# GAINS, LOSSES, AND JUSTICE IN FINANCIAL MARKETS

by

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Economic agents are driven by one fundamental premise: what is gotten is more highly valued than what is given up. Thus, whenever agents involved in an exchange are fully-informed and free to act, the outcome is expected to be positive-sum. In a product market exchange in which the seller in good faith has sold a defective product or charged the wrong price, an exchange or refund is a common remedy that effectively reinforces the importance of a positive-sum outcome. Otherwise, the buyer would be saddled with a loss.

Whenever one of the parties is misinformed, manipulated, or coerced, the outcome likely is zerosum in that one of the parties pockets a gain while the other suffers a loss. Such practices are widely condemned in law simply because the underlying premise has been twisted to: *what belongs to the weaker party can be taken by the stronger party*. The problem with this premise is that the weaker party is NOT fair game.

In the financial sector investing, hedging, and speculating are based on the zero-sum premise that one agent's gain is another's loss. Investors, hedgers and speculators are driven by the uncertainty and risk associated with future price movements. Hedgers are risk-averting; they avoid risk at the expense of the greater gains possible. Speculators are risk-seeking; they take on risk for the greater gains possible. Investors can be risk-averting, risk-seeking, or both. Whether such a zero-sum outcome is just or unjust depends very much on whether the parties involved were fully-informed and free to act. Thus, there is an element of gambling because at the time the exchange is executed neither party knows for sure who will win and who will lose.

In the following we address exchange in product, resource, and financial markets in order to better understand how they are alike and how they differ. Our purpose is not to exam these activities to their finest detail but to underscore the difference between positive-sum and zero-sum activities and the role of justice across all three markets.

We do not include crypto-currencies or stable coins which at this time appear to "reduce the hidden cost of payment latency and the counterparty risk posed by traditional depository institutions" (Long 2019, not paginated) because it is not entirely clear how they impact financial transactions and how they are to be identified as just or unjust.

#### MICRO-ECONOMIC ACTIVITY

No Gain, No Exchange. Gain is the driving force behind buying and selling whether it takes place in the product market, the labor and natural resource market, or the financial market. In the product market and the resource market exchange depends on the following condition for the parties involved (buyer/seller, employer/employee, producer/resource holder): what is gotten is more highly valued than what is given up. This condition reduces to is "no gain, no exchange."

There are instances, such as shoplifting and price gouging, discriminating and embezzling, when one party seizes the gain that rightfully belong to the other party. Even so, the market system functions effectively only when there is general compliance with the principle of commutative justice that reinforces "no gain, no exchange" by requiring both parties to exchange things of equal value and impose equal burdens on one another.

Stock Market. "No gain, no exchange," reinforced by commutative justice, applies in the stock market when a trade is executed. However, neither the buyer nor the seller of those shares knows for certain what they will yield in terms of dividend stream and share price in the future. Uncertainty, obscurity, and elevated risk attend the holding of those shares in the future. The person holding them to support retirement well into the future is an investor when he/she expects a long-term gain based on dividends and the share price. The person who deliberately buys only shares in corporations will a rock-solid record of paying dividends and slow-but-steady growth in share price is a hedger. On the other hand, the person who buys shares in corporations with an erratic performance record or no record whatsoever is a speculator.

Whatever the buyer's underlying purpose in these stock purchases, the practice is known as "buying long" and is based on the simple premise that the stock is undervalued and will increase in value in the future. "Selling short," on the other hand, is based on the premise that the stock is overvalued and will decrease in price in the future. Selling short is the practice of paying another person a fee to borrow his/her shares with the promise to replace them at a given date in the future, selling those shares immediately, and replacing them as required at the share price on that given date. The person selling short pockets a gain if the future price is lower and takes a loss if the price is higher. Day traders are speculators. So too are those who financially back a theatrical production in the hope that it will have a long and successful run on Broadway.

Even so, selling short is not unjust as long as the terms of the contract are transparent and the parties are free to act. If, however, one of the parties has control over the share price in the future, justice is not served because uncertainty and risk are much lower for the one who controls that price and thereby imposes an unequal burden on the other. In strictly ethical terms, that contract is unjust and not binding.

Naked Short Selling. Although it is not defined in the federal securities laws or SRO<sup>1</sup> rules, "naked" short selling is the practice of selling short without first having borrowed the shares. Not being able to borrow the necessary shares could happen in the case of a small company with only a few outstanding shares. Under Securities and Exchange Commission rules the short seller is allowed three days to deliver the shares to the holder/lender before that shorter seller is reported for failure to deliver. A sudden increase in failure-to-deliver reports involving the shares of a specific firm suggests some irregularity in the trading of those shares.

Though not illegal per se, naked short selling could be a sham or abusive practice in certain instances as when a broker-dealer lends the same shares to different short sellers. This abuse can happen because shares typically are transferred electronically and no registered stock certificates ever change hands. Thus, under its emergency rule-making authority, the SEC can declare naked short selling legal for some and illegal for others depending on how the Commission responds to changing market conditions and the behavior of holder/lenders and short sellers especially when major financial stocks are severely threatened. In September 2008, for example, the SEC issued new rules with the intention of protecting investors from naked short-selling abuses (SEC 2008, not paginated).

Naked short selling with the deliberate intent to drive the share price down is illegal. It is unjust because the short seller, hoping to capture an ill-gotten gain, necessarily conceals his intent from the holder/lender and thereby violates both the transparency rule and the control-over-price rule. Naked short selling in which the short seller has no intention of ever delivering the shares is unethical because it violates the transparency rule. Proving ill intent when the transparency rule or control-over-price rule has been violated intentionally makes enforcement difficult and leads at times to the SEC being accused of not doing its job.

Futures Contract. A futures contract is a legally-binding commitment to buy or sell a specific commodity such as wheat or oil or financial product based on the S&P index, Dow Jones index, or some other index for a fixed price on a specific date in the future. Hedgers are producers and users of commodities who are risk-averse regarding future prices. Both parties try to reduce that

<sup>&</sup>lt;sup>1</sup> An SRO is a self-regulatory organization such as the New York Stock Exchange that exercises some degree of regulatory authority over an industry or profession.

risk by signing futures contracts that call for the producer to sell the commodity at a fixed price and deliver it on a given date in the future to the user who must buy that commodity at that price and take delivery on that date. Producers win and users lose when the price of the commodity on the delivery date is *below* the agreed price as specified in the contract. Users win and producers lose when the price on the date of delivery is *above* the price specified in the contract.

Even though the futures contract on the date of delivery is a zero-sum agreement in which one party eventually wins and the other loses, justice is served as long as they understand in full and accept without reservation the terms of the contract when they commit themselves contractually. In other words, a futures contract meets the demands of justice when the terms are transparent and the parties are free to act. Under the principle of commutative justice they are exchanging things of equal value – a clearly stated price for a clearly specified commodity or financial product -- and imposing equal burdens on one another – the uncertainty and risk involved in future price movements *over which neither one has any control*. If, however, one of the parties has control over prices in the future, justice is not served because uncertainty and risk are much lower for the one who controls those prices and thereby is imposing an unequal burden on the other. In strictly ethical terms, that contract is unjust and not binding.

A futures contract can be bought and sold multiple times just as a stock can be bought and sold time after time on the New York Stock Exchange and the NASDAQ. Thus the holder of a futures contract can transfer the risk to someone else in exchange for cash. Speculators buy and sell futures contracts through commodity exchanges but are neither producers nor users of the underlying commodities. Unlike hedgers, speculators are risk-seeking with regard to future changes in commodity prices. They buy commodity contracts which they regard as *undervalued today* because they expect the future price of the underlying commodity will be higher than the commodity price set forth in that contract and therefore they can expect to sell that contract in the future at a higher price than what they paid for it. They sell commodity contracts they regard as *overvalued* today because they expect the future price of the underlying commodity will be lower than the commodity price set forth in that contract and for that reason the contract itself will sell at a lower price in the future. Speculators win whenever they have predicted future price movements correctly. Otherwise they lose. Unlike hedgers, speculators cannot afford to be obligated under the terms of a contract on its date of delivery because they are in no position to deliver the underlying commodity nor can they take delivery because they have no use for it.

For a futures contract based on a financial product such as the S&P index, the buyer of that contract experiences a gain when the index rises and a loss when it falls. Specifically, a change of one index point in the S&P 500 index represents a gain or loss of \$250 (Chen 2019, not paginated). For example, if at the end of the trading day that index has risen by 20 points, the person who holds that contract captures a \$5,000 gain and the person who sold it must transfer

\$5,000 to the account of the person who purchased it. If the index falls, the purchaser must transfer to the seller's account \$250 for each point the index has fallen. This kind of futures contract is bought and sold on either the Chicago Board of Trade or the Chicago Mercantile Exchange, providing agents in that market with valuable information that helps inform their decision-making for the day.

The CBOT and the CME are not the only futures contract exchanges in the United States. The New York Mercantile Exchange specializes in oil futures contracts. The New York Board of Trade provides a market for cocoa, coffee, cotton, orange juice, and sugar. Other futures exchanges operate in London, Tokyo, Sydney, Singapore, and elsewhere.

Speculation. Notwithstanding the negative inference implied in "speculator," persons who speculate provide an important service to daily commodity and financial product markets. Speculators, especially those who are specialists in a specific commodity or financial product such as corn or the euro focus attention on future price movements. They are in fact specialists in future price expectations who put at risk their own money on the basis of their analysis of those expectations. Future price expectations in turn influence the daily market price from both the demand side and the supply side.

On the demand side, consumers who expect prices to rise in the future are likely to buy today in order to avoid those future price increases. Conversely, consumers who expect future prices to fall are likely to postpone current spending in order to take advantage of the lower expected prices in the future. On the supply side, producers who expect higher prices in the future are likely to hold back current production in order to sell more when prices are higher. Producers who expect prices to fall in the future are likely to sell more in order to take advantage of those momentary higher prices.

By following exchange activities relating to the buying and selling of futures contracts, consumers and producers are better informed regarding future price expectations. Whenever the price of a futures contract itself (not the agreed price as set forth in that contract) for a specific commodity or financial product is *falling* consumers and producers can expect the price of that commodity or financial product to fall in the future and can adjust their current buying and selling accordingly. When the price of such a contract is *rising* consumers and producers can expect the price of the underlying commodity to rise in the future and can apply that information to their own current market decision-making.

By informing consumers and producers in their day-to-day market decision-making, speculators help determine current market prices.

Casino gambling is a form of speculation in which the gambler initiates an exchange involving a relatively small amount of money that is wagered in the expectation that there will be a very substantial payoff. Risk, uncertainty, and obscurity attend every gambling play in which the experienced gambler is likely to know how to reduce the risk – by playing blackjack for instance instead of the slot machines, by counting cards at the poker table – but is not able to eliminate uncertainty, obscurity, or risk entirely. Unlike buying and selling in the real economy, what is given up in casino gambling is clear and assured, what is gotten in return is not. The betting outcome is nearly instantaneous in a casino where gamblers are enticed to recoup their losses by continuing to bet even though it is well-known that the odds overwhelmingly favor the house.

Strictly speaking, casino gambling is not unjust as long as the house is transparent about the risks involved and the gambler is free to act. Both conditions are problematical. There is little incentive for the house to disclose the odds to its gambling customers and none at all if a game is fixed. A person who is a compulsive gambler is not free to walk away from the card and roulette tables and slot machines. Indeed the land casino offers heavy gamblers free food, hotel accommodation, and drinks to encourage them to continue gambling at the moment and in the future. To the extent that these freebies, especially free alcoholic drinks, weaken a gambler's freedom to act, they are unjust.

Options Contract, Forward Contract. An options contract is similar to a futures contract except that the person holding such a contract has the option of meeting his/her obligations as set forth in the contract or backing out. As with futures contracts, option contracts are exchange-traded. An option to sell a futures contract is called a *put*. An option to buy a futures contract is known as a *call*.

A forward contract is like a futures contract but is more complex. To reduce the risk of a very large gain/loss on the date of delivery, a futures contract is re-balanced every day to the daily spot price of a futures contract with the same agreed price on delivery and the same underlying asset. This practice, known as "marked to market," reduces the risk that there will be a very large gain/loss on delivery date because the loser on a daily basis must transfer monies to the margin account of the winner. A forward contract is not re-balanced and therefore exposes the contracted parties to a large gain for the one and a large loss for the other on the date of delivery. Thus there is a credit risk associated with a forward contract in that the seller/producer may not

<sup>&</sup>lt;sup>1</sup> The perks offered by land casinos are listed at <a href="http://www.gamblingunveiled.com/enjoy-forms-casino.html">http://www.gamblingunveiled.com/enjoy-forms-casino.html</a>

<sup>&</sup>lt;sup>2</sup> Much more information on compulsive gambling is available at <a href="http://www.gamblersanonymous.org/ga/">http://www.gamblersanonymous.org/ga/</a>

be able to deliver the underlying commodity and the buyer/user may not be able to make payment in full at delivery. Futures contracts are exchanged traded whereas forward contracts are bought and sold over the counter. This difference means that futures contracts are much more standardized than forward contracts.

The risk of failure on the part of the producer or the user of a futures contract on delivery date is borne by the exchange thereby limiting credit risk in futures contracts. To illustrate, participants in the New York Mercantile Exchange are required to maintain accounts with deposits sufficient to cover any losses they may experience.

Currency Market. The currency market is a special kind of financial market where currencies are traded on the basis of their exchange rates -- the value of one currency relative to another. Currency trades are executed through brokers who provide access to a network of international banks that buy and sell currencies electronically and through that trading activity set all currency exchange rates. The foreign exchange market is open 24 hours a day through exchanges operating at different times of the day in New York, Tokyo, Sydney, and London. On a daily basis, trading involves several trillion dollars On Tuesday, December 31, 2019 the U.S. dollar exchanged for 108.66 yen.<sup>1</sup>

Trades are made in anticipation of the gain from holding one currency versus another. If, for example, the U.S. dollar exchanges today for 105 yen and a currency speculator expects that the dollar will exchange for 120 yen next week, that speculator would sell yen and buy dollars today in anticipation of the gain of 15 yen for each dollar sold and exchanged for 120 yen next week. The speculator who anticipates the change in the rate of exchange correctly and buys or sells accordingly captures the gain. Any speculator on the other side of that buying or selling activity who in effect anticipated the rate of exchange incorrectly suffers the loss. Key to this zero-sum outcome is that the currencies are being bought and sold not for the purpose of exchanging that money for some good or service but for the expected gain in the exchange process itself. The use value/exchange value calculus of buying and selling does not apply to speculating. For currency speculators gain and loss originate in the difference in the exchange rate (the currency's price or exchange value) from one point in time to another.

Just as we observed with future prices for commodities, a person actively engaged in buying and selling currencies can hedge against changing currency prices in the future by turning to a futures contract, an options contract, or a forward contract. As we suggested at the beginning, currency markets may change significantly if and when crypto-currencies or stable coins become more

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<sup>&</sup>lt;sup>1</sup> Current exchange rates for all international currencies are available at <a href="https://www.xe.com/currencyconverter/convert/?Amount=1&From=USD&To=JPY">https://www.xe.com/currencyconverter/convert/?Amount=1&From=USD&To=JPY</a>

widely accepted in routine financial transactions.

Housing Market. Apart from those who buy a house to make it their home and expect to stay there for a long time, a house or similar property can be purchased for the purpose of investing, hedging, or speculating. An investor expects the property to increase in value in the long term and plans to hold it in anticipation of that long-term gain. A hedger purchases the property because other types of investments such as equities and commodities are too risky at the moment. A speculator acquires the property in the expectation of the gain to be made over the short term in a market where property prices are rising rapidly. "Flipping" a house is speculative behavior in that the house is held only long enough to make some improvements, which at times can be more superficial than substantial, and are expected to increase its resale value by more than the cost of those improvements.

Hoarding. Though not contractual in nature, hoarding is a form of hedging in that the buyer is betting that an expected commodity shortage will drive the price higher and therefore decides to purchase more of that commodity today than usual in order to avoid the shortage and the anticipated higher price. The buyer who hoards suffers a loss if the future price is lower than the current price and the seller captures a gain. If, on the other hand, the anticipated higher price materializes the seller suffers a loss by selling today and the buyer captures a gain by getting the commodity at today's lower price.

#### MACRO-ECONOMIC ACTIVITY

*Macro-economic Circulatory System.* Just as the simple supply/demand diagram represents how the economy operates at the micro-economic level, there is a simplified representation as to how the economy functions at the macro-economic level displayed in Diagram A. This diagram allows us to see more clearly activities in financial markets in the context of the full range of activities in the entire economy.

The mainstream version of this diagram – typically referred to as the macro-economic *circular* flow diagram<sup>1</sup> — is revised principally to conform to a personalist-economics way of thinking about macro-economic affairs: producer/employer/entrepreneur, consumer/worker, government official, borrower/creditor/banker,<sup>2</sup> and importer/exporter. In Diagram A allowance is made for

<sup>&</sup>lt;sup>1</sup> See Patinkin (1973, pp. 1037-1046) for a discussion of the origins of the circular flow diagram that some economists have traced to Frank Knight's 1933 booklet *The Economic Organization*.

<sup>&</sup>lt;sup>2</sup> Included in this group are shareholders in public and private corporations and holders of private and public bonds, both foreign and domestic. Included as well are venture capitalists who are noteworthy because they provide access to equity to startups and small businesses that do not have access to the equity market.

borrowing and saving by householders. These changes are consistent with the emphasis that personalist economics most fundamentally is about human beings carrying out their routine, everyday activities in economic affairs.

We titled Diagram A "Macro-Economic Circulatory System" for three reasons. First, it uses linear rather than circular graphics. Second, it emphasizes that every one of the flows represents action undertaken by a specific economic agent, by a *person of action*. Replacing "circular flow" with "circulatory system" is another expression that originates with thinking about economic affairs from a personalist perspective. Third, just as the heart controls the flow of blood through the arteries of the human body, the *person of action* controls the flow of goods and services, payments, human resources, natural resources, savings, credit, capital, and borrowings through the macro-economy.

Domestic and foreign economic agents function in the financial market which is identified by eight flows: 7, 7a, 7b, 8, 8a, 8b, 12, and 13. Flows 7 and 12 display the demand for financial resources and borrowed funds from domestic and foreign sources. Both flows are denominated in U.S. dollars. Similarly, Flows 8, 8a, 8b, and 13 represent domestic and foreign sources of financial resources that include savings and credit creation. Included in Flow 8b is the amount of philanthropic giving which in 2019 is expected to total \$430billion (Zinsmeister 2020, not paginated). Remittances made by U.S. residents to family members living outside the United States are accounted for in Flow 8b. In 2017 remittances from the United States to other countries were estimated at \$148.5 billion (PRC 2019, not paginated).

Flow 7a is payment made to bankers and creditors for the financial resources they made available to producers. Flow 7b is payment made by consumers and government officials<sup>1</sup> for the financial resources they borrowed from bankers and creditors. Consumer borrowings are reported regularly by the Federal Reserve as consumer credit. Borrowings by the U.S.Treasury, minus redemptions, are reported by the Treasury as public indebtedness.

Taxes are shown in Flow 11 as originating from consumers and workers. Taxes are determined not by any of the private agents in a market economy. Rather, they are imposed by government officials through the political process. We display them on Diagram A as originating from consumers and workers on the premise that even though producers routinely include those taxes in their cost structure they find ways to shift them to consumers in the form of higher prices, to workers in the form of lower wages, or both.

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<sup>&</sup>lt;sup>1</sup> Specifically, the United States Treasury.

The product market is represented by five flows: 1, 5, 6, 9, and 10, and refers to flows of goods and services. Flows 1 and 9 represent the demand for goods and services originating from consumers and producers. The demand for goods and services originating from government officials is shown as Flow 10 and is included in the combined demand for goods and services because Flow 10 solicits bids from eligible producers. Flow 5 refers to the supply of those goods and services. Flow 6 takes into account payment for all of those goods and services. As in the U.S. financial market, the economic agents operating in the product market are both domestic and foreign.

U.S. imports are goods and services produced elsewhere for use in the United States. The supply of goods and services from foreign producers is included in Flow 5. Payment *made* for those imports to foreign producers is captured in Flow 6.

U.S. exports are goods and services produced in the United States for use elsewhere. The demand for goods and services from foreign sources is shown in Flows 1, 9, and 10. Payment *received* from foreign sources for those exported goods and services is captured in Flow 6.

A U.S. trade deficit occurs when payments *made* for imports are greater than payments *received* for exports. A trade surplus occurs then the payments *received* for exports are greater than payments *made* for imports. The U.S. trade deficit persists as long as foreign investors buy U.S. assets or foreign creditors lend money to U.S. producers and consumers. In CY 2018 the U.S. trade deficit reached \$627.7 billion. See Diagram B for a display of the trade deficit alongside the U.S. budget deficit, public debt, and Social Security trust fund.

The resource market is represented in Diagram A by seven flows -- 2, 3a, 3b, 3c, 4, 14, and 15 -- corresponding to labor resources and natural resources. Flow 2 corresponds to the demand for the resources that are used in the production process. Flow 3a is the supply of new labor and natural resources as originating in the household sector. Total payment made by producers for labor and natural resources is represented in Flow 4.

The resource market does not draw on foreign sources for natural resources because those resources by and large are not mobile. However, there is some cross-border mobility when it comes to laborers who, for example, enter the United States as agriculture workers during planting and harvesting, and exit when the work is finished taking payment for services rendered (see Flow 4) with them when they return to their home country.

Flow 14 represents wasted natural resources. This flow allows us to visualize environmental degradation in terms of the circulatory system. Flow 15 accounts for idle human resources, so that we can see from a macro-economic perspective job loss, unemployment, exit from and re-

entry to the labor force, and reemployment.

Discarded natural resources, Flow 14, can be either recycled or reprocessed and used again in the production of goods and services. A reprocessed item is one that undergoes some change before it is used again. A recycled item is one that is returned to the production process without being reprocessed. Both are shown as being returned to the process of production through Flow 3c. Given long-standing practices that encourage discharging waste into the air, water, and soil, along with the burial of nuclear waste in secured containers, the waste that is shown as dumped out in Flow 14 indicates that the circulatory system is not an entirely closed system. Flow 14 also includes waste in the form of the packaging and discarded contents associated with the purchase and use of consumer goods.

Carrying capacity is a concept that has emerged as a result of heightened awareness of the importance of the environment to the well-being of all earthly creatures, especially human beings. Carrying capacity refers to the limit on the capability of our planetary home to absorb environmental contamination of the air, soil, and water. There is in other words a limit to the amount of Flow 14 which is dumped and can be tolerated without impairing the well-being of every earthly inhabitant. Where that limit lies is precisely the question at the heart of the public discourse

Some of the jobless displayed in Flow 15 stopped looking for work and dropped out of the labor force because they had exhausted all immediate sources of reemployment. They are identified as discouraged workers and their numbers are estimated every month in the Current Population Survey. Unless and until they find work and re-enter the labor force, discouraged workers are a second indicator that the circulatory system is not an entirely closed system. Though we know of persons who have been jobless for long periods of time, and we recall that during the Great Recession the United States was beset by massive and persistent unemployment, the average unemployed person remains jobless for only a short period of time. Indeed, during an economic boom when there are labor shortages, unemployment may run for just one or two weeks.

Large proportions of the unemployed are on temporary layoff and subsequently are recalled by their employers. Others, including the unemployed who dropped out of the labor force, find new jobs. We represent those persons, through Flow 3b.

International Trade. A stronger dollar means that U.S. consumers are advantaged because the dollar buys more of a foreign currency than before, effectively making imported goods cheaper. For example, if a Japanese DVD is priced at 25,000 yen and \$1 exchanges for 90 yen, the DVD costs \$278 (25,000 yen / 90 yen). If the exchange rate changes such that \$1 exchanges for 105 yen, the same DVD then costs the U.S. buyer \$238 (25,000 yen / 105 yen).

By making foreign-produced goods cheaper, a stronger dollar strengthens the demand of U.S. consumers and producers for imports and weakens their demand for U.S.-produced goods. This shift away from U.S.-produced goods means a drop in production at U.S. firms and fewer jobs for U.S. workers.

A weaker dollar means that U.S. consumers are disadvantaged because the dollar buys less of a foreign currency than before, effectively making imported goods more expensive. For example, if a German camera is priced at 1,100 euros and \$1 exchanges for 1.20 euros, the camera costs \$917 (1,100 euros / 1.20 euros). If the exchange rate changes such that \$1 exchanges for 0.90 euros, the same camera then costs the U.S. buyer \$1,222 (1,100 euros / 0.90 euros).

By making foreign-produced goods costlier, a weaker dollar weakens the demand of U.S. consumers and producers for imports and strengthens their demand for U.S.-produced goods. This shift toward U.S.-produced goods means a rise in production at U.S. firms and more jobs for U.S. workers.

#### FINAL COMMENTS

Justice is served in market exchange when the parties involved are free to act and have reason to expect an economic gain. Economic agents operate on the premise that what is gotten is more highly valued that what is given up. This premise applies to all parties involved in a product-market or resource-market transaction. In other words, transactions in those markets represent positive-sum opportunities for all parties engaged. Simply put, no gain, no exchange.

Economic agents in product and resource markets typically are backward-looking in the sense that they use their own personal experience to decide to engage in a given market transaction opportunity. At the same time they are forward looking in that they expect that whatever is gotten in fact will turn out to be more highly valued than what was given up. Risk attaches to any market-based transaction where an economic agent is misinformed, miscalculates, or has been manipulated. "Buyer's remorse," not to mention "seller's remorse," are two examples of outcomes in a product market transaction that do not conform to the general underlying premise. "Bad hire," "bad boss," are two others, this time in the resource market.

For product and resource markets to function effectively, transactions by and large have to be positive-sum for the parties involved. A transaction violates commutative justice whenever one party deliberately misinforms the other party or manipulates the other party robbing him/her of the freedom to act. An economic agent who is free to act but miscalculates *what is gotten/what is given up* may not claim that he/she has been wronged under commutative justice.

Economic agents engaged in financial-market transactions operate under the same premise: what is gotten is more highly valued that what is given up. However, the risk involved in financial-market transactions is greater due to the very nature of those transactions. For example, small investors who personally buy and hold shares of stock in a given public corporation are *betting* that the future value of that stock will increase, the corporation will offer attractive dividends, or both. The risk taken by small investors depends very much on the buying and selling activity of large institutional investors who at any moment can drive the price up or down, substantially changing what is gotten in the future. Small investors who allow financial advisers to manage their portfolios are betting that their advisers will make smarter bets than they would, that those advisers are able to time the market. In effect, they are betting that their advisers know which financial assets to buy, which ones to sell, and when to execute those trades so that the worth of the small investors' portfolios increases over time.

Small investors are well-advised to know how much in commission and portfolio-management fees their financial consultants are charging for their advice. Advisors are duty-bound under distributive justice to treat clients in similar financial circumstances, with similar portfolios, in approximately the same manner. Even so, this does not mean that they may not charge different fees for clients with small portfolios as compared to those with large portfolios when they encounter different costs for serving different clients.

Advisors are expected to maintain a fiduciary relationship with their clients. They are expected to operate in such a way that what is gotten/what is given up for their clients is more important that what is gotten/given up for themselves. Whether they comply is questionable. As in product and resource markets, commutative justice condemns advisers who misinform or manipulate their clients. However, an honest mistake by an advisor in calculating what is gotten/what is given up does not violate commutative justice.

In the financial market investing, hedging, and speculating are based on the zero-sum premise that one agent's gain is another's loss. Selling short, for example, is a zero-sum activity. The party who bets that the future stock price of the shares that were borrowed would fall, pockets the gain. The counterparty who bet that the future price of the borrowed shares would rise pockets the loss. As long as both parties are free to act and are not engaged in manipulation or misinformation, this zero-sum outcome does not violate commutative justice. In essence, both parties understand that they are gambling, that one will win while the other will lose. The same applies to futures contracts, options and forward contracts,

Buying and selling currencies reduces to zero-sum activity. The speculator who correctly anticipates the change in the rate of exchange for a currency and buys or sells that currency captures the gain. Any speculator on the other side of that trade who anticipated the rate of

exchange incorrectly suffers the loss. Key to this zero-sum outcome is that the currencies are being bought and sold not to exchange that money for some good or service but for the expected gain in the exchange process itself.

Real estate holdings are assets which are acquired in the expectation that they will increase in exchange value in the future and can be cast off when that expectation does not materialize. The person who pays for an asset that appreciates in value enjoys a gain. The person who exchanges that asset for cash takes a loss.

When a residential property is purchased with the expectation that it will increase in value and indeed it appreciates in value, the new owner seizes the gain, and the former owner relinquishes that gain. If it house depreciates in value, the new owner is the loser and the former owner is the winner.

Though not contractual in nature, hoarding is zero-sum activity. The buyer who hoards suffers a loss if the future price is lower than today's price and the seller captures a gain. If, the anticipated higher price materializes the buyer captures a gain.

Insider trading is a form of manipulation in which one party to a financial-market exchange knows more than others, not because he/she has been more astute as an analyst or just lucky but because that person has access to confidential information that is not publically accessible, and uses that information to buy or sell financial assets is manipulating any counterparty. Insider trading is a violation of the principle of contributive justice that requires anyone who is a member of a group – in this instance, those who trade assets – has a responsibility to maintain and support that group. When insider trading is not condemned, the market becomes unstable and untrustworthy where the strong devour the weak.

Because success or failure in financial markets depends so much on future prices of financial holdings about which no one can know with certainty, trading involves guessing and guessing means betting. The guessing and betting can be reduced substantially when future price movements are predictable over a very short time period. As short as a second or two. Mining data that is available to the public on a continuous basis any trader who observes an event that reliably precedes a change in the price of a financial asset and has access to the market where trades can be executed immediately that trader is able to achieve a gain or avert a loss at the expense of other traders. Since that trader is not misinforming or manipulating other traders, he/she cannot be condemned for violating commutative justice.

When traders begin executing trades on the basis of the conviction that prices will continue to rise indefinitely and they need to continue to buy and hold, trading can get out of hand, and bubbles can develop. When they begin to realize that their buy-and-hold conviction no longer works, a market correction can reduce the value of their holdings. When they panic and begin selling their assets in anticipation that their prices are likely to continue falling and they sell in order to minimize their losses, a correction may turn into a crash. Alan Greenspan, former chair of the Federal Reserve aptly described the behavior underlying the crash that followed the dot.com bubble of the 1990s as "irrational exuberance".

Our "Macro-Economic Circulatory System" diagram departs from the mainstream diagram along two dimensions. First, it is linear rather than circular. Second, it emphasizes that the flows represent action undertaken by a *person of action*, including producer/employer/entrepreneur, consumer/worker, and borrower/creditor/banker. Just as the heart controls the flow of blood through the arteries of the human body, the *person of action* controls the flow of goods and services, payments, human resources, natural resources, savings, credit, capital, and borrowings through the macro-economy.

Personalist economics finds support for changing from the conventional macro-economic circular flow diagram to the macro-economic circulatory system in Alfred Marshall and Joseph Schumpeter. As Marshall (1948, p. 1) remarked more than 125 years ago in the opening page of his *magnum opus*, economics "... is the study of mankind in the ordinary business of life ..." And Waters (1952, p. 14) said of Schumpeter that he "restored the human person as the dynamic factor in the explanation of economic activity." This change represents one of the most important differences between mainstream economics and personalist economics as to how one is to approach economic affairs from a macro-economics perspective: persons matter more than things.



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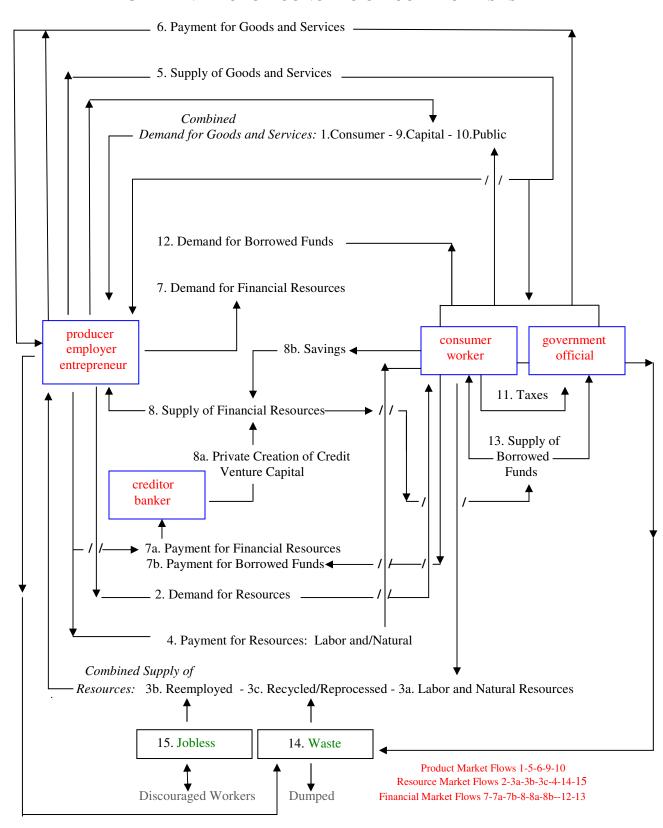
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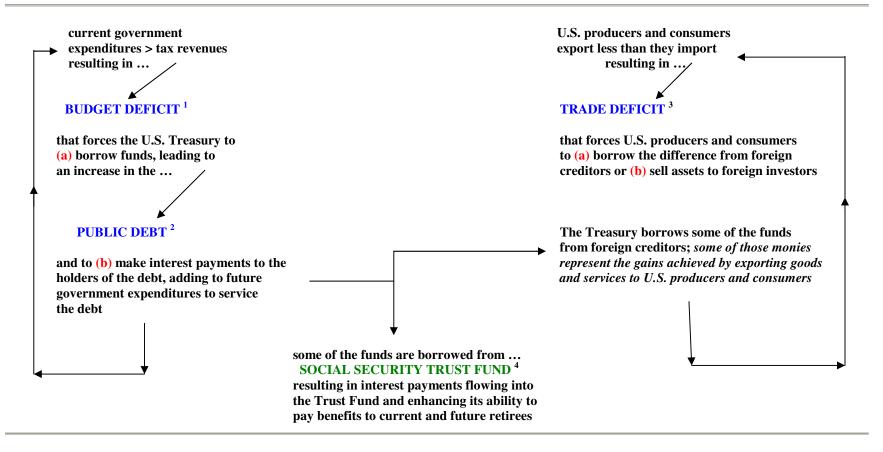
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### DIAGRAM A. MACRO-ECONOMIC CIRCULATORY SYSTEM





<sup>&</sup>lt;sup>1</sup>U.S. budget deficit (FY2019) = \$984 billion.

<sup>&</sup>lt;sup>2</sup> Public debt as of December 26, 2019 = \$23.1 trillion; \$1.2 trillion held in Japan, \$1.1 trillion in China.

<sup>3</sup> U.S. trade deficit, goods & services (CY2018) = \$627.7 billion.

<sup>&</sup>lt;sup>4</sup> Current generation of workers and their employers contribute to trust fund / current generation of retirees receive monthly benefit payments from the trust fund / lending funds to the U.S. Treasury is possible when there are surplus monies in the trust fund (contributions > benefits paid).