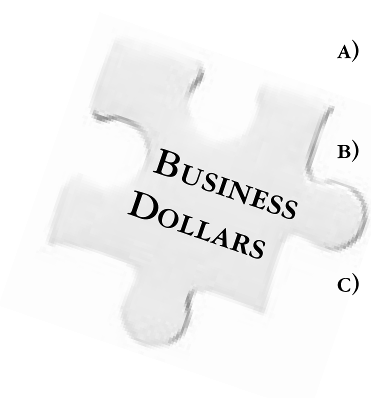
9. **This seeming unmanageability of money and the economy contains the seeds of an entrepreneurial solution. Downward pressure on market share from *proliferation of competitive duplication* produces excess or underutilized business capacity.** It is possible to capture underutilized capacity and use it to back a new financial instrument. Such a financial instrument can increase employee compensation (i.e.; consumer purchasing power) without raising cash labor costs. It would be somewhat akin to giving employees raises and benefits out of currently empty restaurant tables, empty airline seats and empty college desks. It is useful to remember that people do not so much desire money, as they want the things that money can buy. So, instead of downsizing companies to match demand (in available dollars), it makes more sense to increase purchasing power to the level of available capacity — which businesses are already expert at doing whenever cash demand increases.

10. **A new financial instrument, termed *Business Dollars*™ ($\$^B$)™, has been developed to increase the purchasing power of employees and consumers. This is turn improves the sales and profits of retailers and the financial resources of communities.** Similar non-cash instruments, such as frequent flyer miles, are already well received in the market and indicate the commercial potential for a supplemental business currency. While frequent flyer miles are issued primarily as spending perks, so that those with the greatest spending power also enjoy the most perks, *Business Dollars* are designed to promote Sustainable Prosperity and widespread economic security.

11. **Similar to frequent flyer miles or barter dollars, *Business Dollars* are issued and redeemed within a voluntary, cooperative network of businesses.** Under contract, participating businesses agree to sell a portion of their unsold products and services for some combination of dollars and Business Dollars. Each merchants sets their own ratio of US$ to $B, as well as any needed restrictions, similar to "2 for 1" dining offers, senior citizens discounts, dollar movie night and cyber-fares.

12. **To function optimally, *Business Dollars* are designed with *eight distinct features*. They represent *best practices* among noncash financial instruments, transaction settlement systems and commercial networks:**

   a) **$\$^B$ are denominated in dollars** instead of miles, points, products or hours. They are therefore compatible with standard transaction, accounting and retail point-of-sale systems.



   b) **$\$^B$ are linked to dollars and exchanged in a ratio with dollars.** Businesses set their own DualCurrency prices, based upon underutilized capacity and market response. This way, merchants enjoy incremental cash profits while accepting some percentage of *Business Dollars*.

   c) **$\$^B$ are backed contractually by a broad array of products and services from a diversity of merchants.** This is distinct from frequent flyer miles backed only by airline seats or national currencies backed only by government promises. It is also distinct from backing a new currency with dollars, which does nothing to solve the dilemma of scarce dollars.

   d) **$\$^B$ distribute goods and services that are more abundantly available**, while U.S. dollars (or a greater percentage of US$ in the price) limit distribution of goods and services that are relatively scarce.

E) $\$^B$ **are managed cooperatively by a strategic alliance of businesses**, much like the VISA system. This is distinct from third party management such as a barter broker or the Federal Reserve. Such a strategic alliance — utilizing *stakeholder consensus building technologies* — assures that *Business Dollars* best serve the entire array of business stakeholders: investors, employees, consumers, vendors, competitors and communities.

F) $\$^B$ **are electronic**. Processing paper currency, coins, checks, discount coupons, punch cards and the like is inefficient, expensive and predisposed to errors and fraud. DualCurrency Commerce is designed as a simple enhancement to credit cards, debit cards, smart cards and e-commerce with the most sophisticated security systems possible.

G) $\$^B$ **are virtual, purely symbolic and information-based**. *Business Dollars* are purely an accounting tool to better match business capacity with consumer wants and needs. They are neither loaned for interest nor invested for dividends. As an accounting tool, $\$^B$ are ideal to support local, national and even global commerce.

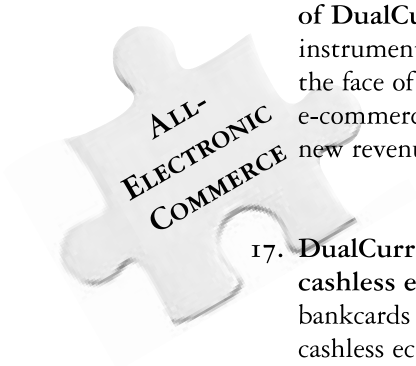
H) $\$^B$ **are community or social capital**. It takes everyone's cooperation to make *Business Dollars* fungible (earned and spent broadly, like dollars). Therefore, underutilized business capacity becomes a shared resource of the entire community. $\$^B$ increase current financial resources — without resorting to tax dollars or philanthropy.

13. **These eight requirements are supported through the patented pricing, accounting and transaction settlement system of DualCurrency Systems (DCS)**. The integration of a universal corporate scrip along side dollars helps to close the gap between underutilized business capacity and the limited purchasing power of many individuals, families and communities. The DualCurrency System matches trends towards all electronic commerce and promotes greater cooperation between all stakeholders in the production and distribution of new wealth.

14. **There are countless uses for *Business Dollars* within a DualCurrency network, just as there are for U.S. dollars.** New purchasing power can reach virtually every customer demographic. Examples include:
    - Employees through employee benefits programs
    - Investors through dividends paid in $\$^B$
    - Retirees through Social Security enhancements
    - Clients of health care systems through incentives for healthy behaviors
    - Community members, corporate employees and students through volunteer incentives

15. **The organizational model that can develop and manage such an enormous undertaking already exists in a variety of complex adaptive systems.** These systems are termed Chaordic (representing a dynamic balance of chaos and order or competition and cooperation) by Dee Hock, founder of VISA International. They are characterized by: decentralized and nonhierarchical management; moral as well as financial drivers; little staffing relative to their size and function; complete disengagement from politics and rivalries between nations; and voluntary, not compulsory, affiliation. Examples include VISA International and the Internet, as well as self-help and mutual aid groups such as the 12 Step program of AA.

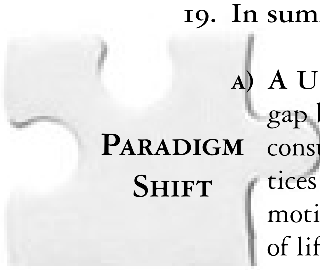
16. **The banking and transaction processing industry can certainly amass the necessary human, technological and financial resources to develop, test and launch a broad array of DualCurrency beta tests and pilots.** Besides establishing credibility for any new financial instrument, these powerful institutions offer established retailer and cardholder networks. In the face of growing competition from non-banking enterprises — including a proliferation of e-commerce and electronic payment intermediaries — the industry is highly motivated to find new revenue streams.



17. **DualCurrency Commerce fits industry trends towards all-electronic exchange and a cashless economy**. Supplemental purchasing power — available only through DualCurrency bankcards or via the Internet — constitutes a significant incentive for almost anyone to join the cashless economy. DualCurrency Commerce reduces transaction costs for retailers, who today must manage cash, checks, coupons and many special promotional programs, most of which would be unnecessary within a DualCurrency network.

18. **The business opportunity of DualCurrency Commerce is virtually limitless.** Businesses the world over seek more customers, while consumers and communities everywhere seek greater economic resources. There is a significant profit motive for developing DualCurrency Commerce, as well as an opportunity to launch many new socially responsible business ventures. Enhancing the profit motive with an altruistic vision is an essential ingredient in balancing competition and cooperation.

19. **In summary, there are four key elements to DualCurrency Commerce:**



a) **A Unique Market Analysis:** In the Information Economy, there is a large and growing gap between the productive capabilities of businesses and the purchasing power of most consumers. Only the perception of scarce resources and a few long-held theories and practices keep society from realizing Sustainable Abundance. Business leadership and the profit motive can rapidly carry us to a new economy with a higher standard of living and quality of life for all people.

b) **A Proprietary Financial Instrument:** *Business Dollars* are a universal corporate marketing scrip and a design tool for sustainable economic development. Similar to frequent flyer miles, but denominated in dollars, $\$^B$ are compatible with popular accounting, transaction and point-of-sale systems. As an accounting tool, and not a scarce commodity-like currency, *Business Dollars* can be utilized in local, national and global commerce.

c) **A Patented Transaction System:** The patented DCS pricing, accounting and transaction settlement system creates a seamless interface between dollars and *Business Dollars*. Instead of creating another alternative or complementary currency, DualCurrency Commerce offers the world's first companion currency that brings a new financial instrument directly into mainstream commerce. The system enhances standard credit cards, debit cards, smart cards and e-commerce, and assures positive cash flow from DualCurrency transactions for retailers, banks and transaction companies.

D) **A DualCurrency Employee Benefits Network:** A DualCurrency Employee Benefits Network (DCNET) is a voluntary association of businesses, employees and consumers that all agree to conduct business in a combination of cash and *Business Dollars*. Within the network, *Business Dollars* increase purchasing power without increasing either cash labor costs or retail prices. DCNET is managed like the VISA system, through representative boards of affected stakeholders. Stakeholder consensus building technologies allow every business stakeholder — owners, employees, customers, vendors, competitors and communities alike — the opportunity to contribute to greater productive efficiencies and to share in the new wealth created.

Discussion points for economists and business leaders emerging from DualCurrency theory.

20. ***Stakeholder Consensus Building Technologies* can bring democratic processes and fresh solutions to economics, eliminating some of the acrimony from political and economic life.** There is no question that, in today's world, money buys power and influence. On the other hand, political protest by small numbers of people who claim to speak for the majority is not much of an alternative. Imagine instead if every stakeholder to an economic issue had the right to a voice and a vote. Imagine if the very plastic card that brings enhanced purchasing power also allows us to express economic preferences between guns and butter or between higher taxes and shorter working hours. Technologies are at our fingertips to help us consider any and every point of view on matters that affect our economic lives.

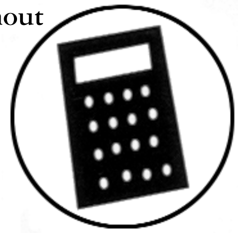
    For example, imagine if Starbucks could poll an entire community about their wants and needs. How empowering might it be if instead of building a twenty-second coffee shop within a three mile radius, consumers could pledge to go the extra mile to the nearest Starbucks in exchange for Starbucks building a new child care center? Impossible? Why? If *Business Dollars* helped Starbucks to recruit and retain the best employees, and if *Business Dollars* rewarded investors, while conserving cash in the company, then why shouldn't Starbucks offer additional resources for community development… something that they already do generously?

2 Imagine if S*takeholder Consensus Building Technologies* helped Wal-Mart and Home Depot to converse with other stakeholders, wherever they open new stores. Imagine *Business Dollar* resources helping to design win-win solutions where win-lose models prevail today. Instead of seeing protests by organized labor and citizens opposed to big-box retailers, creative new approaches could be designed to compliment traditional market forces in order to preserve jobs, respect local traditions, and still deliver the best products and services at the lowest prices to consumers.

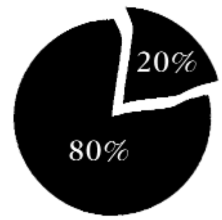
New wealth, produced and distributed through *Business Dollars*, will certainly not solve every social, economic and environmental problem that we face. But, like previous improvements to money, banking and commerce, DualCurrency Commerce can provide additional tools and resources to forge an improved quality of life… and perhaps the kind of society that we delight to live in and that we hope to leave to our children and grandchildren.

A Sample DCNET Transaction

1 The DualCurrency Employee Benefits Network (DCNET) measures excess productive capacity throughout the network.

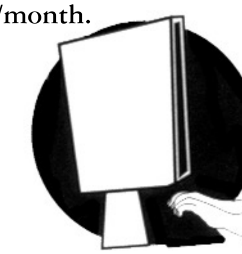


2 DCNET management allocates $4 million in available goods and services for June — 80% to employee member benefits and 20% to community projects.



3 August employee member benefits equal $^{B}8.00 (Business Dollars) per hour for all employee in the DCNET.

4 Jill Jones, a computer programmer, enjoys a boost in her spending power of nearly $^{B}1300/month.



5 Jill buys a $1000 mountain bike from a participating retailer and pays $800 in cash and $^{B}200.

6 Jill gets a monthly DCNET statement showing her $^{B} member benefit and her spending in cash and $^{B}.

EVERYONE BENEFITS

- Employees stretch their cash and enjoy greater purchasing power.
- Employers enjoy better paid, more productive employees.
- Retailers gain additional customers, increased sales and higher profits.
- Banks and transaction vendors increase customers and revenues.
- DCNET profits from transaction fees.

Introduction

The possibility of *Sustainable Abundance* calls into question the long-held theory of "scarce resources and unlimited wants and needs" as a foundation for modern economics and commerce.

THE NEED FOR A FRESH PERSPECTIVE

Science and society advance whenever our perception of the world falls more into line with physical reality. For example, when the theory of a spherical planet replaced that of a flat earth, new doors opened to exploration and global commerce. When doctors came to understand that evil spirits did not cause disease, and that infections and germs could be detected and treated, the field of medicine took a giant leap forward.

In the field of economics, little has been done to reconsider or rethink the foundational theory of "scarce resources and unlimited wants and needs." If indeed the theory has become even a little outdated, then bringing it more into line with reality has profound implications for economics, money, banking and commerce.

The Great Paradox

Money is all that's missing…

Consider, then, the single example of food and world hunger. (Additional examples will be provided.) Food is not inherently a scarce resource. In fact, it is an abundant, renewable resource. There are certainly not unlimited wants and needs for food. The consequences of overeating are obesity, poor health and low self-esteem. In other words, both sides of the accepted equation, "scarce resources" and "unlimited wants and needs" are not in line with reality.

Beyond this observation, a peculiar dilemma confronts economists and business people alike: Agribusiness the world over seeks to sell more food. Individuals, families and communities across the globe are in dire need of food. Logically, there should be a strong profit motive for bringing together buyers and sellers.

If we examine the many factors of production and distribution related to agriculture and food, everything seems to be at hand. On a global scale, there is no shortage of land, seeds, fertilizers, water or sunshine for agricultural production. There appears to be plenty of planting, harvesting, processing and packaging equipment. No one decries an unusual lack of skilled management or labor in the food industry. Food production and distribution companies are not in general at the limits of their productive capacities. There is certainly no lack of communication, transportation or financial infrastructure to support the production and distribution of agricultural and food products. Even under the most difficult political, military or geographic conditions, business has the know-how and the means to drop-ship nearly any product or service to virtually anywhere in the world.

The anomaly, that begs a fresh look at economic theories and tools, is that only money is missing to bring together businesses that seek to sell food with people who wish to buy it. Yet, money was invented to promote commerce, not to inhibit it! Why is money not doing its job? In other words, why is money the master, not the servant, in this situation? Something is not right, if all the needed factors of production are at hand, and only money is missing to promote desired commerce.

Something is not right, if all factors of production are at hand, and only money is missing…

This White Paper is an exploration into new ways of seeing economic reality, economic resources and our economic possibilities. It introduces DualCurrency Commerce as the logical outgrowth of a new economic reality — Sustainable Abundance. It scrutinizes our most cherished financial instrument, the dollar, and suggests ways to increase commerce — sustainably and equitably — through the addition of a new financial instrument. The White Paper also points towards new economic relationships, technologies and institutions that will support the growth and effectiveness of DualCurrency Commerce. It suggests how business leadership and the profit motive can rapidly improve the standard of living and quality of life all across the globe, while dramatically reducing harm to the natural environment.

The White Paper asserts that a universal business scrip[1] — transacted through plastic bankcards and e-commerce — can provide greater purchasing power for consumers, increased profits for businesses, higher transaction revenues for banks and transaction companies, as well as new economic resources for communities. This new scrip is earned and spent in combination with dollars through a patented, DualCurrency pricing, accounting and transaction settlement system. What are proposed are relatively simple enhancements to popular banking and retail practices that offer a profit motive — in dollars — for every DualCurrency transaction.

A central goal of this White Paper is to help business leaders, politicians and economists alike through the seeming confusion between money and wealth. Before the end of the document it may become clear that we have the capacity to solve countless economic problems — from a know-how, a resource, a technological or, even, a sustainability standpoint — we simply don't know how to fund the solutions. For instance, we have the know-how and the resources to provide universal, high quality healthcare. We only lack the funding mechanism. Similarly, we have everything at hand to provide senior citizens with economic security and a high quality of life. We simply do not know how to fund it, without raising taxes or risking their life savings in the stock market. Lastly, as has been pointed out, we have everything at hand to end world hunger. We just do not know how to pay for it.

Few of our social and economic dilemmas stem from a lack of resources, know-how or necessary technologies. They are purely and simply financially rooted. Since the money that we use is our own invention, with a little creativity, it can be improved upon — re-invented — to better serve our needs.

[1] Historically, scrip was a note for monies owed or a private currency redeemable at the company store. Today, scrip often takes the form of business-issued loyalty rewards, such as frequent flyer miles. Scrip is unique as a financial instrument, as it is business issued and backed by goods and services.

THE BIG PICTURE

Each day, the global Information Economy produces more and better goods and services using fewer materials, less energy, less labor and less capital. Logically, this technological and economic progress should produce dramatic, across-the-board improvements in the standard of living and quality of life for individuals, families and communities — combined with ever-shorter hours of work and ever-less detrimental impact of production and distribution on the natural environment. In contrast, it appears that a great many people are working longer and harder, that many communities are in decline and that many nations are in economic crisis. This seeming contradiction begs the question, “To where are the exponential productivity gains of the Information Economy disappearing?”

To where are the exponential productivity gains of the Information Economy disappearing?

Trends in Production

Less Labor
Less Energy
Less Capital
Fewer Materials

Anticipated Economic Outcomes

Higher Standard of Living
Improved Quality of Life
Less Damage to the Environment

Looked at another way, the many factors of production and distribution are continuously improving and expanding: technology; new energy sources; management and labor skill; communication, transportation and distribution infrastructures; banking and transaction processing systems and so forth. At the very same time, the quality of life for individuals, families and communities rides up and down with cycles in the economy or personal successes and failures. Many people with excellent job skills go for lengthy periods of time, unable to secure stable, well-paying employment. Many senior citizens, who worked hard all their lives giving us the benefits that we enjoy today, are not assured a secure retirement. Employers and employees alike are struggling with the high and rising costs of health care. Can we not see that something is amiss when continual improvements in the critical factors of production do not translate into corresponding and sustained economic gains for individuals, families and communities?

ARE WE SETTLING FOR A SECOND-RATE QUALITY OF LIFE IN A MEDIOCRE GLOBAL ECONOMY?

Advances in technology make possible advances in civilization and an improved quality of life for all people. There are profound implications if Sustainable Abundance is truly replacing scarcity as the foundation for economic relationships.

What more is possible if we apply modern technologies to age-old economic dilemmas such as the business cycle, unemployment, poverty, inflation and recession?

Why should millions of people, in the U.S. and around the world, live in daily fear for their economic security? Why doesn’t every advance in technology and productivity lead to an improved quality of life? Why are words such as “idealistic” and “utopian” pejoratives? In an era of rapid

What more is possible if we apply modern technologies to age-old economic dilemmas such as the business cycle, unemployment, poverty, inflation and recession?

technological advances, can we not make the birthright of every child health, safety, quality education and meaningful work? Can we not give every senior citizen a secure retirement? Why, even, would we not trade a small portion of our abundant resources to other nations, in exchange for military disarmament, rejection of terrorist tactics and the possibility of world peace?

MONEY INNOVATIONS THROUGHOUT HISTORY

From time to time, innovations in money emerge which improve upon earlier financial tools and business practices. New forms of money appear for two simple and logical reasons — old money begins to inhibit the growth of commerce, while new technologies make more efficient financial tools both practical and timely.

So it was when the invention of metal smelting led to minting gold and silver coins, moving commerce beyond the limitations of barter. Similarly, the invention of printing led to paper currencies and checks, expanding trade once again. More recently, computers and telecommunications systems have elevated banking and transaction processing light-years beyond what paper transactions and manual accounting procedures once made possible.

Yet, if the dollar were somehow inhibiting commerce, despite the seemingly unlimited scope of electronic banking, it would be prudent to consider innovations in money that new technologies make possible.

If the dollar were somehow inhibiting commerce... it would be prudent to consider innovations in money that new technologies make possible.

MORE GOODS AND SERVICES THAN PURCHASING POWER

As strange as this may seem, we need merely consider the broad array of industries where productive capacity exceeds consumer purchasing power to recognize that commerce is somehow being constrained:

- Most restaurants seek additional customers, while families desire to dine out more often.
- Airlines, hotels, resorts and rental car agencies all over the world often operate at partial capacity, yet large numbers of people long to travel and vacation more.
- Most auto dealerships have large inventories of high quality new and used vehicles. At the same time, many families desire newer, better and safer automobiles.
- Retail stores, department stores, discount stores and factory outlets all endure at least some surplus inventories. While they could generally manage higher sales volume — and while suppliers seek additional orders to fill — countless consumers wish to buy, but cannot afford more of these very products.
- Numerous colleges and universities are cutting back programs and faculties. Yet, individuals, young and old, long for more education, and businesses seek better-educated employees.

The list of industries where business capacity outstrips consumer buying-power goes on and on.

We are so accustomed to the notion that there is not enough money to satisfy all of our wants and needs, that we fail to see these situations as lost business opportunities, wherein many more wants and needs could be met.

It is possible that an additional financial instrument can stretch current financial resources to better distribute goods and services that are now abundantly available. This DualCurrency approach has never been tried… but neither had paper currency before its day.

Understanding Money

DISTINGUISHING MONEY FROM WEALTH

The profit motive has become the indisputable engine of choice to promote economic growth. Profits are about making money. The revenues of a business beyond its expenses equal its profits. Profit is a financial concept, a money concept.

Economics is a tool to improve our standard of living and our quality of life. Money is a tool of economics and commerce. Normally, it is not difficult to keep the tools we use distinct from the products and services that we use the tools to create. On the other hand, it seems almost impossible to keep money and wealth distinct from one another. In both economics and popular culture, making money and creating wealth are seen as two sides of the same coin. But are they really

We inherently know the difference, for although we may long for a high standard of living, we still laugh at the image of a miser who obsessively counts his money. For now, we will put aside the values-based argument about what is more valuable in life: material possessions or intangibles such as love, family, respect, friendships or good health; as well as the debate over whether money can buy happiness, or whether material security and material comforts are a prerequisite to health, happiness and security. Individuals must answer these important questions for themselves. This inquiry is centered instead on the possibility of improving the role of money in the production and distribution of wealth.

For the purpose of this discussion, money will be understood as merely a tool for the efficient production and distribution of needed and desired goods and services. Wealth, on the other hand, will be considered valued goods, services and experiences, as well as the resources — material and human — that create them, e.g.: raw materials and energy; skilled management and labor; technologies and infrastructure. If we distinguish between money and wealth, it becomes clear that our wealth producing resources vastly exceed the purchasing power or money in people's possession. Much of our wealth and potential wealth goes to waste day after day, as we search for money to turn the wheels of commerce. Again, simply observe the countless lost wealth producing opportunities in empty restaurant tables, empty airline seats, empty college desks, empty motel rooms, parked rental cars, off-hours at movies, video stores, health clubs and so forth.

THE DUAL NATURE OF MONEY

Our exploration continues by examining the very nature of money. How well do we really understand its qualities? For the most part, we count it, save it, invest it or spend it. How much time does anyone allot — economist, consumer or businessperson alike — considering improvements to this ancient, yet ever-changing tool called money?

In many ways, money is ubiquitous or omnipresent… like water to a fish or like the very air we breath. We assume that money, as we know it, is the essential ingredient of successful commerce and economic growth. Money certainly is important in commerce, but we shall soon see that it is quite often the only ingredient missing for commerce to take place.

Money, as we know it, has a *dual nature*: On the one hand, money is a universal unit of measure and a tool of accounting. This feature promotes economic cooperation. Money measures the value of everything exchanged in the market, including raw materials, energy, labor, and even the buying and selling of whole businesses, locally, nationally and globally.

On the other hand, money is a scarce unit of exchange that promotes economic competition. In economics, as in life, some situations call for more competition, while others may call for more cooperation. The lines of competition and cooperation are constantly drawn and redrawn. For example, all those who compete for a spot on the basketball team must later cooperate as teammates or they will fail to win games. Similarly, those who may have competed against one another during the regular season must learn to cooperate later in order to win an all-star game or an Olympic team competition.

It is no different in business. While we may compete for jobs at a company, we must cooperate with fellow employees once we are hired, although we may continue to compete for promotions and raises. While departments may compete for budget dollars, they must cooperate so that the company runs smoothly. Even competing companies in a single industry will cooperate to agree upon product specifications and standards, such as 24" wide dishwashers, address protocol on the World Wide Web, or standard-sized spark plugs and tires for automobiles. Competitors also cooperate in industry associations such as the American Manufacturers Association, the American Medical Association or Chambers of Commerce to pass legislation on a national level or to develop and bring an expensive or technologically challenging new product to market. All these examples represent a constructive balance of competition and cooperation.

This White Paper contends that most of our economic woes come from a simple imbalance between competition and cooperation. As we will uncover further along, it is unrealistic for a single tool — in this case the dollar — to simultaneously promote the right amount of competition and the right amount of cooperation for every situation. (Or, for that matter, to distribute goods and services equally well that are scarce and that are plentiful.) As businesses compete over money in the market place, they all too often sacrifice the cooperation needed to maximize the efficient production and distribution of desired goods and services.

THE COMMODITY-LIKE NATURE OF MONEY

Money descended from animals and things, the very things that people needed to survive and thrive such as cows, chickens, tobacco and salt. In earlier economies, we bartered these things. Today we exchange their symbolic representation.

While money is today considered *fiat* or symbolic, in reality it still has some of the commodity-like nature of the scarce material objects that it descended from.

While money is today considered *fiat* or symbolic, in reality it still has some of the commodity-like nature of the scarce material objects that it descended from.

If money was truly symbolic, we could never pass it from buyer to seller. We never hear anyone say, “Pass me an inch, and I’ll measure this piece of cloth,” or “Give me a couple of pounds, and I’ll weigh this fish.” Symbols are community property, like numbers, language and public information. Truly symbolic money would be like information itself, inherently shared by everyone who gives and receives it.

If money were only a symbol — a tool for measuring and recording transactions — like an inch, a gallon, an hour or the number ten, then it could never be loaned for interest nor invested for dividends. It would seem absurd if someone said to us, “Please lend me an hour, and I’ll pay you back an hour and ten minutes.” It is not money the tool of measure and accounting that is loaned and invested, but money the semi-scarce unit of exchange.

Money, Competition

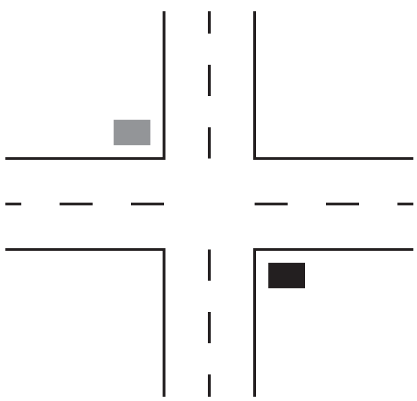
AND IMPROVEMENTS TO MARKET EFFICIENCY

THE SOURCE OF THE ANOMALY

To grasp why consumer purchasing power consistently lags behind the productive capacity and productivity gains of business, we must observe the everyday workings of the market with fresh eyes. In particular, we must appreciate the contradictory — positive and negative — effects of economic competition in business and community life.

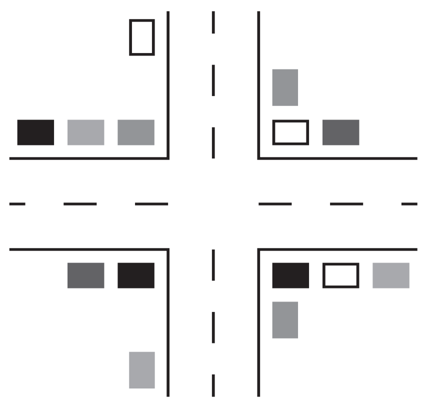
It is generally agreed that there are many benefits to economic competition. Competition rewards hard work, risk and innovation. These in turn promote job creation. For consumers, economic competition affords greater selection, lower prices, improved quality and better service. From these benefits flow a higher standard of living and quality of life for most citizens. Economic growth from competition seems to provide a strong tax base with which government can address additional community needs.

Moderate Competition



Economic competition produces many benefits for businesses, consumers and communities.

Extreme Competition



Enormous wealth is wasted as extreme competition creates severe downward pressure on market share, profits and wages.

CAN THERE BE TOO MUCH OF A GOOD THING?

Over time, industries mature and innovations are copied. There comes a point at which many businesses offer the same or similar products. On the one hand, there is a growing abundance of available products and services as any given industry expands.

On the other hand, this is the very point at which the drawbacks of economic competition begin to rival the benefits. These drawbacks include: declining market share, falling profit margins and stagnant wage levels; corporate downsizing and lay-offs; business failures and sometimes the decline of entire communities. We even witness market saturation, economic instability and deterioration in the powerful economies of developed nations such as Japan, Germany and the United States.

Stated another way, in mature industries, the battle between companies for sales and market share erodes business profits and puts downward pressure on the wages that employers pay employees. Since wages are the single most important source of consumer purchasing power, there is always a creative tension (or, perhaps, more appropriately a destructive tension) between the growth of companies and overall industry capacity on the one hand and what size piece of the pie employees, who are consumers away from the job, can afford to enjoy.

> **Downward pressure on market share and profits… which translates directly into unwarranted restrictions on consumer purchasing power.**

Thus, competitive economic growth and new job creation places simultaneous downward pressure on the market share and profits of businesses, as well as on the wages of employees which translates directly into unwarranted restrictions on employee/consumer purchasing power.

These restrictions in purchasing power, in turn, lead to further downward pressure on business sales and profits, and even further downward pressure on employee compensation. "Consumer confidence" is often blamed for poor performance in the economy and this downward spiral in purchasing power, as if the needs and desires of individuals and families rise and fall like psychological mood swings. Economists often call for holding the line on wages, so that companies can show greater productivity, gain a competitive edge and thereby increase business profits and economic growth. This is right where much of the confusion and blame which characterizes Economics and gives it the name, "the dismal science," originates.

It is here that we can begin to unravel the barrier, in traditional economic thought, to an ever-improving standard of living and quality of life, when all the other factors of production and distribution are improving. When wage levels and consumer spending power are held down by extreme competition, the standard of living for individuals, families and communities does not keep pace with advances in technology and business productivity. Even the best-intentioned corporate management cannot aggressively improve employee compensation, for fear of becoming uncompetitive in the market.

A CONCRETE EXAMPLE

We will use restaurants as just one example of this business capacity—purchasing power gap, which is observable today in most industries.

A nice variety of restaurants within any community certainly provide consumers with selection, convenience and competitive pricing. What happens, though, when there is a proliferation of restaurants? It is not uncommon in any large metropolitan area for consumers to have easy access to: several competing hamburger restaurants; even more pizza shops; numerous ethnic restaurants; a large variety of fast food and fine dining choices; bars and employee cafeterias offering food; as well as countless specialty shops offering coffees, bagels, desserts and more. Beyond all this, nearly every hotel or motel has at least one restaurant, food vending machines are popping up everywhere and many grocery stores now feature sandwich counters, salad bars, and even sit down restaurants. The selection and total productive capacity of just this one industry alone boggles the mind. How does this enormous growth of overall productive capacity impact communities?

Do we see a commensurate rise in overall purchasing power based upon the increase in available goods and services? Do we see ever-improving employee compensation—multiplied by all of the industries that are proliferating today?[2] Clearly not! Except for those individuals who hold down two and three jobs or who achieve exceptional success in their careers, this overall economic growth does not translate into commensurate improvements in the general standard of living. In fact, under some economic conditions, many members of the community, such as senior citizens or the unemployed, are coldly told to "tighten their belts."

[2] Merely consider the growth in most sections of the Yellow Pages phone book year after year! Unfortunately, we have little notion of our total productive capacity, because economists focus on sales volume (i.e. dollar transactions) and not total capacity or underutilized capacity.

We fail to grasp the large and growing gap between how good our lives are now and how much better they might be.

We accept this sad state of affairs as "just how the economy works." We fail to grasp the large and growing gap between how good our lives are now versus how much better they might be.

As a community, we could celebrate the opening of each new business as a welcomed improvement to our overall productive capability, standard of living and quality of life. Yet, we do not do this, because, to date, we have had no way to address the simultaneous downward pressure of each new business opening on the wages of employees and the purchasing power of consumers.

This understanding is not foreign to economists. Industry and product cycles, mature industries with lower profit rates and lower return on investment, as well as market saturation are all clearly understood phenomena in business and economics.

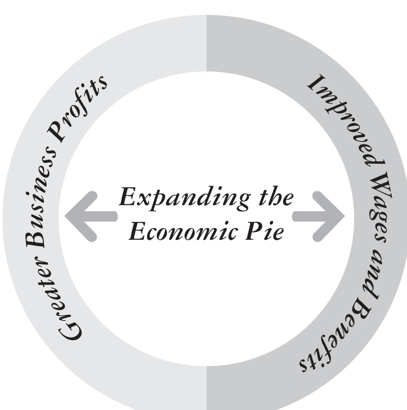
Even government programs and nonprofit services can add to proliferation of *competitive duplication*. This happens in two ways:

A) Sometimes programs add directly to the competition for dollars in a given industry, as in government or nonprofit community centers or gyms competing with private sector health clubs.

B) There can also be proliferation of government agencoes or nonprofit organizations. Merely observe the large and growing sections in the phone book for these two catagories.

What is missing—because current economics fails to distinguish between wealth or wealth producing capacity and money—is a sense of the anomaly, when we have businesses downsizing and failing, side by side with unmet wants and needs for the very products and services that those businesses seek to sell. What should be the setting for continued economic expansion and growing prosperity becomes, instead, a missed business opportunity. Where government and not-for-profit efforts seek to help people by providing a social safety net, the answer lies simply in the production and distribution of more goods and services by the business community.

Beyond the Zero Sum Game



THE APPEARANCE OF A ZERO SUM GAME

Despite overall growth in any industry or even in the economy as a whole, every business continues to face the hazard of downward pressure on market share, profits and wages. Viewed from this vantage point, there appears to be a zero sum game where wage increases and improved benefits to employees seems to come at the expense of business profits and investor dividends. Likewise, benefits to managers and investors seem to come at the expense of employees. Thus, we see the economic roots of the historical clash between labor and capital.

What we will explore in the next section is a way to grow the economic pie for everyone, which opens the door to an unprecedented level of labor-management cooperation.

Whereas traditional economics and commerce is inclined to downsize business capacity to match existing consumer purchasing power, DualCurrency Commerce shows how to raise consumer purchasing power to match existing business capacity—right up to the level of Sustainable Prosperity.

AN ENTREPRENEURIAL SOLUTION

Proliferation of competitive duplication, as described above, results in significant underutilized business capacity. Under these circumstances, businesses everywhere can produce more goods and services than willing consumers can afford to buy. The subsequent downsizing is euphemistically called "rightsizing." The response to this situation has generally been unemployment insurance for those laid off, efforts at retraining people for other jobs, as well as some additional government and nonprofit services for those in need. There has been little thinking on how we might capture underutilized business capacity to address unmet consumer and community needs. What is technologically feasible, for the first time, is to capture the value of this wasted wealth with a supplemental business scrip. We would then have a tool to pay people for work that is needed but not currently funded or to raise employee compensation, when traditional dollar resources are insufficient or unavailable.

A noncash financial instrument can improve employee compensation without increasing cash labor costs. Improved employee compensation translates into greater consumer purchasing power. Greater consumer purchasing power means increased production and sales. Stable cash labor costs relative to increased production and sales is the very definition of enhanced productivity. DualCurrency Commerce is designed to increase business productivity while simultaneously improving employee compensation. This is a very different solution to the productivity issue than downsizing, layoffs and employee giveback contracts.

A noncash financial instrument can improve employee compensation without increasing cash labor costs.

As previously observed, a supplemental financial instrument, can help to distribute goods and services that are more abundantly available, while the dollar continues to distribute goods and services that are in relatively scarce supply.[3] When the new financial instrument is combined with dollars into a single DualCurrency transaction, then redeeming it becomes a way to increase sales and cash profits for businesses that accept it. This upward, win-win economic trend can expand commerce to the current limits of excess business capacity and beyond.

UPDATING THE LAW OF SUPPLY AND DEMAND

This White Paper distinguishes between wealth and money. That means it distinguishes between the goods and services, which the current rules of money permit us to produce, versus our true productive capacity, which could produce far greater wealth given new tools with new rules.

In a market economy, *Supply and Demand* determines prices. DualCurrency pricing is likewise based upon *supply and demand*. But DualCurrency Economics also recognizes that:

A) Available business capacity, without money or purchasing power, does not constitute *Supply*.

B) The unmet needs of individuals, families and communities without money or purchasing power does not constitute *Demand*.

Again, we observe the dilemma of economics where money is the master and not the servant. Businesses stand ready to produce and sell the very products and services that consumers wish to buy. Only money is missing to bring willing buyers and willing sellers together.

[3] The market will likely set prices for any product or service — plentiful or scarce — in relative ratios of dollars to a new financial instrument.

Balancing Competition and Cooperation

To function optimally, *Business Dollars* are designed with *eight distinct features*. These characteristics reflect *best practices* from among noncash financial instruments, transaction settlement systems and commercial networks:

A) **^{B} are denominated in dollars** instead of miles, points, products or hours. They are therefore compatible with standard transaction, accounting and retail point-of-sale systems.

B) **^{B} are linked to dollars and exchanged in a ratio with dollars.** Businesses set their own DualCurrency prices, based upon underutilized capacity and market response. This way, merchants enjoy incremental cash profits while accepting some percentage of *Business Dollars*.

C) **^{B} are backed contractually by a broad array of products and services from a diversity of merchants.** This is distinct from frequent flyer miles backed only by airline seats or national currencies backed only by government promises. It is also distinct from backing a new currency with dollars, which does nothing to solve the dilemma of scarce dollars.

D) **^{B} distribute goods and services that are more abundantly available**, while U.S. dollars (or a greater percentage of US$ in the price) limit distribution of goods and services that are relatively scarce.

If your only tool is a hammer, every problem looks like a nail.
— Abraham Maslow

INTRODUCING DUALCURRENCY COMMERCE

An innovative application of banking and transaction technologies has been devised to bridge the gap between underutilized business capacity and the limited financial resources of many consumers and communities. The new form of exchange is called DualCurrency Commerce (DCC). The simple premise behind DCC is that our current dollar resources can be stretched or supplemented using a non-dollar medium of exchange.

As the name suggests, DualCurrency transactions are priced and settled in two mediums of exchange simultaneously. For example:

- A $30 meal might cost $15 in cash and $15 in a second currency.
- A $10 pass to the YMCA might cost $3 in cash and $7 in a second currency.
- A $500 plane ticket might cost $255 cash and $225 in a second currency.

THE IDEAL FINANCIAL INSTRUMENT TO SUPPLEMENT DOLLARS

The use of non-cash incentives has been well received in the airlines industry, as the worldwide growth of frequent flyer awards documents. DualCurrency Commerce stands on the shoulders of such programs with several noteworthy improvements. One of the most significant innovations is that DualCurrency Commerce goes far beyond rewards just for spending or utilizing a specific credit card. Many if not most people understand that rewards for spending are just deferred discounts. Instead of getting *20% Off* on each of 5 airline tickets, frequent flyer miles tease customers to *Buy 5 and get 1 Free*.

Are there not other valuable behaviors—besides spending—that merit additional recognition and reward. These might include the everyday work of ordinary employees, which produces the wealth that we currently enjoy. Other examples might include incentives for volunteering in communities, mentoring young people, cleaning up the environment or investing in green businesses, raising children, improving attendance and grades in school, or health and wellness improvements such as losing weight, quitting smoking, increasing exercise and following doctors' orders. Many of these activities have significant economic impacts in workplaces, schools and communities.

It also makes sense to consider that noncash rewards for spending merely give those with the most dollars to spend the most additional noncash rewards. DualCurrency pricing, accounting and transaction settlement systems can certainly improve efficiency and liquidity in redeeming frequent flyer miles. But rewards for spending, like any form of discounting and marketing, do nothing to close the business capacity-purchasing power gap described earlier in this White Paper.

WHAT ARE BUSINESS DOLLARS?

Dee Hock, the renowned Founder of VISA International, uses a special kind of question to tee up design work on challenging or ambitious project. Applied to the issue of a new financial instrument, this question is paraphrased as follows:

> **"If anything imaginable is possible, if there are no constraints whatever, what would be the nature of an ideal financial instrument to improve market efficiencies and promote sustainable commerce?"**

A well-managed second currency can expand trade and commerce — without causing inflation — much the way that paper currency originally augmented gold coins. *Business Dollars*™ are introduced here as one such medium of exchange. *Business Dollars* ($\$^{B}$™) are a *business-issued scrip*, a form of business-community capital that follows different rules than traditional, government-issued currencies. *Business Dollars* are used to capture and distribute currently wasted wealth, such as empty restaurant tables, empty airline seats, empty college desks, off-hours at the movies, excess retail inventory and so forth.

WHAT IS THE PATENTED DUALCURRENCY PRICING, ACCOUNTING AND TRANSACTION SETTLEMENT SYSTEM?

Technologically simple, DualCurrency Pricing, Accounting and Transaction Settlement facilitates efficient transaction processing in two separate financial instrument, dollars and any second currency. Examples include barter dollars, service credits, frequent flyer miles and the proprietary DCS currency, *Business Dollars*. The system enhances banking and transaction products such as credit cards, debit cards and smart cards. It is also used for e-commerce on the Internet. A technological "enhancement" means that, with only modest modification and expense, transaction companies and banks can turn the very plastic cards that consumers already use into *DualCurrency earning and spending cards*. The DualCurrency system also utilizes standard retail point of sale (POS) terminals. It can therefore help to reduce the inconvenience and expense for consumers and merchants of cash, checks, discount coupons, punch cards and other marketing programs. The entire transaction process is automated and hassle-free — simply swipe and sign a standard transaction receipt. The patented DualCurrency technology verifies account balances and approves transactions. It also credits cardholder accounts with earnings and debits accounts for expenditures in both dollars and *Business Dollars*.

E) **$\$^{B}$ are managed cooperatively by a strategic alliance of businesses**, much like the VISA system. This is distinct from third party management such as a barter broker or the Federal Reserve. Such a strategic alliance — utilizing *stakeholder consensus building technologies* — assures that *Business Dollars* best serve the entire array of business stakeholders: investors, employees, consumers, vendors, competitors and communities.

F) **$\$^{B}$ are electronic**. Processing paper currency, coins, checks, discount coupons, punch cards and the like is inefficient, expensive and predisposed to errors and fraud. DualCurrency Commerce is designed as a simple enhancement to credit cards, debit cards, smart cards and e-commerce with the most sophisticated security systems possible.

G) **$\$^{B}$ are virtual, purely symbolic and information-based**. *Business Dollars* are purely an accounting tool to better match business capacity with consumer wants and needs. They are neither loaned for interest nor invested for dividends. As an accounting tool, $\$^{B}$ are ideal to support local, national and even global commerce.

H) **$\$^{B}$ are community or social capital**. It takes everyone's cooperation to make *Business Dollars* fungible (earned and spent broadly, like dollars). Therefore, underutilized business capacity becomes a shared resource of the entire community. $\$^{B}$ increase current financial resources — without resorting to tax dollars or philanthropy.

DISTRIBUTING *BUSINESS DOLLARS*

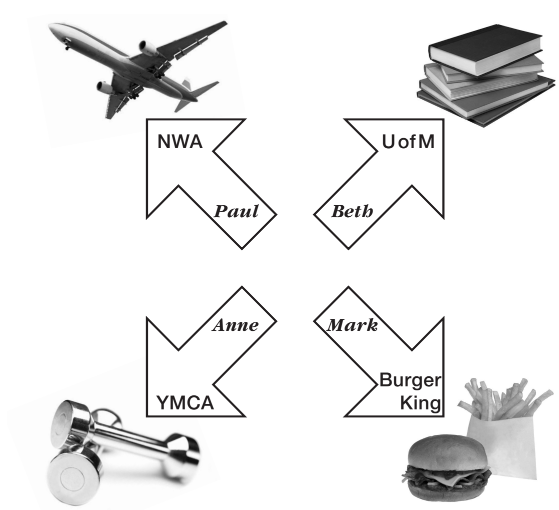
There are many ways that *Business Dollars* can enter the economy and supplement dollars. Private sector examples include employee benefits, investor dividends, minimum wage subsidies and customer loyalty awards. Public sector approaches might include supplements to social security or food stamps, tuition assistance and tax rebates. Philanthropic uses of a second currency might include volunteer incentives, artists' subsidies, single parent assistance and foundation grants. Lastly, there may be ways that additional spending power could be used to promote desired changes in behavioral such as improved academic performance, recycling, carpooling or regular check-ups at the dentist.

For several reasons, this White Paper highlights the use of *Business Dollars* as an employee benefits tool in a DualCurrency Employee Benefits Network. First, most wealth today is produced by businesses and their employees. Second, businesses in almost every industry experience employee recruitment and retention as a significant challenge. Third, demonstrating improved employee compensation, without increasing cash labor costs or taking money away from owners and investors, reveals a win-win approach to employer-employee relations and a new paradigm for economics and commerce. Lastly, employee benefits such as flights for airlines employees, tuition for university employees, meals for restaurant employees and memberships for athletic club employees are not currently taxed. It would be advantageous in the early development of DualCurrency Commerce not to penalize early adopters with the burden of paying taxes on *Business Dollars* in U.S. dollars (more on this issue below).

TRADITIONAL EMPLOYEE BENEFITS

Employee discounts are an established method of marketing excess capacity, as well as a valuable perk at many different jobs. Airlines employees enjoy free or discounted flights. Restaurant employees enjoy free or discounted meals. University employees often take free classes, while employees at athletic clubs take advantage of free memberships. In every case, whether a private sector business, a government agency or a nonprofit organization, employers know how to use their excess capacity as a perk or an incentive for their own employees.

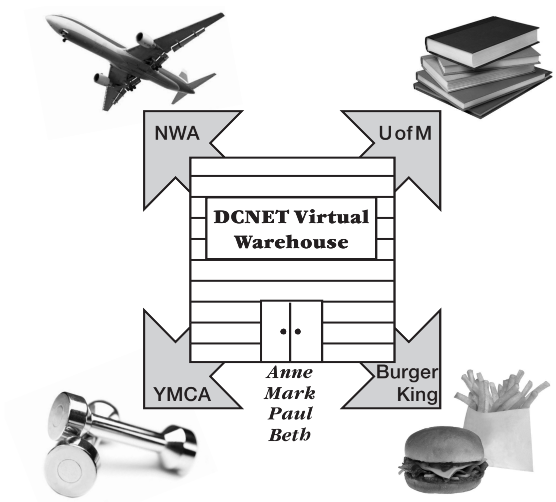
Traditional Employee Benefits



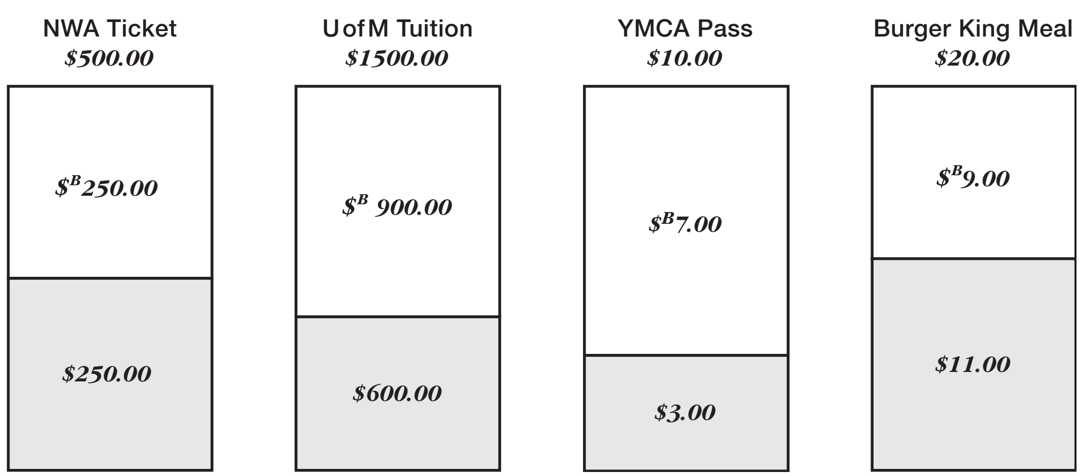
INTRODUCING DCNET

Many if not most businesses have far more capacity than all of their cash customers and all of their employees combined can purchase. This underutilized capacity can be marketed through a DualCurrency network at a profit for participating businesses. Through a DualCurrency Employee Benefits Network (DCNET), the employees of every participating business benefit from the excess capacity of all participating businesses. Underutilized productive capacity becomes a shared resource of the entire DualCurrency network and beyond the network to the entire community.

DUALCURRENCY EMPLOYEE BENEFITS NETWORK



In a previous section, we examined the pricing mechanism in a DualCurrency Network. It reflects the traditional law of "Supply and Demand," enhanced by the inclusion of *Business Dollars* as new consumer purchasing power. Under contractual agreement, merchants determine the U.S. dollar portion of the price based upon their incremental cash cost of production and tack on an incremental cash profit. They next price the balance of a product or service in *Business Dollars*, up to its normal price (not a special list price, nor a special promotional price, just the price that everyday cash customers pay, but in a combination of dollars and business dollars). Here are four examples of DualCurrency prices from the private, public and nonprofit economic sectors:



• Businesses shown are examples only. No endorsement or participation is claimed or implied.

A SAMPLE SCENARIO

Imagine yourself a restaurant owner who has chosen to participate in the DualCurrency Employee Benefits Network. With the help of a DCNET representative, you explain to your employees the benefits that they will enjoy from your DCNET affiliation. You also note that there will be new customers arriving who will pay for their meals using DualCurrency plastic buying cards that utilize your same POS terminal as traditional credit and debit cards.

As a business owner, you determine an enticing — yet profitable — ratio of cash to *Business Dollars* at which to offer meals. You decide that your cost plus 15% cash profit would provide valuable cash flow to your company and to your bottom line. You calculate your incremental cost of sales during slow periods to be 25% for food, 5% for labor and 5% for energy use, combined with wear and tear on capital equipment. Adding this 35% for incremental costs to 15%, your incremental profit goal, means that you must receive 50% of the bill in dollars for your participation in DCNET to be financially worthwhile.

To this 50%, DCNET adds 5% (of the bill) in dollars to cover transaction system costs and a profit for DCNET. This means that DualCurrency prices at your restaurant are 55% cash and 45% *Business Dollars*. You also determine any limitations on times at which you will accept $\$^B$, such as "No Weekends" and guidelines such as "tips should be 15% or more and must be paid in cash." These rules are similar to the rules that today govern senior citizens discounts and "2 for 1" dining coupons.

Your DCNET representative helps you to design a promotional campaign aimed at DualCurrency cardholders. From the start, you enjoy an influx of new customers and an incremental cash profit with every DCNET sale. Your business receives DualCurrency statements from your current transaction processor — Visa, MasterCard, etc. — and participating employees receive a monthly statement from DCNET showing *Business Dollar* member benefits credited to their accounts and expenditures debited. You distribute your cash revenues in the traditional way — towards materials, labor, overhead and profit.

DCNET distributes *Business Dollars* directly to you and your employees as member benefits.

The DualCurrency Employee Benefits Network distributes *Business Dollars* directly to you and your employees as member benefits. While different DualCurrency Employee Benefit Networks may operate by somewhat different rules, the one in this example gives each employee an equal member benefit of $\$^B$350.00 per month, prorated for a forty hour work-week. The member benefit is based upon the total volume of underutilized capacity in the business community divided by the number of participating employees in the network. As the system matures, monthly *Business Dollar* member benefits rise, as does the number of participating merchants.

When your restaurant *redeems Business Dollars*, they are retired or taken off the books by DCNET, the same way that frequent flyer miles are taken off the books when redeemed.

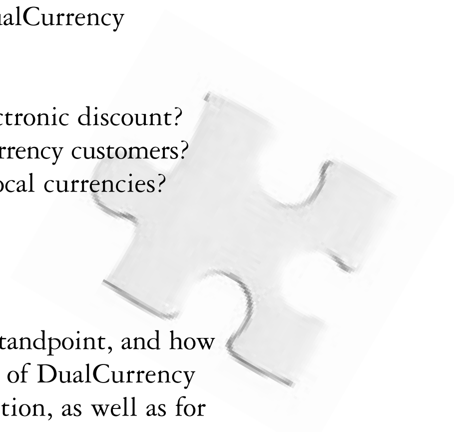
Employees that currently earn \$8.00 per hour now earn an extra $\$^B$2.00 per hour for a total of \$10.00 per hour effective purchasing power. There is no charge to the business owner for this employee benefit. *Business Dollars* come from the pooled excess capacity of all the participating businesses. Transaction fees cover cash system costs.

When you and your employees go to spend your $\$^B$, here is what you find: An evening at the movies costs \$2 cash and $\$^B$5 for tickets, while refreshments cost half cash-half $\$^B$. A \$100 bag of groceries costs \$90 cash and $\$^B$10. A flight from Minneapolis to New York City costs \$200 cash and $\$^B$150. Two thousand dollars in tuition and books for a semester of college is available at a voluntary slidingscale rate, ranging from $500 cash and $\$^{B}$1500 to $1800 cash and $\$^{B}$200, helping those with fewer cash resources to pay for tuition and books using more *Business Dollars*.

FOUR COMMONLY ASKED QUESTIONS

These four commonly asked questions are important issues in understanding DualCurrency Commerce and how it differs from other new money initiatives:

- What will the IRS say?
- How are *Business Dollars* a new financial instrument and not merely an electronic discount?
- Do merchants risk having full-cash customers turn into partial-cash, DualCurrency customers?
- Why don't *Business Dollars* circulate like U.S. dollars, barter dollars and local currencies?



WHAT WILL THE IRS SAY?

We can only speculate upon how *Business Dollars* will be treated from a taxation standpoint, and how various IRS rulings might help or hinder the development, testing and growth of DualCurrency Commerce. There are already tax regulations for many kinds of non-cash transaction, as well as for different types of employee benefits. None of these apply directly to $\$^{B}$.

Barter dollars and circulating local currencies are considered commercial in nature and are therefore taxable, with taxes due in U.S. dollars. $\$^{B}$ are not a barter dollars or a local currencies. They do not circulate from business to business or from consumers to businesses and then back into circulation. As described earlier, they are an accounting tool, or virtual currency, for measuring and helping to distribute underutilized business capacity. Like frequent flyer miles and other forms of discounts, which are not taxed, they are issued, redeemed and then are taken off the books.

Employee benefits such as free flights for airlines employees or free tuition for university employees are also not taxed. Employing this precedent, then *Business Dollars*, which are distributed and redeemed within a DualCurrency Employee Benefits Network, as a universal employee benefit, should also not be taxed. Other forms of discounting, such as coupons (which, too, are issued, redeemed and then disappear) and marketing promotions such as senior citizens discounts, dollar movie night, cyber-fares and "2 for 1" dining are not taxable events. In all of these cases, the IRS is only concerned with the dollars taken in by a merchant, not by the promotional offer that got customers in the door.

There are tax precedents for noncash currencies such as Time Dollars and Community Service Credits, which circulate within not-for-profit community development networks. These transactions have been determined to be noncommercial in nature and non-taxable. In many ways, all the uses for DualCurrency Commerce and $\$^{B}$ are similarly related to business and community betterment, in other words to the common good.

Each DualCurrency transaction has a dollar component, which should be considered commercial and taxed accordingly. But, each also has a non-dollar component, which represents the accounting of previously wasted business-community wealth. For this reason, while businesses enjoy new cash profits, participants who have traditionally had the least spending power may find the most benefit. The "last" may indeed be the "first," and without resort to tax funded government programs or redistribution of wealth schemes.

Perhaps the most advantageous approach for local, state and federal governments to take would be to simply support the free development of DualCurrency Commerce, without putting the burden on early adopters of owing taxes due in U.S. dollars on Business Dollar earning and spending. There are numerous ways that Business Dollars can directly subsidize government programs, without participants needing to pay taxes in cash; from supplements to social security and retraining of displaced workers to empowering true welfare reform and funding a Twenty-first Century Peace Corps. If, in the final analysis, the Business Dollar side of a DualCurrency transaction is determined to be taxable, then an electronic tracking system is already in place. A percentage of the dollars in each transaction can be set aside to satisfy the IRS.

HOW ARE ***BUSINESS DOLLARS*** A NEW FINANCIAL INSTRUMENT AND NOT MERELY AN ELECTRONIC DISCOUNT?

A common fear with promotional programs that involve coupons, frequent flyer miles or discounts of any kind is the potential disruption of a company's already beleaguered cash flow.

The difference between Business Dollars and simple discounts has been difficult for most people to grasp. This has mostly to do with seeing things through our habitual lens or paradigm. If we are used to thinking merely in terms of one currency, then any time that a merchant accepts less of that currency, it appears to be a discount.

A useful analogy in grappling with this distinction is the emergence of paper currency, at a time when precious metals and tradable goods and services served as money. Even though early paper currency was a little suspect in value, and perhaps not as desirable as goods or gold, it was nevertheless not a discount against the price of an item calculated in gold coins. It was the first halting exploration into what would become one of the most powerful financial instruments in history. It is potentially the same with *Business Dollars*. It may appear to early adopters of DualCurrency Commerce that merchants are "just offering a discount, like they always do," and that "Business Dollars have no value, because the merchant doesn't even keep them."

But, Business Dollars are as real as any money ever invented or conceived. They are contractually backed by the promise of participating merchants to redeem them in a specific ratio with U.S. dollars (that ratio set by the merchant). This means that a virtual warehouse of underutilized business capacity backs *Business Dollars*. Perhaps the definition of a "hard currency" should really be one that is backed by the promise of goods and services offered by businesses, rather than a currency backed only by a limited supply of gold or by government promises to issue more money.

There is also a dual nature to discounting, much the way that there is a dual nature to money and competition. While discounting does put extra purchasing power into the hands of consumers and stretches their dollars, this positive feature of discounts is more than offset by the general downward pressure of economic competition on market share, profits and wages. There is a distinct limit to how much prices can fall, before the production and sale of a product or service becomes unprofitable. So, while productivity is dramatically increasing day after day in the Information Economy, the falling of prices only partially keeps pace. And for those who are downsized out of jobs, discounts are not of much value. After all, it takes money to take advantage of discounts.

We are amused by the person who announces that they saved $100 while shopping… timidly acknowledging that they spent $400 to do it.

We are amused by the person who announces that they saved $100 while shopping… timidly acknowledging that they spent $400 to do it. The truth is that discounts are an aspect of spending money. Simply spending the same limited purchasing power will never solve the problem of limited consumer purchasing power.

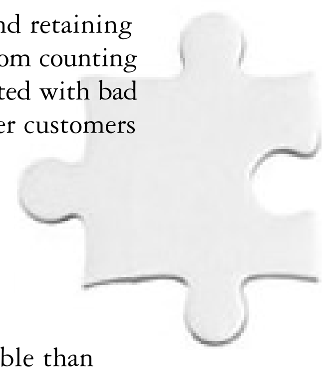
As well, discounting is central to the current competitive game. Discounts contribute to the downward pressure on market share, profits and wage as described above. When merchants discount, they simply have fewer dollars to pay their employees, and so employee/consumer purchasing power declines. The crushing downward economic pressure to survive in today's economy leads to holding steady or even forcing down the wages of employees, as well as vendor costs. In sharp contrast with this dilemma of traditional discounting, *Business Dollars* can put new purchasing power into the hands of employees, managers, owners and investors, as well as into the hands of the same group of stakeholders associated with a business's vendors. Therfore *Business Dollars* are a tool that fosters good will and cooperation between all business stakeholders alike.

DO MERCHANTS RISK HAVING FULL-CASH CUSTOMERS TURN INTO PARTIAL-CASH, DUALCURRENCY CUSTOMERS?

In today's competitive business environment, there are always risks with every sale, special offer or promotional program that businesses will take in less cash per item sold, while hoping to make up the difference in volume. In other words, the trend in commerce is for more and more customers to find the lowest available prices (especially by searching the Internet). This trend cannot be blamed on DualCurrency Commerce, now or in the future. Such downward pressure on prices and cash flow is likely to continue, for as long as unbridled competition remains the standard mode of operation in business.

On the other hand, DualCurrency Commerce has several distinct advantages over traditional discounting that help to counteract the dangers of disrupted cash flow for participating merchants. First, while discounts reduce cash income that turns into employee wages and benefits or profits to owners, *Business Dollars* provide an alternative form of purchasing power in place of any that is lost. Second, while lost revenues traditionally send shock waves throughout an entire network of interdependent merchants and vendors, *Business Dollars* again provide alternative resources that create stability and upward momentum among all the related parties. Third, discounting generally costs additional cash for advertising to make the special offers known. A DualCurrency Network drives additional business to participating merchants, while lowering the cost of acquiring and retaining customers. The DualCurrency system also cuts transaction processing expenses derived from counting currency, coins and checks; from paper accounting practices and from fraud losses associated with bad checks. Lastly, similar restrictions and redemption guidelines are used, that already steer customers towards excess capacity specials sold at lower cash prices. Examples include:

- No Friday or Saturday nights
- Only available on the Internet
- Limit one per customer
- One free with one paid
- New members only
- Not good with other special offers
- Off-season special
- Available between 4:00 – 6:00 p.m.



If one day, *Business Dollars* are as fungible as U.S. dollars — and hopefully more fungible than frequent flyer miles — then most such restrictions will disappear, because the two financial instruments will be interchangeable. And why not? When new money solves the economic problems that its predecessor could not, eventually it climbs to the top of the wallet or purse as the preferred currency. This is true, whether we are discussing the convenience and versatility of paper money over gold, or the many advantages of electronic commerce over paper.

WHY DON'T *BUSINESS DOLLARS* CIRCULATE LIKE U.S. DOLLARS, BARTER DOLLARS AND LOCAL CURRENCIES?

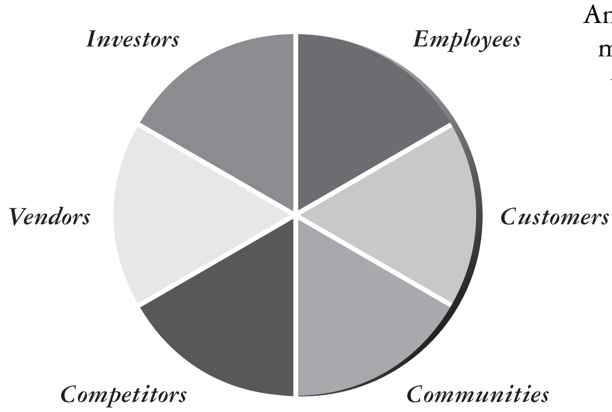
I have regularly encountered the argument that if they do not circulate, then they cannot really be money. *Business Dollars*, if they do not circulate, must only be a discount, a coupon, an accounting tool, perhaps, but certainly not money. If they are earned, spent and then taken off the books, the poor merchants who have accepted these *Business Dollars* have been deprived of the opportunity to invest or spend the currency for themselves.

This is just one more example of thinking that current practices represent all that has ever been and all that will ever be. As has been pointed out earlier, the entire history of money is one of constant evolution and change, based on the needs of the economy and the level of technology at hand. At the dawn of paper currency, there were likely many who argued that, if it isn't a thing of value, then it shouldn't be traded and cannot be money." Maybe gold, silver, cows and chickens were reliable as money, but certainly not worthless little pieces of paper. In the transition from paper currency and checks to electronic banking, the argument could certainly be heard—and for some remains no doubt still real—that "If you can't see it and touch it, it can't be money." Well, invisible electronic debits and credits have certainly overtaken paper currency as the "coin of the realm."

What makes something money is very simple. It must be a reliable tool to increase economic cooperation and to expand the volume of goods and services produced and distributed? If so, it is a form of money. Even more simply put,

If employees accept it and spend it as consumers…
if businesses redeem it for their products and services…
then it is money.

DUALCURRENCY STAKEHOLDES



Building greater collaboration and efficiency through stakeholder consensus-building technology.

DECISION MAKING IN DCNET

An organizational model that can develop and manage such an enormous undertaking already exists in a variety of complex adaptive systems. These systems are termed Chaordic by Dee Hock. Chaordic comes from Chaos and Order and represents a dynamic balance of competition and cooperation; individuality and common purpose; structural durability and freedom to change. They are generally characterized by: decentralized and nonhierarchical management; moral as well as financial drivers; little staffing relative to their size and function; nearly complete disengagement from politics and from rivalries between nations; and voluntary, not compulsory, affiliation. Highly successful examples of Chaordic organizations include a business model in VISA International, a high-tech model in the Internet and a mutual aid or person-to-person model in the 12 Step program of Alcoholics Anonymous (AA).

The DualCurrency Employee Benefits Network combines the best features and best practices of all three chaordic models. For example, VISA is cooperatively owned and managed by its member banks, which set policies and control operations through representative boards. Within the framework of VISA regulations, individual banks control their own portfolios of cardholders. DCNET is a similar cooperative association, only made up of retailers, employers and employees, as well as banks and transaction companies.

The Internet provides extensive worldwide communication and decision-making tools, while allowing each participant in projects or discussions to also express their individuality. The Internet is a vast, evolving network where credentials and large bank accounts do not give you a superior ranking in most discussion circles. DCNET is a similar voluntary association that will show remarkable economic coordination, while respecting the authority of each member business (and individual employee) to participate as they choose within the guiding design principles of the network. In many ways, DCNET provides a new, level playing field, where like on the Internet, one can find communities of like-minded folks.

Chaordic comes from Chaos and Order and represents a dynamic balance of competition and cooperation; individuality and common purpose; structural durability and freedom to change.

Lastly, self-help and mutual aid organizations, such as the 12 Step recovery program of AA, are devoted to an improved quality of life for every individual participant and unite people in a secular spirituality that respects each person's religious or spiritual orientation. Hopefully such common compassion, freedom of expression and commitment to wellness, will characterize the business and organizational cultures of every DualCurrency network.

In most ways, business, employee and consumer relationships inside DCNET look much as they do elsewhere. Business owners and managers have authority over what products to offer, how much to charge, whom to hire, how much to pay them in dollars, as well as how to distribute the cash profits. While the market continues to determine prices, there is an important new factor. Each business determines what portion of *Business Dollars* to accept. Prospective employees, in looking for new jobs, also consider what their $\$^B$ benefits will be. Similarly, consumers when comparing prices also consider, "What part $\$^B$ can I pay for this product or service?"

Individuals still choose where to work, as well as how and where to spend their paychecks. Labor unions still play their traditional role, but with labor-management relations enhanced through a bigger economic pie and an inherently more cooperative set up. Lastly, dissatisfied DualCurrency customers have the same recourse as do their dollar only counterparts—calling the Better Business Bureau or similar agencies. But, the agreement by DCNET members to balance competition with greater cooperation, the new spirit of collaboration amongst all business stakeholders, and a vision to uphold the highest ethical standards in all business relationships, means fewer problems and ever less need for third party remedies.

THE BUSINESS OPPORTUNITY

The necessary technologies, management skills, retailer networks and capital are all at hand to test the concepts presented in this White Paper. What are the parameters of a pilot project that could provide adequate proof of concept, so that many businesses will join in building and operating a full-blown DualCurrency Employee Benefits Network and other DualCurrency applications?

A beta test must be small enough to be manageable, yet large enough to be exciting. There are perhaps hundreds of small barter exchanges, both commercial and community-based, and numerous Time Dollar, Service Credit and local currency efforts underway across the U.S. None have grown to include large numbers of individuals or businesses representing anything but a tiny fraction of trade in even their local economies. While offering perhaps a valuable lifestyle experience to their participants, these small-scale efforts tend to make the prospect of a new financial instrument seem marginal and counter-cultural. In rather sharp contrast, DualCurrency Commerce is designed to complement popular business practices and transaction technologies, so that virtually any employer, retailer, bank or transaction processor can relatively quickly, easily and profitably participate.

Renowned new money visionary, Bernard Lietaer, in his recent book *The Future of Money*, surveys the state of the complimentary currency movement around the world. With the possible exception of Japan, where a variety of new money experiments throughout the nation receive government endorsement and support, progress is only quantitatively, not qualitatively, more advanced than in the U.S. But, we may be in for another Quality Revolution, a la W. Edwards Deming, wherein economic and business ideas that have long been ignored elsewhere are welcomed and developed by top Japanese government and business leaders, leaving the U.S. and the rest of the world playing catch-up.

AN EMERGING DUAL CURRENCY INDUSTRY

It is encouraging to observe the first inklings of an entire DualCurrency industry on the horizon. A nationwide dual currency system to distribute cash and food stamp benefits to government clients is well established. The system, known as Electronic Benefit Transfer or EBT, accesses two separate bank accounts from a single debit card to pay for purchases with a combination of cash and/or food stamps.

EBT demonstrated that existing transaction banking systems can easily settle non-cash transactions when the second currency is denominated in dollars.

In the 1980s and '90s, EBT demonstrated that existing transaction banking systems can easily settle non-cash transactions when the second currency is denominated in dollars.

There are also exciting new dual currency marketing programs in the airline industry. There are occasional special offers for airline tickets on a part-cash and part-frequent flyer mile basis. As well, fully automated systems now exist on the Internet that price and sell products for a combination of dollars and frequent flyer miles.

Commercial ventures, which involve any type of noncash financial instrument, tend to reflect either loyalty rewards for spending or points backed by dollars. Neither of these approaches can have the commercial breadth nor the social and economic impact offered by DualCurrency Commerce and *Business Dollars*. Yet, they do illustrate how transaction technologies are advancing and how much public interest is growing in noncash earning and spending opportunities.

OPPORTUNITIES, RISKS AND CHALLENGES

What could motivate leaders of the banking and transaction processing industries to risk technology, talent and financial resources to undertake such a venture? Simply put: **financial gain**.

The business proposition of DualCurrency Commerce makes sense, because of the indisputable reality of underutilized business capacity, side-by-side with unmet consumer and community needs. The market for DualCurrency Commerce is nothing less than businesses the world over seeking more customers, combined with consumers the world over desiring more spending power. DualCurrency Commerce also helps banks and transaction companies to do more of what they do best—facilitate transactions between businesses and individuals.

There is assuredly nothing trifling to introducing a new form of money and exchange. Yet, there are few obstacles to the process that have not already been faced and surmounted at one time or another in banking history. Thousands of the first banks failed during the introduction of paper currency, but committed people addressed each and every challenge and built the banking industry and the Federal Reserve. Similarly, while Bank of America and others lost tens of billions of dollars in the early years of the credit card industry, eventually the industry triumphed and prospered. (Let us not dwell upon the proliferation of cards and new card offers that characterizes the industry today.)

Along with inevitable risks, early adopters of DualCurrency Commerce may initially enjoy a degree of freedom to experiment and innovate. While the banking industry is highly regulated, marketing perks and employee benefits are relatively unregulated. Regulations to govern DualCurrency Commerce will likely evolve over time through industry initiatives and the actions of regulatory agencies and federal lawmakers — much like laws and regulations that today govern banking, credit cards, insurance, investing and other financial products and services.

A PUSH TOWARDS CASHLESS COMMERCE

The United States appears to be moving towards a cashless or paperless economy. Credit and debit cards are overtaking paper currency, coins and checks in numerous retail settings, while paperless commerce on the Internet beckons us to a future of ever greater convenience, selection and savings. Yet, despite these advantages, the shift to all-electronic commerce remains gradual, and large sectors of the population might be left behind.

What might be a powerful incentive to speed us towards a cashless economy? How about new consumer purchasing power for everyone who goes electronic? Many people might give it a try, if it means the opportunity to buy a new thing or two.

COMBINING FINANCIAL GAIN WITH ALTRUISM

The story is told that Henry Ford doubled the wages of his employees, so that they could afford to purchase his Model-T Fords. This was an unequivocal win-win proposition for the company and its workers, and is perhaps a useful metaphor for the introduction of DualCurrency Commerce.

We also know the legacy of the Carnegie family in building a network of public libraries across the land, when formal education was for the most part a luxury reserved for the upper classes. That legacy benefits thousands of communities and millions of people to this day.

How much greater could be the legacy of the banking and bankcard industries, arguably the most powerful institutions in the history of the world? How much more effective could the profit motive be as an economic engine, if it were harnessed to equally serve businesses, investors, employees and communities alike?

With a little imagination and courage, we can find out. Perhaps a new money will help to unleash the latent power of our technologies as well as our passion as a race to explore the limits of human potential. Perhaps together, we can build a sustainable global economy that works profoundly for every human being on the planet, as well as for our natural environment… at a handsome profit for companies that take the lead. This is the promise and the opportunity of Sustainable Prosperity.

JOEL HODROFF

(*Joel@DualCurrency.com*) is the CEO of DualCurrency Systems, and the inventor of its patented DualCurrency pricing, accounting and transaction settlement system. DualCurrency Systems is an R&D company seeking strategic partners to develop applications of DualCurrency Commerce.

The Informed Patient / *By Laura Landro*

A New Way to Get Doctors to Take Better Care of Patients: Bribe Them

AMERICANS GET MEMBERSHIP points for spending on their credit cards, booking flights, even buying groceries. But for taking your medicine?

Programs that reward doctors for taking better care of patients are starting to catch on in health care—and now patients are getting cut in on the deal as well.

Starting today, a group including **General Electric** Co., **Ford Motor** Co., **Verizon Communications**, **United Parcel Service** and **Procter & Gamble** will launch a pilot program to pay doctors in Boston, Cincinnati, and Lexington, Ky., bonuses of up to 10% if they prove they are taking better care of cardiovascular and diabetes patients.

Borrowing a page from membership rewards programs, the group will also offer patients an optional "CareRewards" points system for following doctors' orders between visits. Though patients won't typically get cash bonuses, they will be able to redeem points for merchandise coupons, time off from work or other perks.

The "Bridges to Excellence" program is the most ambitious effort yet in the "pay-for-performance" movement that is gaining adherents among big employers and health plans. Integrated Healthcare Association, whose members include California health organizations covering eight million enrollees, expects to make bonus payments to doctors next year that could exceed $100 million. "Doctors need to realize that this is the way they will be paid, and they need to get with the program," says Beau Carter, executive director.

It may sound strange to have to essentially bribe doctors and patients to do what they should be doing anyway. But the programs are designed to address what remains one of the central oddities of American health care. In many cases, the current payment system actually makes it more lucrative for doctors and hospitals to provide substandard care. They get rewarded for high volume—in other words, brief office visits—and not the long-term management of care between visits.

Margaret O'Kane, president of the nonprofit National Committee for Quality Assurance, which will audit doctors' results for "Bridges to Excellence," admits that the program may raise eyebrows. "Employers are staring at unbelievable cost rises, so it's hard to make the case that you have to pay doctors extra to do the job right," she says. The long-term payoff, she adds, could be fewer absentees and serious medical complications.

Francois de Brantes, program leader for health-care initiatives at GE, says the bonus programs are a response to the alarming rates of medical error and studies of quality problems in U.S. health care. For example, recent studies say 70% of diabetics don't get care meeting standards of the American Diabetic Association, which can lead to serious health complications.

The program's primary focus is chronic conditions like diabetes and heart disease that require constant long-term care.

For example, diabetes patients can sign on to www.bridgestoexcellence.org for an interactive online tool that will let them enter data about their hemoglobin levels and medication compliance, and earn CareRewards points when they meet the goals set by their doctor.

Those points will be redeemable for, say, a $25 coupon for a diabetes care kit or credits to pay off health plan deductibles and co-payments.

"Airlines figured it out a long time ago with frequent-flier miles," says Vince Kerr, director of health-care management for Ford, whose health plan covers 650,000 members. Though he admits the rewards in the program don't compare with, say, a free airline ticket, "we think people will respond to incentives, particularly if it's also good for them."

Doctors, meanwhile, would receive a yearly bonus of $100 for each patient covered by a participating employer if their practice has a high percentage of diabetic patients whose blood pressure, blood sugar, and lipid levels are sufficiently measured and controlled. The program is estimated to generate savings of $350 per diabetic patient a year, and cost employers no more than $175 per diabetic patient a year. A cardiac-care program will make its debut this year.

Yet a third program will reward doctors for investing in technology to improve patient care, says Thomas Lee, medical director of Boston-based Partners Healthcare System, which helped design the compensation systems. Doctors will get bonuses of $55 per patient annually for investing in systems such as computer-based records and care-management software programs for chronically ill patients. A doctor caring for 300 employees or family members could earn a year-end bonus of up to $16,500.

The Leapfrog Group, another large employer coalition, and the Robert Wood Johnson Foundation are evaluating pay-for-performance pilot projects too.

All of this is consistent with a study in the latest policy journal Health Affairs. It concludes that the business case for quality is "weak or nonexistent" in health care, and advocates providing such financial rewards to doctors and health systems who invest in quality measures. "In some instances you have to put money into the health-care system, at least in the short term, to reward the delivery of better care," says Stephen Schoenbaum, a vice president at the Commonwealth Fund, a nonprofit health foundation. Though he warns that bonus payments alone can't solve all the quality problems in health care, he adds, "As my grandmother used to say, 'It couldn't hurt.' "

Some doctors agree. David Wilson of Eastern Hills Internal Medicine in Cincinnati says his group paid for an audit by the American Diabetes Association and NCQA to win recognition in an existing Diabetes Provider Recognition Program that doesn't carry any financial incentives for participating. "We got a nice plaque for it but not much else," Dr. Wilson says. "Why go through that process and not get any reward?" Health plans and insurers "talk about quality all the time, but now is the time to start putting their money where their mouth is," he adds.

Appendix I – Economic Incentives for Wellness

THE CASE FOR A DUALCURRENCY PILOT IN THE HEALTH CARE INDUSTRY

Let us consider two challenges facing the health care industry in the United States:

1. **A growing financial crisis.** This is characterized by millions of uninsured people, cutbacks in health benefits by many employers, downward pressure on the wages of health care employees (including the incomes of many doctors), financial insolvency of government programs, as well as severe competitive financial pressures on health care institutions of every size and mission.

2. **A deteriorating quality of health and quality of life dilemma.** This is characterized by the exponential growth of such health problems as cancer, heart disease, diabetes and AIDS, widespread obesity, alcoholism and chemical addictions, mounting workplace stress and environmental pollution, all compounded in many communities in economic decline.

These challenges may be effectively addressed by merging a focus on wellness with new economic incentives. Included are incentives for healthier lifestyles on the patient side, combined with incentives for preventing illnesses, rather than merely treating them, on the industry side. The incentives are delivered through an innovative financial model called DualCurrency Commerce.

This proposal for a DualCurrency Wellness Pilot asserts that the economics of our current health care delivery system are centered on detecting and treating illness. The questions to be addressed are, "Can a focus on wellness improve the results of our health care system? What would a market-based, profit-driven model of promoting wellness look like?"

The essential components of wellness are easy to define. Good nutrition, adequate rest and regular exercise are the foundation. Reduction of stress and pollutants in one's environment are also important. Addressing certain physical and emotional needs such as healthy touch, a stable, nurturing home environment and familial or community attachments are vital. Finally, health education is also part of a well-rounded wellness regimen. It is significant to note that none of these elements reflects a need for large budgets, sophisticated medical equipment, enormous physical complexes, or practitioners with advanced degrees. A well-organized network, with a modest outlay of human and financial resources, could quickly put a foundation of wellness under every individual, family and community across the nation.

In contrast to the simplicity of a wellness approach to health care, the current medical model reflects dependence upon complexity and large financial expenditures. Even society's economic indicators go up in response to illness, while noting little or nothing for efforts at wellness. A heart attack is a significant economic event, while healthy eating and regular exercise are economic nonevents. Smoking and the treatment of smoking related illnesses both contribute to economic growth, while quitting smoking does not show up in most economic measures. Medications for mental health constitute an enormous profit center within the industry, while meditation, massage, yoga and other efforts at a healthy, balanced lifestyle add little to the Gross Domestic Product. As of yet, there is no clearly understood profit motive for wellness, although there is a modest and growing awareness, that sick employees cost businesses productivity and profits, while the large number of citizens without health insurance coverage can cost tax payers billions of dollars each year.

Do these contrasts between a wellness model and the current medical model suggest that the two must be at odds or in competition? Not necessarily. In fact, growing interest in what is now termed Integrative Care or Complimentary Medicine is setting the stage for a more balanced medical model to emerge. What could give the current exploration a powerful shot in the arm is the addition of financial incentives for wellness and a financial stake in the new model for health systems.

A DualCurrency Pilot in the Health Care Industry would have three primary objectives:

1. To improve overall community health and wellness.
2. To lower health care costs, while increasing revenues and profits for health care providers.
3. To improve employee compensation in the health care industry.

Sample Scenario (medical details have not been reviewed by a medical professional):

Sally is a Burger King employee living on a modest budget. Sally has a weight problem that complicates her diabetes treatment. In a patient care plan, worked out with her medical team, Sally earns 5.00 Health Bucks ($\$^H$) for each pound of weight that she loses and keeps off for four months. She also earns $\$^H$20.00 when she attends her monthly Healthy Diet and Weight support group. Finally, Sally earns $\$^H$50.00 for each person that she recruits to the Health Bucks Wellness Program who participates in the program for a year.

Sally's physician, Dr. Meg Thomson, and Dr. Thompson's nurse, Michael, are also eligible to earn Health Bucks. They each earn $\$^H$100.00 for every patient that stays in the program for six months and shows at least 70% attendance at support group meetings and scheduled appointments, combined with a 10% or better weight loss result.

So, where does everyone spend his or her Health Bucks? Sally pays $15.00 and $\$^H$30.00 per month for a YWCA membership that also supports her weight loss program. Dr. Thompson takes a trip to Boston and pays $175.00 cash and $\$^H$375.00, much like a Cyber-Fare. Michael is sending his daughter Melanie to college, where a semester of tuition costs her $1,000.00 and $\$^H$1000.00, much like a scholarship.

Executives of the HMO who manage the Health Bucks Program are pleased for three reasons. First, clients who better follow doctors' orders between visits and participate in additional wellness activities are experiencing better health. Second, health care expenses for the HMO, as well as for participating employers are dropping, while employee morale improves and absenteeism declines. Lastly, the perks of the Health Bucks program do not come off the bottom line of the HMO. They come from a newly discovered community resource… underutilized capacity in the business community, pooled to back Health Bucks.

The use of non-cash incentives has been well received in the airlines industry as the worldwide growth of frequent flyer awards programs documents. What is novel about the DualCurrency model is the new source of non-cash incentives. Instead of tapping into the limited cash resources of employers or health care institutions, the DualCurrency system captures currently overlooked wealth within major industries such as retail, entertainment, travel and education. Underutilized capacity and excess inventories are seen virtually everywhere in today's economy: from empty airline seats, hotel rooms and college desks… to excess inventories at retail outlets, auto dealerships and grocery stores… to underutilized capacity at construction companies, hospitals and banks… to off hours at beauty salons, restaurants, movie theaters and workout facilities.

Businesses are eager to market their excess capacity at even a modest profit, and every part-dollars, part-Health Bucks purchase affords an incremental cash profit. The DualCurrency Wellness Pilot is designed to mine the gold of underutilized business capacity in order to build healthier families, workplaces and communities, with the health care industry leading the way.

Appendix II – Capturing Hidden Wealth

TO ADDRESS THE SOCIAL SECURITY DILEMMA

The following scenario introduces an innovative way to give senior citizens additional purchasing power without raising taxes or risking hard earned savings in the stock market. It is intended to encourage and support pilot projects to test the concept. The business community has all of the needed resources—human and technological—to quickly, effectively and profitably raise the standard of living and improve the quality of life for senior citizens everywhere. What is needed is a new tool that combines the profit motive with community economic development. DualCurrency Commerce is just such a tool.

Mary, 74, is a retired drug store clerk. George, 76, her husband of 53 years, is a retired maintenance worker from the University of Minnesota. Mary and George have found a unique way to stretch their modest pension and social security checks through a program called the SeniorCard Project.

The SeniorCard Project is similar to a buying club of businesses where senior citizens can spend Senior Credits along with cash. Senior Credits are a new kind of money, backed by the underutilized wealth of the business community. This enormous, invisible resource includes empty restaurant tables and airline seats; off-hours at movie theaters, oil change shops and beauty salons; unsold inventory at consumer electronic stores and department stores; even nonbusiness products and services ranging from empty college desks and off-hours at the YMCA to light bulbs and magazines offered by nonprofit organizations.

Everyone wins in the new DualCurrency venture. Participating businesses attract new customers, enjoy additional cash profits and turn excess inventory and underutilized capacity into a resource for the entire community. Senior citizens stretch their cash, gain economic security and improve their quality of life. In many cases, they **earn** their Senior Credits through important volunteer contributions in the community. The government avoids raising taxes to maintain the Social Security System, because Senior Credits are almost as good as cash in the DualCurrency network. Banks and transaction companies profit as they manage the DualCurrency system, just the way they manage cash transactions today.

The SeniorResourceNetwork (SRN) is the association of businesses that has agreed to pilot the DualCurrency system and to back Senior Credits. The SRN initially used surveys to determine what goods or services their senior population would most likely buy with their new purchasing power. Over time, computerized tracking and feedback systems are creating ever more efficient matches between business capacities and what SRN customers wanted to buy.

It was decided that in the pilot phase, each senior citizen would receive an extra $500.00 per month in Senior Credits ($\$^C$). Each $\$^C$ is worth one dollar and each merchant sets their own cash to $\$^C$ ratio. Similar to senior citizen discount programs, merchants limit the times during which Senior Credits can be redeemed. Seniors who felt no need for additional spending power can donate their credits to organizations that distributed them to people in need. Here is how Mary and George described their experience:

Mary— "This is easier and more fun than I thought it would be. The SeniorCard is simple to use. Our statements look pretty much like bank statements, only with a separate page for Senior Credits. When I use the SeniorCard, the cash I spend comes from my frequent flyer Visa card, so I still earn frequent flyer miles."

"With Senior Credits we are doing more things. I am pursuing a college degree in Art History at one-third the dollars of normal tuition. The rest is covered in Senior Credits. We bought a computer for 60% dollars and 40% Senior Credits. We get our car repaired with cash for the parts and Senior Credits for the labor. Community businesses still have lots of extra stuff, so our Senior Credit allocation goes up 20% next month. Our children are excited that we are benefiting, without their taxes going up."

George— "We're not poor, mind you, but it helps to see our dollars stretch a little farther. It's great to see the business community doing so much to help senior citizens. We enjoyed a little trip to England last month, something that we thought we never had the money for. Everything related to the trip was half dollars and half Senior Credits—airfare, hotels, restaurants... even side trips and gifts. We just had to travel during off-peak times. That was easy. Our schedules are pretty flexible. I'm also having fun on an orientation team that introduces the program to other senior citizens."

Raymond Barksdale owns a bookstore, not far from a large retirement community. He says that seniors tended to favor the public library over his store. He had little to risk by taking 70% cash and 30% Senior Credits on regular priced books and magazines. His participation in the DualCurrency network brought quite a few new customers. Raymond found that his incremental sales justified the cash discount. Here is what he shared:

"I was dubious about spending $250.00 to reprogram my credit card terminal for DualCurrency, but I got back my investment in just two months. I almost feel guilty making money taking Senior Credits, but it's supposed to be a win for both seniors and merchants. I love the good will being created in the community."

It's totally hassle-free. No coupons or points to track or little shopper cards to punch. My Senior Credit volume is right on my Visa statement. They tell me how much business has come from the program and the cash versus the Senior Credits that I take in. I definitely plan to stay in the program, and I wholeheartedly recommend it to others."

About the Author

Humans created money. Humans can alter anything they create. Change the nature of money, and you can literally change the nature of economic reality. Joel Hodroff, founder of Commonweal and the inventor of the patented dual-currency transaction system, understands that proposition. He is a pioneer, trying to create a new kind of money that bridges market and community. …We are still at the beginning of that journey, but it is one that will surely redefine the limits of the possible.

Edgar S. Cahn,
Founder, Time Dollar Network

Joel Hodroff, Founder and CEO of DualCurrency Systems (formerly Commonweal, Inc.), has been at the leading edge of new money design and development for over a decade. He was awarded the first two U.S. Patents issued for DualCurrency Pricing, Accounting and Transaction Settlement systems. His work seeks to bring new currency solutions beyond the social change and alternative lifestyle movements into the mainstream worlds of banking, commerce and transaction processing. In this search for business-led social innovation, he devised a profit motive (in dollars!) for employers and their employees, retailers and their customers, and also banks and transaction processors to participate together in a DualCurrency economy. At the heart of the DualCurrency model is the capture and distribution of currently wasted wealth — empty restaurant tables, empty college desks, excess retail inventories — when traditional financial resources are insufficient or unavailable.

The first pilot of DualCurrency Commerce is the Community HeroCard Program in Minneapolis, Minnesota, where volunteers earn Community Service Dollars redeemable at participating merchants (*www.communityherocard.com*). Joel's pioneering work in DualCurrency Commerce is documented in *The Future of Money* by Bernard Lietaer, *Funny Money: In search of alternative cash* by David Boyle, and the Japanese Public Television Documentary *Ende's Warning to the Future*.

Joel lives in Stillwater, Minnesota with his wife Anni and step-daughter Olivia. Joel strongly believes that business leaders should model healthy, balanced lives. While Co-Chairing Responsible Minnesota Business, his life also includes family time, exercise, meditation, peer coaching and close personal friendships.